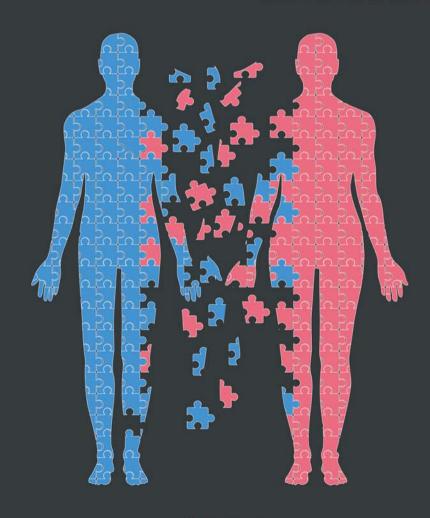
## Itsuko Dohi

# Gender Personality in Japanese Society

The determinants of femininity/masculinity, mental health, female-male relationships, and cultural factors



**Union Press** 

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## Itsuko Dohi



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## **Foreword**

### Mamoru Fukutomi

It is not uncommon to evaluate others from the viewpoint of masculinity/ femininity in our daily lives, such as "the new boss is very masculine and makes quick decisions", or "her feminine affection and family-centered attitude made me decide to marry her," or "recently young people are lacking in masculinity and femininity." This way of evaluating is not only for others but also for ourselves. Masculinity and femininity are images people share in every society, and they influence stereotypically our personality and behavior. Gender Personality is constructed by accepting these gender stereotypes into our self-concepts.

This book presents continuous studies about Gender Personality by Dr. Dohi, the author of this book. In detail, she writes about the way femininity/masculinity is determined, about measuring Gender Personality, and about the relationships between Gender Personality, mental health, male-female relationships, and Japanese cultural features.

Concerning the way to measure masculinity/femininity, most studies have treated masculinity/femininity as an independent dimension. However, Dr. Dohi has developed the Communion-Agency Scale (CAS), which includes masculinity in relation with agency, and femininity in relation with communion. She constructed the scale by referring to the suggestion of Helgeson (1993) and Kite (2001), that masculinity/femininity had been featured only in the positive aspects of agency/communion, so CAS added negative aspects of masculinity/femininity.

Dr. Dohi explains that gender type consists of the following four catego-

ries by combining positive aspects of masculinity and femininity, i.e., "masculine" gender type with high masculinity, "feminine" gender type with high femininity, "androgynous" gender type with both high masculinity and femininity, and "undifferentiated" with low masculinity and femininity. Then, she empirically clarified that positive-masculinity mitigates negative-femininity, and positive-femininity mitigates negative-masculinity. As CAS has added negative aspects of masculinity/femininity, it has made it possible to analyze Gender Personality extendedly.

The determinant model of femininity/masculinity hypothesizes that Gender Schema and Gender Identity determine the extent of femininity/masculinity. In particular, the proposition of Gender Identity made it possible for Dr. Dohi to analyze and conclude each gender type from the developmental point of view. For example, "androgynous" gender type accepts not only what is expected of one's sex, but also what is not expected of one's sex. This tendency is in contrast with "masculine" individuals and "feminine" individuals, who are gender schematic, so they only accept what is expected of one's sex. This tendency comes from Gender Identity, which facilitates "androgynous" individuals to include any traits effective for establishing their self-identity. In short, Dr. Dohi explains that the "androgynous" individuals put more value on being themselves than on following gender. As a result, "androgynous" individuals are expected to have high masculinity and femininity. Furthermore, positive-masculinity mitigates negative-femininity, and positive-femininity mitigates negative-masculinity, so "androgynous" individuals are supposed to have low negative-masculinity and negativefemininity.

Developmentally, at the first step, people are seen not to develop both masculinity and femininity, so they have undifferentiated personality. In childhood, Gender Schema is developed, so boys accept masculinity into their self-concepts, i.e., "masculine" gender type, and girls accept femininity into their self-concepts, i.e., "feminine" gender type. In and after adolescence, Gender Identity tends to develop, and both sexes recognize that femininity and masculinity are important for their attainment of ego-identity, and finally become androgynous, integrated femininity and masculinity. Moreover, Gender Identity was causally clarified to facilitate androgyny by Structural Equation Modeling.

Dr. Dohi also examines the ways that Gender Personality are related to mental health and interpersonal communications and their importance for social life. Concerning this point, the relationships between Gender Personality and the Type A behavior, mental health, social adaptability, interpersonal stress in the first encounter with others are analyzed. In the results, Dr. Dohi found that masculinity was to induce the Type A behavior, but an additive femininity could mitigate the negative effect of masculinity toward Type A behavior. This result suggests a way to develop social life smoothly without any stress.

Concerning mental health and social adaptability, in the case of females, Dr. Dohi clarified that negative-femininity increases depression, and decreases self-esteem; moreover, if negative-masculinity is added, this tendency becomes more facilitated. She clarified the effect of the negative aspect of femininity/masculinity, suggesting the effectiveness of the Communion-Agency Scale. Concerning stress, androgynous individuals had higher blink rates, so in the future, she suggests that there should be further examination to determine whether feeling stress and making good communication are independent or not.

Changing the subject, the greatest feature of this book is that Gender Personality is empirically analyzed in relation with Japanese diverse cultural features, and it discusses widely the problems of gender which can give influence towards peoples' lives. Accordingly, this book is challenging the analysis of Japanese culture from the viewpoint of gender.

Firstly, Dr. Dohi argued that Japanese society is family-unit oriented, where not individuals but married couples or families function as a minimum unit of society. In addition, family-unit orientation works to maintain Japanese-style gender society with an eccentric motherhood-centered principle, which can be observed in one's view of child-care. This argument gives an innovative viewpoint for analysis of Japanese culture, which has been characterized mainly by consciousness about one's family and ancestors and collectivism. For example, through a research study about cultural differences of sleeping customs and attitudes between Japan and France, Dr. Dohi claimed that the distinction between individualism and collectivism cannot always be adaptive for every interpersonal domain, and that, depending on the private domain or public domain, both countries could be sometimes individualistic or sometimes collectivistic. She points out that in the case of Japan, in a private domain such as a married couple, Japanese people do not always go out with his or her spouse, romantic love feeling is not so strong, so they seem to be individualistic. However, in a public domain, Japanese people try to maintain intimate friendship with various considerations. This attitude seem to be collectivistic. In contrast, Japanese people pretend not to be interested in complete strangers, which again seems to be individualistic. Japanese people behave very differently toward in-group members and out-group members. It is very interesting that the author does not treat the difference between individualism and collectivism from only one viewpoint.

Additionally, this book contains various analyses about Japanese originality in relationships between lovers and married couples seen from shadow work, about gender-related succession by the parents' child rising, and about gender stereotypes in the way to share payments for drinking between young people, and so on. Each piece of research is independent, but in total it makes us feel the author's intensity toward gender and Japanese culture.

Once I wrote a book (Fukutomi, 1985) about the psychology of "being like", titled "Rashisa no Shinrigaku" in Japanese. In the book, I identified a feature of Japanese culture as "culture of sympathy" in contrast to a "culture of individual" in Western society, and pointed out that the phrase of "an implicit understanding" might express Japanese mentality directly. The mentality makes it possible to understand each other even without concrete words. However, even between Japanese people, it is necessary to share the same social context given by social norms, and if people are present in such context social norms, they feel released as if they can understand each others.

In fact, it is suspicious whether they truly know each other mutually, i.e. "God alone knows". However, the important point is that they believe that they can understand each other. This mentality in the background makes it possible to have the feeling of keeping bonds without behavior or words of disclosure of their romantic love.

Thinking about gender means re-thinking self-evident truth, in other words, pondering over cultural categories, which have been taken for granted without any questions. Bem (1993), who is one of pioneers of the study about Gender Personality, commented as follows in the preface of her book, "The Lenses of Gender"; When I say that my sexuality does not mesh with the available cultural categories, I mean that the sex-of-partner dimension implicit in the three categories of heterosexual, homosexual, and bisexual seems irrelevant to my own particular pattern of erotic attractions and sexual experience. The recognition of what is impossible to express in one's needs or interests facilitates some kinds of attitudes against already existing frames. The lenses of gender proposed by Bem consist of the following three lenses, i.e., Biological essentialism, Androcentrism, and Gender Po-

larization, which are treated as the things that distort the facts. Accordingly, as long as these lenses are used to observe everything, it is impossible to see the truth. Bem concluded that we should not see through these lenses, but fix our eyes on the lenses themselves. The issues of gender are truly the issues related to the way to live. It may also be possible to think that individuals' consciousness and behavior have been oriented intently by sex (Fukutomi, 2006). This is equal to the maintenance and reinforcement of gendered society or "gendered", which Dr. Dohi has pointed out. From this meaning of gender, it could be treated as "doing" gender (West & Zimmerman, 1987) instead of "being" gender.

Furthermore, Dr. Dohi points out that it is problematic for individuals to be affected by culture, which makes family relationships sex-typed without any awareness by the individuals. In the results of her research, sex-typing gives damage to individuals' independence, and influences the individuals' life styles. The issue of gender is not only present in Japan. It is the same issue for everyone who lives in a matured society to seek and attain their independent life style. Maybe we are unconsciously confined by the frame of social idea, generally accepted in the world and made by gender. The phenomenon is a global issue spread in all of matured societies.

A concept named "medicalization" is almost the same phenomenon as sex-typing. For example, the word is used to emphasize the message that being active sexually is a symbol of "masculinity" as a gender-related norm, and it treats the weakness of sexual functions by aging as a phenomenon of losing value as a masculine individual, and as a sickness to be cured by medicine such as Viagra. It should not be missed that even the standard of illness is made by a gender-related norm.

Such a situation can be seen as a social phenomenon caused by gender. Individuals must be eager to manage to find release from the restraint of gender. For this purpose, Dr. Dohi proposes the following; masculinity and femininity should not be treated as fixed traits in an individuals' mind, but as a kind of readiness for activation depending on the situation. In other words, it is also an intensity to control gender under one's own power, and to actualize it, individuals should recognize that they are gendered by themselves, i.e. they should be gender sensitive. This is parallel with fixing our eyes on the lenses, as claimed by Bem. In addition, establishment of Gender Identity may also be equal to seeing objectively the situation of ourselves.

Needless to say again, a cultural point of view is necessary for analyzing any problems of gender. Unfortunately, there have been few psychological studies to analyze Japanese culture in relation to gender so far. Regarding this point, the achievement of Dr. Dohi, who has studied Japanese culture from various gender-related points of view, is truly very worthy.

Furthermore, in addition to investigating gender psychology in Japanese culture, this book is worthy for a special mention, as it is written not in Japanese but in English, which is the internationally common language in research. This is exceedingly generous and very few Japanese psychologists write books in English. Writing a book in English can be expected to present Japanese specific gender issues toward researchers throughout the world, and can help bring comparative features of every culture into being.

Concerning the research methods, most of Dr. Dohi's series of studies are in the quantitative approach mainly by using questionnaires and statistically analyzing, particularly the latest statistic methods such as Structural Causal Modeling, so that the causal relationships between observed variables can be clarified. However, even such a high level quantitative method by questionnaires may have limitations as it is used for adapting the concept of "identity" on Japanese culture, which is excessively abstract, ambiguous, and based on individualism.

For the sake of further elaboration on the model in Japanese culture, in which Gender Identity is hypothesized as a determinant factor, performing research and adding qualitative studies into quantitative studies will have another additional effect. This book is a guide into the future of gender research. It can be expected to enlighten younger researchers in developing further studies.

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## **Preface**

This book was completed by selecting some of the author's social psychological studies and some chapters contributed to books about Gender Personality which have been published since 2000.

Until the 1970's, sex differences were treated only biologically, and thereafter many studies have been performed as gender studies, so that recent studies have treated sex differences as the products of social roles for females/males. Today, psychological studies about gender, including Gender Personality which is the theme of this book, are mainstream. These studies, however, have been developed in Western societies, and therefore some of their conclusions should not be adopted directly by other cultures. Seen from the viewpoint of a Japanese person, some particular cultural factors such as Japanese traditional family systems, the orientation towards motherhood, and family-unit orientation (in which families are treated as the minimum unit of the social sphere, so that married couples are seen as a kind of "individual") could be very important for thinking about Japanese Gender Personality. As a representative example, S. L. Bem proposed the concept of psychological androgyny in the U.S.A., which can be easily accepted in European-Western societies, where attainment of the self is seen as very important. On the other hand, in Japanese society, harmony with other people is highly valued and individuals are considered to exist only when groups and families exist in advance, and therefore an individual's psychological androgyny may not be considered as important in comparison with European-Western societies. This is one of the points most focused on in this book. Probably, empirical examinations into the desirability of Gender Personality in particular societies can clarify the values of each society. Thus research papers which are strongly related to the original gender of Japanese society were selected for this book.

The empirical studies in this book have already been published in academic journals abroad or within Japan, or in university bulletins. However, to complete this book, these papers were revised and shortened because of limitations of space. In addition, this book was made not only by listing such studies but also by relating them to other works, in an attempt to take a wider view of Gender Personality. Furthermore, by publishing in English, the standard academic language, the author hopes to increase interest in Japanese gender studies among researchers internationally, to establish new relationships with many researchers, and open further discussions on this field.

This book consists of the following four parts, containing a total of thirteen chapters.

Part I presents the concepts of Gender Personality and a determinant model of femininity/masculinity. In Chapter 1, the concepts of Gender Personality—mainly femininity/masculinity—are commented on. It is hypothesized that femininity, which mainly contains communion, and masculinity, which mainly contains agency, consist of the following two factors: firstly Gender Schema, a kind of frame of cognition about gender; and secondly Gender Identity, a kind of ego-identity, or an orientation for the individuality of one's own lifestyle as female/male by managing the needs of the self and social expectations. Chapter 2 describes the development of a Communion-Agency Scale (CAS) to measure both positive and negative aspects of femininity/masculinity. In Chapters 2 and 3 the validity of the determinant model of femininity/masculinity is also examined. In Chapter 4, through interviews, the determinant model is applied to the female university graduates.

Part II describes the relationships between Gender Personality and mental health or social adaptability. In Chapter 5, how masculinity facilitates Type A behavior patterns is clarified and, in contrast, attention is given to how femininity moderates the relationship between masculinity and the Type A behavior pattern in the case of both females and males. Chapter 6 presents how femininity/ masculinity of both positive and negative aspects are severally related to social support, self-esteem, and depression, etc. These results suggest that various sex differences in the broader domains of mental disorder and other syndromes can be explained from the viewpoint of Gender Personality. Chapter 7 examines how psychological androgyny

can make communication between females and males smoother, and decrease interpersonal stress.

In Part III, Gender Personality is discussed in relation to Japanese culture. Chapter 8 proposes that in Japanese society married couples or families are supposed to be minimum units socially, and it is expected that once people get married, they should be "one body, one mind" and should engage in their own given social roles, whether their roles suit them or not. Such a culture may maintain and strengthen Japanese gender society and accordingly may make individuals gendered. These hypotheses are discussed and tested. In addition, a description is offered of how, particularly in daily and private situations in the life of a married couple or in family life where socially invisible shadow work is carried out, gender is easily maintained and strengthened. Thereafter, empirical examinations are conducted of intergenerational gender-related socialization within the family in Chapter 9, of the influences of "Ie" (a kind of Japanese traditional family system) and collectivism in Chapter 10, of ways of sharing payment when drinking between young females and males in Chapter 11, and of customs or attitudes toward sleep behavior in Chapter 12.

Part IV consists only of Chapter 13, in which conclusions for the total book and also a preview of further studies are shown. Concretely, as a distinctive feature of Japanese society in relation to Gender Personality, the family is supposed to be the minimum unit for living in Japanese society. In fact this normative idea already does not fit with real society, but many social systems still follow it. Indirectly, "Ie" consciousness and priorities for motherhood are inevitable for any understanding of Japanese culture. Through these Japanese cultural features, family-unit orientations, which make intimate male-female relationships such as people in a married couple dependent on each other, must become widespread. In this chapter these social problems are discussed. In addition, discussion is carried out on the hypothesized model of the process by which Japanese culture makes individuals gendered and facilitates their orientation for family-unit relationships. In reality, an orientation towards family-unit relationships is influenced by social systems such as social security, tax systems, marriage, and the family register, which make people mutually dependent. Furthermore, these social systems derive from the Japanese culture of a previous era (a gendered role involvement in the workplace, acceptance of power distance, collectivism, etc.), and influenced in consequence by these cultural factors, family-unit orientation makes females feminine and males masculine.

Finally, I, the author, gratefully acknowledge the support and encouragement of Professor K. Hirokawa of Baika Women's University, with whom some of the research papers in this book were written. Professor Y. Kashima of the University of Melbourne is also gratefully acknowledged for offering ideas to propose a cultural gender model, and for encouraging me to start new research about Japanese Gender Personality. I particularly wish to express my appreciation to Dr. M. Fukutomi, a former professor of Tokyo Gakugei University, for reading and writing a Forward to this book. Professors A. Aono of Fukuyama University and Y. Morinaga of Hiroshima University are thanked for their valuable contributions to co-editing our former introductory book about gender. Special thanks go to Dr. H. Ikeda, who gave me considerable support in publishing this book, and to Ms. Kako Richards and Professor Ian Richards, who were engaged in the preparation of the English manuscripts.

This book was published with the support of a special research grant from Kobe Shoin Women's University for the publication of research results.

## Gender Personality:

Overview and determinant model of femininity/ masculinity

Part I consists of four chapters. In Chapter 1, first of all, it will be explained that personality is influenced biologically and socially, and gender is one of the most important social factors. Next, Gender Personality (femininity/masculinity, Gender Schema, Gender Identity) is positioned as a kind of gender-related psychological study, and the author's determinant model of femininity/masculinity is explained. Based on this determinant model, it was hypothesized that both positive and negative aspects of femininity/masculinity are determined by Gender Schemas and Gender Identity. In addition, as femininity/masculinity means the acception of gender stereotypes into self-concepts, gender stereotypes, which have common contents across many countries, are also overviewed.

Chapter 2 shows the process of development of a Communion-Agency Scale which measures both positive and negative aspects of femininity/masculinity. Next, the results of an empirical examination of the constructive validity of the model are introduced.

In Chapter 3, in addition to femininity/masculinity, Gender Schema and Gender Identity are also measured empirically, and by using Confirmative Factor Analysis (CFA) and Structural Equation Modeling (SEM), tests are conducted to see whether the determinant model of femininity/masculinity is suitable for observed variable data.

Furthermore, in Chapter 4, through interviews with female university graduates, who have recently began working, the process of developing Gender Personality at work, at home, and in their interpersonal relationships with their intimate male friends will be explored.

In conclusion of Part I, further discussion will be offered on the studies

in Part I and on other studies conducted by the author earlier, one of which is a hypothesis about the development of psychological androgyny, which is supposed to increase as people grow older.

# Definition of Gender Personality and the determinant model of femininity/ masculinity

## Gender Personality: Gender inside the individual mind

In general, an individual identifies oneself as a female or a male in accordance with her or his own biological sex. This identification is referred to as one's "sexual identity." At the same time, though, Gender Personality is another type of self-concept with which an individual makes an estimation about one's feminine or masculine side, based on how the majority of people in a given society think about the nature of the feminine- or masculine-side of people (i.e., gender stereotypes). One side of Gender Personality assimilated into the self-concept of females is "femininity," which is considered desirable for females and which is used when describing someone as a female in a given society. Another side of Gender Personality assimilated into the self-concept of males is "masculinity." Just as for femininity, masculinity is seen or regarded as desirable for males and is used when describing someone as a male.

From another point of view, one's individual sex can be divided into physical, behavioral and mental aspects, and each aspect can be determined both biologically and socially. For example, according to the physical aspect, which appears to be biological sex in this case, males and females are differentiated in accordance with, for example, their genitals, breasts or muscles, and according to other physical aspects: people who have long hair are considered feminine while people who have athletic tanned-skin are considered masculine. This "social" gender of femininity and masculinity is, in other words, Gender Personality. With regard to the behavioral aspect, factors such as delivering a baby and breast-feeding are the determinants

for making a differentiation between biological sexes among individuals. Meanwhile, according to other behavioral aspects, how people play behavioral roles such as child caring and vocational behavior are aspects of Gender Personality determined by social factors. Nevertheless, one's individual sex is defined both biologically and socially, and how these factors are defined is dependent on the physical, mental or behavioral aspects of individuals, as mentioned above.

Figure 1.1 is a diagram that was developed (Dohi, 2004) to indicate, when an individual is perceived in accordance with physical, mental and behavioral aspects, which of the biological and social factors has the stronger influence on each aspect of one's sex. As this Figure 1.1 illustrates, all physical, behavioral and mental aspects of one's sex are affected biologically or socially in various ways, and it shows in more detail that the physical aspect of one's individual sex, in general, has a strong tendency to be affected biologically while the behavioral aspect of one's individual sex has a strong tendency to be affected socially. However, the determinants for differentiation in the case of the mental aspect are still in dispute. Though the mental aspect is definitely the main domain of Gender Personality, and has a tendency to be influenced both biologically and socially, it is still too complicated a matter to identify genetic, circumstantial and other factors which are possibly involved in developing one's character and ability—as the idiom "nature or nurture" suggests.

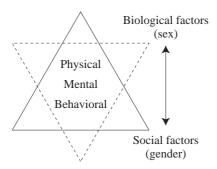


Figure 1.1 Individual physical, mental and behavioral aspects of one's sex which are determined by one's sex and gender

Source: Dohi, I. (2004). Individual physical, psychological and behavioral aspects of one's sex which are determined by one's sex and gender. In A. Aono, Y. Morinaga, I. Dohi. Psychology of gender. Kyoto: Minerva Shobo.

## The consensual gender stereotypes among individuals

According to Crawford & Unger (2004), gender stereotypes are consensual beliefs about different characteristics of females and males. The cognitive function, which is the main function of gender stereotypes, may lighten the load of individuals' cognitive activities (e.g., assessment of and memorizing about people) as equally as many other stereotypes. Furthermore, the characteristics of both females and males are extremely generalized and individual differences are underestimated within groups of females and males. Contrary to this, however, difference in sex is overestimated between females and males. Femininity and masculinity is formed by individuals based on gender stereotypes in a given society. However, the content is a little different among individuals since people's recognition and acceptance of what is feminine or masculine are different among individuals. Moreover, gender stereotypes are vague in content and people are inevitably subjective in judging whether the content is true. In fact, pursuing such a truth is not necessary to reach rigorous answers, similarly to the case with other kinds of stereotypes, and the accuracy of stereotypes is not the main theme in recent studies of stereotypes (Kamise, 2002). Nonetheless, since a large part of gender stereotypes is shared among a certain number of people, gender stereotypes are addressed in this book on the premise that there is a commonality in the perception of such stereotypes. This will be examined in more detail in the next section.

## Feminine and masculine stereotypes

Femininity and masculinity are formed as individuals accept feminine or masculine stereotypes into their self-concepts, as described earlier. How much feminine or masculine personality is accepted varies among different individuals. In other words, individual differences are found on one's degree of femininity and masculinity.

A large number of research and studies were conducted on gender stereotypes in the 1960s and 1970s (Nesbitt & Penn, 2000). Broverman et al. (1972) identified that personality traits which are associated with males are confident, independent, controlling and other competence-related traits, while personality traits which are associated with females are the traits related to warmth and expressiveness. Kashiwagi (1972) conducted a survey with male and female participants of an age-group between junior-

Adjectives associated with males		Adjectives associated with females			
Active	Adventurous	Dominant	Submissive	Sentimental	Superstitious
Forceful	Independent	Masculine	Affectionate	Feminine	Dreamy
Strong	Autocratic	Daring	Sensitive	Weak	Soft-hearted
Aggressive	Enterprising	Robust	Emotional	Attractive	Dependent
Stern	Courageous	Rude	Gentle	Fearful	Sexy
Severe	Progressive	Wise	Mild	Curious	Charming
Unemotional			Talkative	Affected	

Table 1.1 Contents of gender stereotypes

Source: Williams, J. E. & Best, D. L. (1982). Measuring sex stereotypes: A thirty-nation study. Beverly Hills, CA: Sage.

high school (age: in their early to mid-teens) and university in Japan. In the survey, the participants were asked to evaluate what they expected from females and males. The survey identified that a high degree of activity and intelligence are expected from males while beauty and submissiveness are expected from females. Williams & Best (1982) summed up the adjectives which were believed to represent male and female characteristics, based on a study sample consisting of university students in 25 countries (see Table 1.1).

As we can find in all the studies outlined above, many researchers have identified that the core personality traits which are associated with females are communion attributes, and those of males are agency attributes (Broverman et al., 1972; Williams & Best, 1990; Bakan, 1990). Bakan (1966) defined agency and communion as follows.

"I have adopted the terms "agency" and "communion" to characterize two fundamental modalities in the existence of living forms, agency for the existence of an organism as an individual, and communion for the participation of the individual in some larger organism of which the individual is a part. Agency manifests itself in self-protection, self-assertion, and self-expansion; communion manifests itself in the sense of being at one with other organisms. Agency manifests itself in the formation of separations; communication in the lack of separations. Agency manifests itself in isolation, alien-

ation, and aloneness; communion in contact, openness, and union. Agency manifests itself in the urge to master; communion in non-contractual cooperation. Agency manifests itself in the repression of thought, feeling, and impulse; communion in the lack and removal of repression. One of the fundamental points which I attempt to make is that the very split of agency from communion, which is a separation, arises from the agency feature itself; and that it represses the communion from which it has separated itself."

The development-model of Bakan (1966), Block (1973), and Loevinger (1966) argues that the integration of agency and communion is a fundamental task of human beings (Dohi, 1995).

Communion and agency correspond to other dualistic exact-opposite concepts. Some of the concepts relate to gender while others do not. We can find concepts similar to agency and communion attributes in, for example, Parsons & Bales' (1955) instrumental leaders' trait and expressive leader's trait, Misumi's (1966) performance function and maintenance function of leadership and Kawai & Aoki's (1986) division discipline as a role of fathers and inclusion discipline as a role of mothers. The first half of each pair relates to agency and the second half of each pair relates to communion.

The traits which are thought as typical gender stereotypes, as shown above, are desirable for human beings to have, regardless of their biological sex. That is to say, these are the positive aspects of stereotypes. On the list by Williams & Best (1982), nonetheless, we also find negative aspects of stereotypes which include "dependent" or "superstitious" as feminine stereotypes and "rude" as a masculine stereotype. It had been argued that such negative traits are, relatively speaking, found more in feminine stereotypes than masculine stereotypes. Rosenkrantz et al. (1968), for example, surveyed male and female college students and concluded that they commonly held stereotypes about males and females, and that they believed the traits they associated with males are more socially desirable than the traits they associated with females. Stereotypes in nature contain negative aspects, and the negative aspects are involved with serious social issues which are possibly related to discrimination or prejudice. They are also likely to have harmful influences on one's mental health. Accordingly, both the positive and negative aspects are incorporated into the Communion-Agency Scale (CAS) developed by Dohi & Hirokawa (2004).

## The first determinant of femininity/masculinity: Gender Schemas

Dohi (1995; 1999) proposed a determinant model of femininity/masculinity and hypothesized that they were determined in accordance with Gender Schemas and Gender Identity (see Figure 1.2).

Gender Schemas (Bem, 1981) are structures which direct people's cognitive process to, for example, where attention is paid, how information is interpreted and how memory is maintained when individuals acknowledge objects. Gender Schemas make individuals make sex-typed choices, such as "this is feminine" or "this is masculine," from various kinds of information they receive. The information includes information related to self-characteristics. When a female receives such information, for example, Gender Schemas make her think something like, "having these characteristics is feminine and I am a female, thus I will accept it as my self-concept" and/or "this characteristic is masculine and I will not accept it into my self-concept

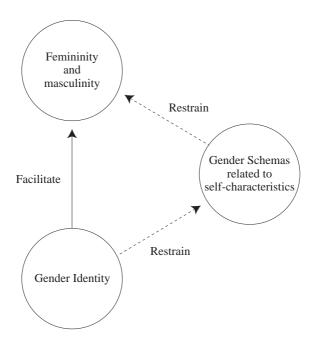


Figure 1.2 A determinant model of femininity/masculinity

Source: Dohi, I. (1999). Self-concept of gender: The determinants of masculinity and femininity and their functions. Tokyo: Taga Shuppan.

since I am a female." Consequently, Gender Schemas make females accept stereotypically feminine characteristics (communion) and males accept stereotypically masculine characteristics (agency) as self-concepts, while Gender Schemas prevent women from accepting masculinity and men from accepting femininity. More specifically, females become a feminine-dominant gender type and males become a masculine-dominant gender type.

Gender-aschematic individuals, in contrast, do not go through the process of verifying whether given characteristics match with their own biological sex, and thus, they have a strong tendency to have a gender-typing of psychological androgyny. The individuals with this gender type accept both masculinity and femininity, regardless of their biological sex.

We, however, should not forget that the weakness of Gender-aschematic can make males have no interest in having masculinity and females have no interest in having femininity. In other words, they become individuals of an undifferentiated gender type with low masculinity and femininity. Accordingly, Dohi (1996) proposed Gender Identity as the second determinant of Gender Personality in order to distinguish between "androgynous" and "undifferentiated" gender types. The Gender Identity Scale which was developed by Dohi is shown in Table 1.2.

## The second determinant of Gender Personality: Gender Identity

Studies on the self in psychology often use the idea of dichotomy (Yamamoto, 1989) and the self, which is supposed to be a whole, is divided into bipolar conflicted concepts. In a case where the maturity of self is at a high degree, however, the conflicted concepts may be blended and integrated. This is found in the studies, for example, on "Both sides of its own self" by Yamamoto (1989) and "Two-sidedness of personality" by Kuwabara (1986). The concepts of "mutuality" and "identity" advanced by Erikson (1950) are also thought of as having similar meanings to a two-sidedness of self. Mutuality means, on the one hand, the orientation for cooperation with others and being altruistic, and on the other hand, also the orientation for consistent assertion of self-existence and being self-centered (Inoue, 1986). In other words, it means mutual activation and mutual development in the relation of self to others. It may also mean that satisfying others' needs is equal to satisfying the needs of oneself. Gender Identity (Dohi, 1996) is defined as such gender-related identity which seeks to integrate both sides of one's self.

### Table 1.2 Gender Identity Scale

#### For females

#### <Accepting one's sex or gender>

- 1. I have no intention of having babies. (Reverse)
- 2. My own gender is against me. (Reverse)
- 3. Loving someone is something valuable in my life.
- 4. I have a/some friend/friends whom I can talk with about somebody I like of the opposite sex.
- 5. My life will not be completed if I don't give birth.
- 6. I would have been happier if I were male. (Reverse)
- 7. I would like to be reborn as a male. (Reverse)
- 8. I often read articles about romantic relationships.
- 9. I'd like to find some pleasures in being a female.
- 10. I have a rough plan to have my own children someday.

#### <Identification with parents>

- 1. I still have some resentment or opposition to my parents. (Reverse)
- 2. I wish I was born as a child in another family. (Reverse)
- 3. My parents often say to me "it's because you are woman..." (Reverse)
- 4. My parents reprimand me for coming home late. (Reverse)
- 5. I discovered how to live as a female from my mother.
- 6. My parents do not allow me to travel because I am a woman. (Reverse)
- 7. My parents are very close to each other.
- 8. I have never been on a trip with my parents. (Reverse)
- 9. I am always expected to do household work because I am a female.
- 10. My parents understand me well when I talk to them.

#### <Intimacy with the opposite sex>

- 1. I usually start conversations with persons of the opposite sex.
- 2. I often go on a date with one person.
- 3. I have plenty to say with people of the opposite sex.
- 4. I have many friends of the opposite sex.
- I don't need to pretend about anything with my favorite people of the opposite sex.
- I have a strong personality which has an appeal to my favorite people of the opposite sex.
- 7. I feel tense in front of my favorite person(s) of the opposite sex. (Reverse)
- 8. I cannot tell my romantic feelings to my favorite person of the opposite sex. (Reverse)
- 9. I can accept the wants of the person whom I am dating.
- My romantic relationships with person(s) of the opposite sex do not last long. (Reverse)

#### For males

#### <Accepting one's sex or gender>

- 1. My parents often say to me "it's because you are male..." (Reverse)
- 2. My own gender is against me. (Reverse)
- I often received physical punishment from my parents because I am a male. (Reverse)
- 4. I have no intention of having children. (Reverse)
- 5. I would have been happier if I were a female. (Reverse)
- 6. I believe that my parents would not have bothered me so much about my school performance if I was a female. (Reverse)
- 7. I have never had romantic feelings for persons of the opposite sex. (Reverse)
- 8. There is no reason to feel shame as a male about hair growing on my body.
- 9. I don't like men's bodies because they are rugged. (Reverse)
- My parents forced me to get into playing at least one sport because I am a male. (Reverse)

#### <Identification with parents>

- 1. My parents are very close to each other.
- 2. I am planning to be with my wife for a long time while stimulating each other as human beings.
- 3. Whether we can have a happy married life or not is something we have to figure out by ourselves.
- 4. My parents understand me well when I talk to them.
- 5. I might get a divorce even though I am marrying someone. (Reverse)
- 6. When I was small, I talked about what happened in school very often.
- 7. There is something dignified about my father.
- 8. My life after marriage depends on my partner so I am not sure about the future. (Reverse)
- 9. I can imagine what kind of parent I will be.
- 10. I always have some kind of ideal about persons of the opposite sex.

#### <Intimacy with the opposite sex>

- 1. I often go on a date with one person.
- 2. I have plenty to say with people of the opposite sex.
- 3. I have a strong personality which has an appeal to my favorite people of the opposite sex.
- 4. I usually start the conversations with persons of the opposite sex.
- 5. Loving someone is something valuable in my life.
- I cannot tell my romantic feelings to my favorite person of the opposite sex. (Reverse)
- 7. I have many friends of the opposite sex.
- 8. I have a/some friend/friends whom I can talk with about somebody I like of the opposite sex.
- 9. I feel tense in front of my favorite person(s) of the opposite sex. (Reverse)
- I don't need to pretend about anything with my favorite people of the opposite sex.

Source: Dohi, I. (1996). Construction of gender identity scale. The Japanese Journal of Educational Psychology, 44, 187-194.

Gender Identity is "to live the life you want to live as a female" for females and "to live the life you want to live as a male" for males. Gender Identity is a self-identity based on one's acceptance of his or her own sex. It is hypothesized that Gender Identity facilitates the acceptance of both masculinity and femininity, regardless of one's own biological sex. It is also hypothesized that Gender Schemas can relieve the inclination to mitigate femininity for males and the inclination to mitigate masculinity for females. This is because self-identity, in nature, has a function of mutuality which tries to reconcile the relation between one's self and society and utilize them both. Even if individuals have potentially both masculinity and femininity, once they are gender typed in socialization, females tend to have only femininity and males only masculinity. Nevertheless, once self-identity is established, one comes to have psychological androgyny in an effort at being compatible with one's own needs and social expectations. This is because both agency and communion—the core of masculinity and the core of femininity—are required for individuals in order to establish self-identity. Gender Identity makes one recognize that it is not appropriate to categorize people in accordance with such feminine characteristics or masculine characteristics in the process of gender-related socialization, and it is thought that this inhibits Gender Schemas.

Psychologically androgynous persons, who possess attributes of both femininity and masculinity, are thought to wish to live by their own values rather than following gender categories in society. Therefore, it is believed that they accept what they consider important for themselves, even if masculine characteristics are not expected for females and feminine characteristics for males by society. The application of the determinant model of Gender Personality (see Figure 1.3) will be discussed in Chapter 3 using two kinds of Gender Schema indexes and the Gender Identity Scale.

# Understanding femininity/masculinity with both positive and negative aspects by gender type

Femininity/masculinity have been understood as gender types with four categories since Bem (1974; 1975) advocated the concept of psychological androgyny. The four categories are: "androgynous" gender type with high masculinity and femininity; "masculine" gender type; "feminine" gender type; and "undifferentiated" gender type with low masculinity and femininity. A Japanese version of the Bem Sex Role Inventory (BSRI; Azuma,

1990; 1991) and several other androgyny scales have been developed so far in Japan, too.

The gender type is defined by referring to high- and low-levels of masculinity and femininity of a positive aspect, and the levels of masculinity and femininity of the negative aspect of each gender type can be predicted by referring to Gender Schemas and Gender Identity, as included in the author's determinant model (see Figure 1.3).

When Gender Schemas are strong, females become "feminine" gender type in which femininity is high and masculinity is low in both positive and negative aspects, and males become "masculine" gender type in which masculinity is high and femininity is low in both positive and negative aspects.

In contrast, when Gender Schemas are weak, regardless of their biologi-

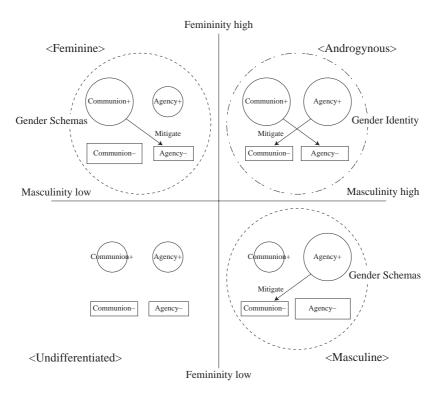


Figure 1.3 Masculinity and femininity, Gender Schemas and Gender Identity of every gender type

Source: Dohi, I. (2006). Masculinity and femininity. M. Fukutami (Ed.) Gender psychology. Tokyo: Asakura Publishing, pp. 105-120.

cal sex individuals reach a high-level of psychological androgyny in which the levels of both masculinity and femininity are high in the positive aspect, or they reach "undifferentiated" gender type in which the levels of both masculinity and femininity are low in the positive aspect.

Gender Identity makes individuals become "androgynous" gender type or undifferentiated" gender type. When the level of Gender Identity of individuals is high, both their masculinity and femininity becomes low in the negative aspect—which can be a rebuff for them becoming independent—while both masculinity and femininity become high in the positive aspect. As a result, they become "androgynous" gender type. In cases where the level of Gender Identity of individuals is low, both their masculinity and femininity become low in the positive and negative aspects, and thus it is likely that they will become "undifferentiated" gender type.

It is also thought that there are interactions among Gender Personality factors, as shown in Figure 1.3. More specifically, the positive aspect of masculinity (agency) mitigates the negative aspect of femininity (communion), and the positive aspect of femininity (communion) mitigates the negative aspect of masculinity (agency). The reason for these interactions can be hypothesized, by following Helgeson's theory, in that agency and communion have in nature a tendency to be balanced, and thus the positive aspect mitigates the excessiveness of the negative aspects of agency and communion, because agency and communion in positive aspects cannot affect each other since they are independent from each other. Chapter 2 will discuss the validity of this hypothesis by using a new scale to measure Gender Personality (femininity and masculinity).

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# Communion-Agency Scale and its constructive validity:

Measuring the positive and negative aspects of femininity/masculinity

The purposes of this study were to develop a scale for measuring the positive and negative aspects of communion and agency separately and to examine its constructive validity. First, 40 preliminary-items were rated by 264 male and female university students, and its data were used to determine CAS (Communion-Agency Scale) items which include four sub-scales (each sub-scale contains six items). Next, 303 female university-students and 169 male university-students were measured using the CAS, and each of them was identified as one of four gender types (androgynous, masculine, feminine and undifferentiated) in accordance with their positive-agency and positive-communion CAS scores. Analyses of variance (ANOVA) were also conducted by sex in order to examine the effects of gender types for negative-communion and negative-agency. The results obtained from the factor analysis of the scale items, from correlations among sub-scales and from ANOVA supported the hypothesis that CAS has a constructive validity, and also revealed that positive-communion moderates negative-agency and positive-agency moderates negative-communion. Discussion was then offered on the expected merits which can possibly be gained by measuring each positive and negative aspect of communion and agency.

# Communion and agency in the positive aspect

Prior to the 1970s, when people talked about sexual differences, they were talking about biological sexual differences (Deaux & Kite, 1987). Studies from the viewpoint of gender (social sex) have become popular since then, and it is now believed that sexual differences are mostly made in conse-

quence of sex-roles assigned differently to females and males by society. Many researchers have identified that the core of femininity—the characteristics related with female roles—is communion and that the core of masculinity—the characteristics related to male roles—is agency, as described in Chapter 1 (Broverman et al., 1972; Williams & Best, 1990; Bakan, 1990). Accordingly, many of the scales which measure femininity and masculinity are composed of items related to communion and agency. However, the problem we face here is that both the interest of the researchers and the scale items which have been developed to examine communion and agency have empirically placed a disproportionate weight on the positive aspect (Kite, 2001), and only the positive aspect has been referred to when psychological influences on individuals are examined (Bem, 1975; Spence et al., 1975; Heilbrun, 1976; Taylor & Hall, 1982). Femininity and masculinity should be understood multilaterally, and more consideration should be given to the negative aspect of femininity or masculinity which is thought of as undesirable for society, as well as for individuals (Helgeson, 1994). These processes will help in an understanding of the influence of femininity/masculinity on mental health, social adaptability and the interpersonal adjustment of individuals.

# The negative aspects of communion and agency

An earlier study on the negative aspects of communion and agency was conducted by Bakan (1966) (Spence et al., 1979). In Bakan's studies, the term "unmitigated" was mainly used for agency. Today, however many psychologists use the term "unmitigated" in "unmitigated communion," for when they refer to the negative aspect of communion. The term "unmitigated" is used when certain undesirable traits of individuals are not mitigated or reduced by other traits. In other words, "unmitigated communion" is about communion which is not mitigated by agency. For example, if someone has a trait of being highly sensitive to other people, this is understood as a positive aspect of communion. However, if the person lacks independence, the ability to take action or other qualities of agency, he/she tends to be sensitive only to the mood or feelings of other people and this quality is now understood as a negative aspect of communion. Individuals with this quality are, in general, over-sensitive to others. Similarly, "unmitigated agency" is about excessive agency which is not mitigated by communion. Having confidence, for example, is one of the positive aspects of agency.

However, if individuals with such a sense of confidence lack cooperativeness with other people, then their confidence is not mitigated by the quality of communion called cooperativeness and it becomes the negative aspect of agency called arrogance. It is believed that when the two aspects of communion and agency mitigate each other and are kept in balance in order to avoid having a one-sided redundancy, then this can help reduce their negative effects on each other.

### An early study on the negative aspect of Gender Personality

Spence et al. (1979) developed the Extended Personal Attributes Questionnaire (EPAQ), which is a first scale for measuring the negatives aspects of femininity and masculinity. The EPAQ was developed by adding sub-scales which measure the negative aspects of femininity and masculinity to the already existing Personal Attributes Questionnaire (PAQ; Spence et al., 1975). The negative aspect of feminine characteristics (communion) means those traits which are judged as socially and individually undesirable and are typical characteristics of females. Likewise, the negative aspect of masculine characteristics (agency) means those traits which are judged as socially and individually undesirable and are typical characteristics of males. Spence et al. (1979) verified their hypothesis that the negative aspect of communion could be reduced by the positive aspect of agency and that the negative aspect of agency could be reduced by the positive aspect of communion. The following two methods were used for this verification. One method was correlation analyses between sub-scale scores. The correlation analyses were also conducted by Helgeson (1993), Saragovi et al. (1997), and their research results were significantly consistent. They verified negative correlations between positive-communion and negative-agency and between positive-agency and negative-communion. The other method was conducted by first identifying gender types "androgynous," "masculine," "feminine," and "undifferentiated" through combinations of dichotomy (high-low) of positive masculinity and femininity and then verifying that there were differences of dichotomy (high-low) for negative-agency and communion among these types. More specifically, it was verified that negative-agency was higher in two types with low positive-communion. That is to say, the "masculine" gender type and "undifferentiated" gender type in which positive-communion was low had higher negative-agency than "feminine" gender type and "androgynous" gender type in which positive-communion

was high. It was also found that negative-communion was higher among the gender types with low positive-agency. In other words, the "feminine" gender type and "undifferentiated" gender type in which positive-agency was low had higher negative-communion in comparison to the "masculine" gender type and "androgynous" gender type in which positive-agency was high. The results were applicable to both females and males. Note that there is no information available about multiple comparison tests using ANOVA (analysis of variance) in order to compare the means of scale-scores among gender types in the paper by Spence et al. (1979).

#### The purpose of the studies

The purpose of this study is to develop a new scale of femininity/masculinity, and this scale is developed to measure not only the positive aspects of communion and agency but also their negative aspects. This study is referred to as Study I in this chapter. The constructive validity of the developed scale is examined in another study. This second study is referred to as Study II in this chapter. More specifically, Study II examines the mitigating effect of positive-communion on negative-agency and the mitigating effect of positive-agency on negative-communion by using correlation-factor analyses, ANOVA and the effects of gender types on negative-agency and negative-communion.

Hypothetically, negative-agency is mitigated among the "feminine" gender type and "androgynous" gender type which have high positive-communion and, in contrast, negative-agency is not mitigated among the "masculine" gender type and "undifferentiated" gender type which are have low positive-communion. Similarly, negative-communion is mitigated among the "masculine" gender type and "androgynous" gender type which have high positive-agency and, in contrast, negative-communion is not mitigated among the "feminine" gender type and "undifferentiated" gender type which have low positive-agency.

## Study I: Developing CAS for both positive and negative aspects

### Collecting items for a preliminary survey

Items for a preliminary survey were collected by citing from and making reference to BSRI (Bem Sex Role Inventory; Bem, 1974), PAQ (Personal

Attributes Questionnaire; Spence et al., 1975), EPAQ (Extended Personal Attributes Questionnaire; Spence et al., 1979) and MHF scale (Masculinity-Humanity-Femininity Scale; Ito, 1978), which are the existing scales of Gender Personality. The collected items are desirable in terms of society and individuals, and they are relevant to communion and agency, which are the typical factors for femininity and masculinity. In addition, communion and agency which are socially and individually undesirable as items for the preliminary survey were identified by referring to the scale developed by Spence et al. (1979) and other existing scales of femininity/masculinity. The number of collected items was 200, which consisted of 50 positive-communion, 50 positive-agency, 50 negative-communion and 50 negative-agency. From the 200 items, the items which were similar to each other and which were relevant only to either males or females due to biological constraints were eliminated. This reduced the number of the items to 82, which consisted of 20 positive-agency, 20 negative-communion, 21 positive-communion and 21 negative-agency. The 82 items were then categorized into the four sub-scales by five raters in order to check that these 82 items represented the concepts in accordance with the hypotheses precisely. As a result, 40 items (10 for each concept) were selected as items for the preliminary survey.

#### Implementation procedures for the preliminary survey

In 2001, a survey was conducted with 264 participants (113 male university students and 151 female university students) in order to finalize the scale-items. First, the participants were asked to assess how well each of the 40 preliminary-survey items applied to themselves by responding in a format of four-level items (from "1. rarely true" to "4. very true"). Then, the participants were asked to respond how frequently each of the personality characteristics which were described in the 40 items is seen between females and males by choosing from: "it is seen more frequently in females," "it is seen more frequently in males,"

### Final scale items of CAS

Principal component analysis was conducted on every sub-scale, with 10 items. From the results of a scree plot it was decided that one component was enough to conclude every sub-scale, and thus the number of compo-

nents was limited to one. Next, principal component analysis was conducted again, and the items of which the component loading was greater than almost 0.50 were selected.

Deletions were made again and this time they were made to: any item which was expected to be an item for masculinity (agency) but was judged as an characteristic found more frequently among females than males; any item which was expected to be an item for femininity (communion) but was judged as an characteristic found more frequently among males than females; and any item which was expected to be an item either for masculinity or femininity but was judged as having no difference found between males and females. As a result, a total of 24 items were decided on as the scale-items and six different items were allocated from them to each of positive-communion, positive-agency, negative-communion and negative-agency. This scale was named the CAS. Cronbach's alpha was calculated. The internal consistency of each scale is shown in Table 2.1.

#### Study II: Examining the constructive validity of CAS

#### *Implementation of survey*

A survey was conducted first to verify whether the mitigating effect of positive-agency would be found on negative-communion and, similarly, whether the mitigating effect of positive-communion would be found on negative-agency, and the developed scale was examined to check its constructive validity. The CAS consisting of 24 items was conducted on 472 participants who were university students (169 males and 303 females) in 2004. A Likert-type scale was adapted for this survey, and each item had four-level responses. Each participant was asked to respond by choosing from one of the four levels, including "1. rarely true" to "4. very true."

### Scale scores and classification of gender types

Scale scores were calculated by adding together the points from the six items of each scale. The score range of each scale was between 6 and 24 points. It shows that the higher the score is, the stronger the traits are (see Table 2.2). *T*-tests were used to assess whether the average values of males and females were significantly different from each other, and agency was found higher among males than females in both negative and positive aspects. No difference was found between males and females in the positive

Table 2.1 Scale items of CAS and their component loadings

Component	Scale items	Loadings
	I am kind to others.	.77
	I can empathize with others.	.66
Positive-communion $(\alpha = .74)$ (Eigenvalue = 2.66)	I am not afraid to apologize.	.66
	I can cooperate with others.	.66
	I am good at praising others.	.62
	I can express my thanks in words.	.61
	I am proactive.	.79
	I have a strong will and belief.	.73
Positive-agency	Once I decide something, I take action.	.71
$(\alpha = .81)$ (Eigenvalue = 3.07)	I have confidence.	.70
(Eigenvalue = 3.07)	I assert my opinions.	.68
	I can face difficulties.	.67
Negative-communion $(\alpha = .72)$ (Eigenvalue = 2.52)	I worry too much about what others say and do.	.77
	I worry so much about others that I can't take any action.	.74
	I am easily hurt by what others say.	.66
	I analyze too much what others say.	.63
	I think about relying on other people automatically.	.52
	I have trouble expressing my opinions in front of people.	.52
	I take an aggressive attitude toward others.	.64
Negative-agency ( $\alpha$ = .62) (Eigenvalue = 2.09)	I have no patience about mistakes made by other people.	.63
	I can't tolerate incompetence.	.60
	I make others comply with me.	.60
	I don't listen to other people's opinions.	.57
	I can't accept opinions different from mine.	.49

	Communion		Age	ency
	Positive Mean (SD)	Negative Mean (SD)	Positive Mean (SD)	Negative Mean (SD)
Females	18.3 (2.4)	17.0 (3.0)	14.8 (3.3)	12.0 (2.7)
Males	18.2 (2.7)	16.5 (3.4)	15.5 (3.5)	12.7 (2.9)
<i>t</i> -value	493	-1.72†	2.27*	2.28*
(df)	464	306.9	467	464

**Table 2.2** Mean and SD of CAS by sex and the results of t-tests by sex

*Note*: \* p < .05, † p < .10

aspect of communion. It was found that there is a tendency for females to have a higher negative aspect of communion than males.

In order to identify gender types, the median was determined by reference to the median-split method, in accordance with the orthogonality of the scales of positive-communion and positive-agency which is the premise of almost all previous research. The median of the scale scores of positiveagency and positive-communion were determined by sex and then the scores were combined. The median of positive-agency was 16 for males and 15 for females, while the median of positive-communion was 19 for both males and females. Each male and female was categorized into: a group where the median is high in both positive-agency and positive-communion, identified as "androgynous" gender type (81 females and 51 males); a group where the median is high only in positive-agency and low in positive-communion, identified as "masculine" gender type (68 females and 36 males); a group where the median is high only in positive-communion and low in positive-agency, identified as "feminine" gender type (66 females and 26 males); and, a group where the median is low in both positive communion and agency, identified as "undifferentiated" gender type (82 females and 50 males).

### Correlations among the sub-scale scores

Table 2.3 shows the correlations among CAS sub-scores by sex. As was hypothesized, a slightly strong negative-correlation was found for both sexes between the scores of negative-communion and positive-agency. Between

	Positive- agency	Positive- communion	Negative- agency	Negative- communion
Positive-agency		.228*	.222**	459**
Positive-communion	.409**		378**	.102
Negative-agency	.175*	125		066
Negative-communion	402**	023	.212**	

**Table 2.3** Correlation between 4 scales of CAS (by sex)

*Notes*: Female data are shown on the upper right (N = 302), and male data on the lower left (N = 167).

negative-agency and positive-communion, a slightly strong negative-correlation was found for females, and a negative correlation was also found for males, though it had no significance.

## The effects of gender types on negative-agency and negativecommunion

Figure 2.1 and Figure 2.2 illustrate the scores obtained by females and males, respectively, according to negative-agency and negative-communion by gender types. A one-way ANOVA (analysis of variance) was conducted after gender types were assigned as independent variables and negative-agency and negative-communion were assigned as dependent variables. For both sexes, it was found that the main effects of gender types were significant for both dependent variables, and Duncan's multiple comparison tests were conducted accordingly. The following is a detailed description of the results of the ANOVA of each dependent variable.

First, for both sexes, significant gender type effects were found in negative-communion (F(3, 293) = 13.069, p < .001 for females and F(3, 160) = 6.001, p < .01 for males), and negative-communion was found to be lower among the "androgynous" gender type and the "masculine" gender type than among the "feminine" gender type and the "undifferentiated" gender type. This result suggests the presence of a mitigating effect of positive-agency on negative-communion.

Secondly, it was found that negative-agency tended to be low among the gender types with high positive-communion, and the results suggest the presence of a mitigating effect of positive-communion on negative-agency.

<sup>\*</sup> *p* < .05, \*\* *p* < .01, \*\*\* *p* < .001

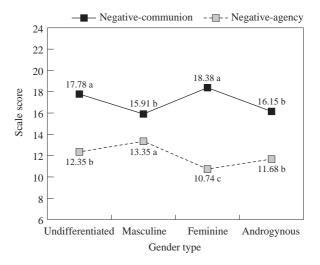
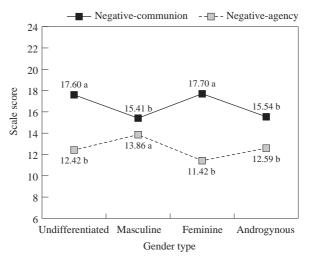


Figure 2.1 Female's negative-communion and negative-agency scores by gender type

*Note*: a, b, c in the figure show that there are significant differences between different letters according to Duncan's multiple comparison tests.



**Figure 2.2** Male's negative-communion and negative-agency scores by gender type

*Note*: a, b, c in the figure show that there are significant differences between different letters according to Duncan's multiple comparison tests.

However, the results found here were not as significant as a mitigating effect of positive-agency on negative-communion. That is, for females, significant gender type effects were found in negative-agency (F (3, 293) = 12.391, p < .001), and negative-agency among the "androgynous" gender type and the "feminine" gender type was lower than negative-agency in the "masculine" gender type. No significant difference was, however, found in negative-agency between the "androgynous" gender type with high positive-communion and the "undifferentiated" gender type with low positivecommunion. The result for negative-agency for males was almost the same as that for females. That is, for males, significant gender type effects were found in negative-agency (F(3, 160) = 4.123, p < .01), and negative-agency among the "androgynous" gender type and the "feminine" gender type was lower than negative-agency in the masculine-dominant gender type. No significant difference was, however, found in negative-agency among the "androgynous" gender type, the "feminine" gender type and the "undifferentiated" gender type.

#### Developed CAS for further studies

#### Reliability and validity of the CAS

The purpose of Study I was to develop a scale of femininity/masculinity which can measure both positive and negative aspects of communion and agency. For this purpose, data was collected on negative-communion and negative-agency which were judged as undesirable personality traits, in addition to the existing scale-items of positive-communion and positive-agency, and then the CAS was developed in accordance with the data. The CAS consists of four scales of positive-agency, positive-communion, negative-agency and negative-communion, and each scale consists of six items.

All the items of each sub-scale, with which the principal component analysis was composed, loaded high in the first component, and Cronbach's alpha was high enough. All these results suggest there is no problem for the reliability of the scale. Both at local and international levels, many of the scales measuring femininity and masculinity are created with items selected based on whether those items are adaptable as descriptive as well as normative gender stereotypes. Next, a post-hoc selection was conducted for agency and communion by a method such as factor analysis. The CAS developed in this study used existing knowledge of major factors about femi-

ninity and masculinity as a reference, focused on agency and communion from the stage of collecting items, and selected items which are recognized generally as descriptive gender stereotypes. The Ito Sex Role Scale (ISRS; Ito, 1986) is another scale which has developed in Japan through similar procedures to the CAS of this study. The ISRS was, however, developed more than 15 years ago, and thus it is possible that developing a new scale in accordance with current gender-stereotypes increases the reliability and persuasiveness of the study's results.

#### The constructive validity of the CAS

The purpose of Study II was to examine the constructive validity of the scale developed in Study I. A correlation coefficient was calculated between the mitigating effect of positive-communion on negative-agency and the mitigating effect of positive-agency on negative-communion, and negative correlations were found, for both sexes, between negative-agency and positive-communion and between negative-communion and positive-agency. The constructive validity of the concept was, then, assessed by sex using a one-way ANOVA for gender types. The dependent variables of this analysis were negative-agency and negative-communion. As a result, the analyses of variance by sex clarified that there were indeed significant gender type effects on negative-communion and negative-agency, as hypothesized. The results are shown in Figure 2.1 and Figure 2.2. It was found that, for both males and females, negative-agency is suppressed to low among the gender types with high positive-communion and negative-communion is suppressed to low among the gender types with high positive-agency. These results suggest that positive-communion which is measured by the CAS mitigates negative-agency and that positive-agency mitigates negativecommunion.

### The mitigating effects caused by positive aspects and Gender Identity

This section will correlate the mitigating effects of positive aspects on negative aspects, which were supported in this study, within the determinant model of femininity/masculinity. These effects are thought to signify the actions of Gender Identity. The determinant model hypothesizes that Gender Identity helps individuals realize that their negative aspects should be mitigated for their own identity. That is, if the Gender Identity of a male or female is not so strong, for example, then the male tends to accept mascu-

linity in a way he is expected to while the female tends to accept femininity in a way she is expected to, in accordance with Gender Schemas, regardless of the sides of each aspect.

This study has confirmed that negative aspects can be predicted to some extent from positive aspects, and therefore, it is possible to use only the 12 items of the positive aspects of communion and agency of the CAS, rather than using all of the 24 items of the CAS when the number of items for questionnaires needs to be restricted.

This study supports the hypothesis of the mitigating effect of positive-communion on negative-agency as well as the mitigating effect of positive-agency on negative-communion. This result can be interpreted as also supporting the validity of the additive androgyny model of Marsh & Byrne (1991), who proposed that the positive aspects of communion and agency have good psychological impacts on individuals. This interpretation is possible because since individuals of the "androgynous" gender type have high positive communion and agency, and each of their negative agency and communion is possibly mitigated additively.

In this study, however, the mitigating effect of positive-agency on negative-communion was stronger than the mitigating effect of positive-communion on negative-agency. It will be necessary to conduct the CAS on more participants in the future in order to examine and confirm the reason why the mitigating effect of positive communion on negative agency appeared to be not so strong in the analysis of this study.

#### Further studies about interaction within gender personality

The first issue to be considered in the future is to confirm the relationships between the positive and negative aspects of communion and between the positive and negative aspects of agency. Helgeson (1993; 1994) described how negative-agency (e.g., arrogance) and the positive-agency (e.g., strong belief of having confidence) are totally different in nature, and likewise, how negative-communion (e.g., dependence) is totally different in nature from the positive-communion (e.g., being sensitive to interpersonal relations). Though such differences exist between the positive and negative aspects, communion is stereotyped as containing feminine characteristics and agency as containing masculine characteristics in the author's determinant model. Thus, a negative aspect of communion cannot be independent of a positive aspect of communion, while a positive aspect of agency cannot be independent of a negative aspect of agency. According to the correlation co-

efficients calculated in this study, the figures between the positive and negative aspects of communion are r = .102 for females and r = .023 for males, and the figures between the positive and negative aspects of agency are r = .222 for females and r = .175 for males. These correlation coefficients indicate that there is no correlation between the positive and negative aspects of communion and that there is a weak and positive correlation between the positive and negative aspects of agency.

The second issue to be considered in the future is to verify the mitigating effect of positive-communion on negative-agency and the mitigating effect of positive-agency on negative-communion more accurately. Saragovi et al. (1997), for example, used factor analyses to examine whether negative-communion shared the same factors as positive-communion and whether negative-agency shared the same factors as positive-agency. If they do not share the same factors, it will mean that they are different in quality. It remains to be determined, for example: how negative aspects should be understood; whether the quality of negative aspects are the same as those of positive aspects; and whether they are different only in degree or are also different in nature. Unfortunately, these issues are beyond the range of the present study, though these issues cannot be left unclarified.

The third issue to be considered in the future is to investigate how the negative and positive aspects of both communion and agency affect the mental health and social adaptation of individuals. The preceding studies about femininity (communion) and masculinity (agency) and their associations with the mental health of individuals have focused only on the positive aspects of femininity and masculinity. A relatively large number of studies has been conducted on the association between positive-masculinity and the mental health of individuals (Bassoff & Glass, 1982; Whitley, 1984). It is known especially that the sense of depression and anxiety is reduced by positive-masculinity (Holahan & Spence, 1980; Roos & Cohen, 1987). However, positive-masculinity sometimes shows negative correlations with the index of mental health of individuals. It has been pointed out that the higher the level of positive-masculinity is, the higher a Type-A tendency becomes (Batlis & Small, 1982; Dohi et al., 2001), and this relates to aggression, laziness and other problem behaviors (Horwitz & White, 1987; Payne, 1987). Examination is required as to how these study results are related to the mental health of individuals when the level of negative-masculinity is high. Such examination could be a key to clarifying the inconsistent study results concerning masculinity.

The results of studies on the link between positive-femininity and mental health indicate that receiving a great deal of social support, promoting health-related behaviors (Budra et al., 1984; Krames et al., 1988) and feeling satisfaction in interpersonal relationships are positively correlated with positive-femininity. Positive-femininity is also known as having a positive correlation with mental stress (Frank et al., 1984). These study results can also be explained more accurately if the negative aspects of femininity are taken into consideration.

Part II of this book will introduce some empirical studies about femininity/masculinity and Type A behavior, self-esteem and depression, social support and other mental health concerns, and adaptation in communication.

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# Investigation of the determinant model of femininity/masculinity

This chapter presents two studies conducted in order to examine the determinant model of femininity/masculinity empirically. For this purpose, femininity/masculinity, Gender Schemas and Gender Identity—the three concepts of the model—are measured by using scales. In Study I, principal component analyses were conducted to confirm that the scale items of CAS (Communion-Agency Scale) were valid as reflecting gender stereotypes and that the scales were valid to the extent of factor structures. Confirmatory factor analyses were also conducted in order to examine the constructive validity. In Study II, examinations were carried out in order to find whether the determinant model could predict femininity/masculinity of the negative aspects of each gender type. Next, the validity of the determinant model as a predictor was examined empirically using Structural Equation Modeling (SEM), after Gender Schemas used in Study I were measured using a gender-diagnostic ratio and Gender Identity Scale had been revised.

## Study I: Validity of CAS as reflecting gender stereotypes

### Gender stereotypes as individual cognition about gender

Individuals are categorized as males or females in accordance with biological sex, which is determined by biological factors such as sex chromosomes and sex hormones, and many physical characteristics generated in various ways by sex. In contrast, femininity/masculinity and other social sexes are generated as social sex-roles, in accordance with social expectancies. That is to say, social sex is generated based on gender, and it is different among

individuals and has a great impact on the characteristics related to, for example, mind and the habitual behaviors of individuals (see Figure 1.1). John Money, a medical psychologist and sexologist, used the concept of gender for the first time. Money et al. (1957) and Money & Tucker (1975) showed that the physical sex and mental sex of individuals are not always consistent. The inconsistency suggests that one's sex is determined by both biological and social factors.

Studies on gender have been popular since the 1980s in psychology as well as in various other academic domains. Gender stereotyping is one such psychological study, which has a cognitive approach. Gendered society is constructed with every person having a gender stereotype and, by contrary, the gender stereotype of individuals is maintained and reinforced as they live in gendered society. It is believed that the cores of femininity and masculinity are communion and agency, respectively, as mentioned earlier in relation to the characteristic traits of gender stereotypes (Bakan, 1966; Dohi, 2006).

#### Maintenance and changes of gender stereotypes in Japan

In Japan, Kashiwagi (1968; 1972; 1974) was the first psychologist to explain and examine gender stereotypes empirically. Kashiwagi (1972) identified "intelligence" and "activity" as factors for male roles and "obedience" and "beauty" as a compound factor for female roles. Various studies have been conducted also in Japan in order to find out how much these gender stereotypes are maintained or have changed. Yukawa (2002), for example, conducted a study to find out how such gender stereotypes have changed. The participants of the study were university students and the research examined how the adjectives which were presumably expressing feminine or masculine characteristics in the 1970s had changed by the beginning of the 1990s.

The results of the study showed that, though the number of words which were categorized as describing masculine and feminine characteristics decreased over the two decades, a number of the words for masculine characteristics and feminine characteristics were still judged as appropriate for describing males and females respectively, regardless of age and sex differences. In particular, the words "strong," "being economically strong," and "having leadership," which had been used for males, and the words "pretty", "beautiful" and sensitive," which had been used for females, were strongly supported as words describing their characteristics still in the 1990s. Chang-

es were, however, found in the terms used for describing both males and females together. In the 1970s, the word "smart" was the only term describing the characteristics of both males and females together, but the words "active" and "cheerful" were added as words describing both male and female characteristics by the 1990s. A study conducted by Goto & Hirooka (2003) identified a new tendency for the words "devoted" and "politely-worded," which had been previously used for describing female characteristics, but were now evaluated as important for both sexes in society.

# The contents of gender stereotypes and their collation with the items of the CAS

The study in this chapter first examines the items of the CAS (Dohi & Hirokawa, 2004), which were determined in accordance with the contents of gender stereotypes in previous studies. The purpose of the examination is to find out whether communion (feminine) items are still evaluated as found more commonly among females than males and whether agency (masculine) items are still evaluated as found more commonly among males than females.

# Investigation of the factor structures of the CAS using principal component analyses

The second purpose of this study is to examine the factorial validity of the CAS. The CAS is a scale which measures the femininity and masculinity of individuals. Both femininity and masculinity are, however, often constructed by more than one factor, as has been pointed out by many studies, so that it is difficult to develop a scale which can cover all factors. On the basis of this, the CAS focuses only on those items which relate to communion factors—the core of femininity—and agency factors—the core of masculinity.

The CAS also measures each factor of communion and agency from both positive and negative aspects. The positive aspects mean socially desirable characteristics, while the negative aspects mean socially undesirable characteristics. According to Helgeson (1994), if someone is in the presence of an excess of positive-agency or positive-communion, those positive characteristics become undesirable ones. Excessive agency is termed "unmitigated agency" and excessive communion is termed "unmitigated communion." The negative-communion and negative-agency of the CAS are the sub-scale items developed by recognizing such excess as negative aspects.

Helgeson (1994) presented a hypothesis whereby negative-communion could be mitigated by positive-agency and negative-agency could be mitigated by positive-communion. Mitigation here does not only mean a difference in degree, but it also means a difference in nature. Thus, in the CAS, too, the difference between negativeness and positiveness forms different components for positive agency and communion.

In accordance with the above, this study first conducted principal component analyses on a total 24 items of the CAS (the four sub-scales of positive-agency, positive-communion, negative-agency, and negative-communion, where each scale consists of six items), and then examined whether four factor-structures will be shown on which each sub-scale item forms independent components.

# Investigation of the constructive validity of the CAS by using confirmatory factor analyses

Confirmatory factor analyses, of which observed variables are the four subscale scores, were conducted for the purpose of examining the constructive validity of the CAS. Based on the determinant model of femininity and masculinity (Dohi, 1999), it was hypothesized that when females have high Gender Schemas (Bem, 1981), their communion (femininity) increases and agency (masculinity) decreases on both the positive and negative aspects. This hypothesis was based on the reasoning that individuals who identify themselves as females, and who have a strong tendency to distinguish various kinds of information between something masculine and feminine in accordance with gender, are consistent cognitively with being female and having femininity but are inconsistent cognitively with having masculinity. In contrast, it was hypothesized that when males have high Gender Schemas, their agency (masculinity) increases and communion (femininity) decreases on both the positive and negative aspects. It was also hypothesized, in accordance with the determinant model, that Gender Identity is a factor which increases both positive communion and agency for both males and females.

Gender Identity is a sort of self-identity, and it is a way of living or a way of having social involvement as a male or a female. In the process of establishing Gender Identity, individuals begin to understand that they need to have both communion and agency, and that having either communion or agency is not sufficient. Likewise, the unmitigated factor was hypothesized as a factor common to the negative communion and agency in the case of both males and females. The unmitigated factor should be correlated nega-

tively with Gender Identity. A survey was, thus, conducted in order to confirm that the positive and negative aspects of each communion and agency are determined by Gender Schemas and Gender Identity.

#### Procedures of the survey

A questionnaire survey was conducted among Japanese male and female students of four different private universities in the Kansai area of Japan. The students belonged to the psychology-related faculty of their universities. The questionnaire was composed of the items of the CAS (see Table 3.1). The CAS is composed of a total of 24 items: four sub-scales with each subscale containing six items. With the items of CAS, the participants evaluated about the descriptive gender-stereotypes and self-concepts as mentioned below. The survey was executed twice at different times, so some participants in the survey evaluated both gender stereotypes and self-concepts while some participants evaluated only one of these. A total of 419 female participants and a total of 110 male participants evaluated the descriptive gender stereotypes, and a total of 644 female participants and a total of 289 male participants evaluated the self-concepts. The survey was conducted in classrooms.

The contents of the questionnaires for evaluation of descriptive gender stereotypes are the following: The participants were instructed to answer each item in a questionnaire by estimating how many percentages of males and females possess the personality traits described in each CAS-item generally. The range of percentages was from 0 % to 100 %. When the estimated ratio for females is statistically and significantly higher than the estimated ratio for males on an item, for example, then the personality trait described in the item is evaluated as feminine-stereotyped. Similarly, when the estimated ratio for males is statistically and significantly higher than the estimated ratio for females on an item, then the personality trait described in the item is evaluated as masculine-stereotyped.

The contents of the questionnaires for evaluation of self-concepts are the following: A Likert-type scale was adapted to the evaluation of self-concepts and each item had four-level responses. Each participant was asked to rate themselves by choosing one from: "1. rarely true" to "4. very true." The higher the score was, the stronger the tendency of the trait for the participant.

Table 3.1 Descriptive gender stereotypes of the Communion-Agency Scale items

		Fe	Female participants		N	Male participants	
	Sub-scale	Estimated rates of males (%)	Estimated rates of females (%)	t-value $(df = 418)$	Estimated rates of males (%)	Estimated rates of females (%)	t-value $(df=109)$
	I can express my thanks in words.	58	73	-19.05***	09	69	4.20***
	I can empathize with others.	54	64	-13.82***	51	52	76
Positive-	I'm not afraid to apologize.	53	63	-12.17***	50	55	-2.51*
communion	I'm good at praising others.	48	89	-17.96***	45	09	***68.9-
	I can cooperate with others.	62	69	-8.86**	09	64	-2.20*
	I'm kind to others.	09	29	-10.43***	55	58	-1.78
	I am proactive.	69	09	10.39***	57	59	62
	I assert my opinion.	99	56	10.84**	56	56	.18
Positive-	I have confidence.	62	57	7.08***	54	55	49
agency	I can face difficulties.	64	54	11.03***	53	49	1.80
	Once I decide something, I take action.	65	54	11.69***	53	51	1.23
	I have a strong will and beliefs.	67	57	10.96***	54	51	1.60
	I am easily hurt by what others say.	44	89	-22.82**	51	99	-5.76**
	I have trouble expressing my opinions in front of people.	45	57	-13.42**	52	52	14
Negative-	I think about relying on other people automatically.	39	64	-23.02***	48	58	4.07***
Communica	I worry too much about what others say and do.	50	89	-16.10***	56	65	-3.19**
	I worry so much about others that I can't take action.	36	52	-17.14**	41	48	-2.90**
	I analyze too much what others say.	40	62	-20.15***	50	56	-2.79**
	I can't tolerate incompetence.	59	54	4.77***	55	54	.49
	I make others comply with me.	62	48	13.74***	52	53	40
	I don't listen to other people's opinions.	56	48	9.19***	51	53	88
agency	I take an aggressive attitude toward others.	59	44	15.28***	09	48	4.37***
,	I can't accept an opinion different from mine.	54	46	86.6	53	51	.83
	I have no patience about mistakes made by other people.	52	47	5.36***	50	49	92.

Note: \* p < .05, \*\* p < .01, \*\*\* p < .001

The results of assessment of stereotypes: Estimated percentages of persons coming under categories by sex

In assessing whether the 24 items of the CAS can be recognized as descriptive gender stereotypes for both males and females, calculations were made to find the ratios of males and females who were estimated to have the personality traits and behaviors indicated in each item. A paired *t*-test was calculated to assess whether significant differences were found by sex in the estimated ratio among individuals.

The results are shown in Table 3.1. The analyses show that, in the case of female participants, significant differences are found between the estimated ratios of males and females in all 24 items of the CAS. It was estimated, in other words, that all the characteristics described in the items of communion (femininity) were found among females more often than among males, and that all the characteristics in the items of agency (masculinity) were found among males more often than among females. In the case of male participants, significant differences were found in less than half of all the items, and no significant difference was found in the estimation ratios for males and females. It had been presumed that there would be no difference in the estimated ratio between males and females in the items related to agency (masculinity) for both positive and negative aspects. The ratio which was calculated based on the estimation made by the male participants about how many males would come under the items of agency (masculinity) was much lower than the ratio which was calculated based on the estimation made by the female participants about how many males would come under the same items.

Likewise, though the ratio calculated based on the estimation related to the communion items was not as significant as that of the agency items, significant differences were found in the ratios calculated based on the estimation between males and females regarding the communion items of the CAS, with females' estimates scoring higher. In other words the ratio which was calculated based on the estimation made by female participants about how many females would come under the items of communion was much higher than the ratio concerning how many males would come under the same items in both positive and negative aspects.

The results of factor structures by principal component analyses

Principal component analyses were conducted by sex using the self-

estimated scores obtained from the 24 items of the CAS. Four principal components were set to be identified in accordance with the number of subscales for both males and females, and next a promax-rotation method was used. Table 3.2 shows the component loading (formative indicators) for the female participants and Table 3.3 shows the same for the male participants.

The female participants did not always have a tendency to form principal components which were identical with the sub-scale items. As to the first principal component of the female participants, for example, the scaleitems belonging to negative-agency, such as "I can't accept opinions that are different from mine," indicated plus signs (+) of loading, and the scaleitems belonging to positive-communion, such as "I am not afraid to apologize," indicated negative signs (-) of loading. This means that different sub-scale items formed the same component. For the second component of the female participants, the scale-items belonging to positive-agency, such as "I assert my opinion," indicated positive signs (+), and the scale-items belonging to negative-communion of the third principal component, such as "I am easily hurt by what others say," also indicated positive signs (+). This reflects the fact that the factor structure of these two components is relatively concrete. As to the fourth principal component of the female participants, the scale-items of positive-agency, such as "I have a strong will and beliefs," indicated positive signs (+), but the scale-items of positivecommunion such as "I can empathize with others" indicated positive signs (+), while the items of negative-communion, such as "I think about relying on other people automatically," indicated negative signs (-). This is interpreted as different sub-scale items forming the same principal component, but the factor structure was not necessarily concrete.

In the case of the male participants, strong formations were seen at each sub-scale item of each component. The factor structure of the male participants was more concrete than that of the female participants, and factor validity was confirmed. Strong formations of the sub-scale items are found in, for example: positive-communion such as "I am good at praising others" in the first component; negative-agency such as "I make others comply with me" in the second component; positive-agency such as "I have a strong will and beliefs" in the third component; and negative-communion such as "I worry so much about others that I can't take any action" in the fourth component.

Table 3.2 The results of principal component analysis of the Communion-Agency Scale (Females)

		Lo	Loadings	
	Negative-agency & positive-communion	Positive-agency	Negative-communion	Positive-agency & communion
A-) I can't accept an opinion different from mine.	.63	70.	.14	.11
C+) I'm not afraid to apologize.	62	.23	.07	07
A-) I have no patience about mistakes made by other people.	.62	.12	.28	.13
C+) I can express my thanks in words.	57	.37	.12	17
C+) I cooperate with others.	56	.23	80.	80:
A-) I don't listen to other people's opinions.	.56	.17	90.	18
A-) I take an aggressive attitude toward others.	.50	.41	80.	28
A-) I can't tolerate incompetence.	.50	.23	.23	.17
A-) I make others comply with me.	.49	.43	.04	03
C+) I'm kind to others.	41	.10	.19	.40
A+) I assert my opinion.	80.	92.	18	02
A+) I am proactive.	10	89.	80	.13
C-) I have trouble expressing my opinions in front of people.	.03	99.–	.23	.01
A+) I have confidence.	.10	.50	13	.22
C+) I'm good at praising others.	37	.38	.21	80:
C-) I am easily hurt by what other say.	03	00.	.74	20
C-) I worry so much about others that I can't take any action.	.03	25	.74	.01
C-) I analyze too much what others say.	.21	08	.71	02
C-) I worry too much about what others say and do.	.05	42	89.	.03
C-) I think about relying on other people automatically.	18	.13	.26	74
A+) I have a strong will and beliefs.	70.	.27	.04	.62
A+) I can face difficulties.	60	.20	13	.59
C+) I can empathize with others.	28	00.	.20	.43
A+) Once I decide something, I take action.	.12	.40	.02	.42
Variance explained by each component	3.54	3.51	2.48	2.91

Note: A+) Positive-agency C+) Positive-communion A-) Negative-agency C-) Negative-communion

Table 3.3 The results of principal component analysis of the Communion-Agency Scale (Males)

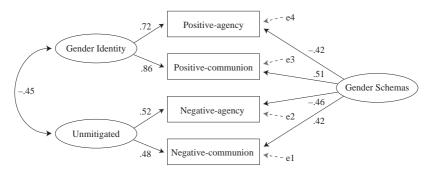
		Loadings	lings	
	Positive-communion	Negative-agency	Positive-agency	Negative-communion
C+) I'm good at praising others.	69.	.13	10	.01
C+) I can express my thanks in words.	69.	90	02	10
C+) I'm kind to others.	99.	27	50.	.14
C+) I cooperate with others.	59.	15	02	02
C+) I can empathize with others	75.	60	90.	.39
C+) I'm not afraid to apologize.	.55	19	.13	11.
A-) I make others comply with me.	.00	.72	03	.05
A-) I take an aggressive attitude toward others.	00.	29.	24	16
A-) I have no patience about mistakes made by other people.	19	59.	.13	.20
A-) I can't tolerate incompetence.	02	.59	.15	.10
A-) I don't listen to other people's opinions.	19	.59	90	.03
A-) I can't accept an opinion different from mine.	23	.59	.11	.25
A+) I assert my opinion.	.26	.38	.24	35
A+) I have a strong will and beliefs.	01	.13	.77	.04
A+) Once I decide something, I take action.	02	90.	.76	.11
C-) I think about relying on other people automatically.	.36	.33	73	.05
A+) I can face difficulties.	.18	12	69°	.05
A+) I am proactive.	.37	60°	.49	10
A+) I have confidence.	.13	91.	.44	25
C-) I worry too much about what others say and do.	60	00.	.18	.85
C-) I worry so much about others that I can't take any action.	91.	11.	10	.78
C-) I analyze too much what others say.	.03	.26	60.	.70
C-) I am easily hurt by what others say.	.27	.15	15	.62
C-) I have trouble expressing my opinions in front of people.	15	18	22	.52
Variance explained by each component	3.54	3.51	3.80	3.38

Note: A+) Positive-agency C+) Positive-communion A-) Negative-agency C-) Negative-communion

# Examination of constructive validity by using confirmative factor analyses

Confirmative factor analyses were conducted for both male and female participants in relation to the hypotheses models shown in Figure 3.1 and Figure 3.2. The results were: GFI = .980 and AGFI = .898 for females; and, GFI = .982 and AGFI = .912 for males. This can be interpreted as showing almost sufficient compatibility found between the data for each case of the male- and female-participants groups.

It can be concluded that the effective indicators of factors on observed variables, as well as the correlation coefficients between factors, support the hypotheses based on the models for both females and males. For female participants, the effective indicator from Gender Schemas for positive-com-



**Figure 3.1** Result of confirmative factor analysis (Females) *Note*: Numerals are standardized coefficients.

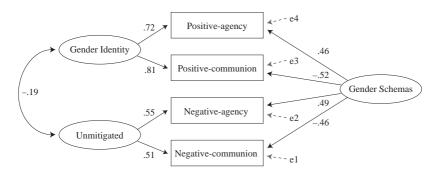


Figure 3.2 Result of confirmative factor analysis (Males)

Note: Numerals are standardized coefficients.

munion and negative-communion showed plus signs, and in contrast, the effective indicator from Gender Schemas for positive-agency and negative-agency showed minus signs. For male participants, the effective indicator from Gender Schemas for positive-communion and negative-communion showed minus signs, and in contrast, the effective indicator from Gender Schemas for positive-agency and negative-agency showed plus signs. The effective indicators from factors of Gender Identity for positive-agency and positive-communion showed plus signs for both females and males, and the effective indicators from unmitigated factors for negative-agency and negative-communion showed plus signs for both males and females. In addition, a negative correlation was identified between the factors of gender identity and unmitigated factors.

Confirmative factor analyses were also conducted for both female and male participants in relation to a model which rejects a correlation between the factors of Gender Identity and "unmitigated" factors. The results are: GFI = .945, AGFI = .816 for female participants; and, GFI = .974, AGFI = .915 for male participants. This shows that the degree of conformance is higher for the model which recognizes a correlation between the factors than for the model which rejects any correlation between them. Furthermore, a hypothesis model with a factor of Gender Schemas was examined. The results are: GFI = .831, AGFI = .577 for female participants; and, GFI = .830, AGFI = .659 for male participants, and it was also concluded that the degree of conformance is higher for a model which consists of factors of Gender Schemas, Gender Identity and "unmitigated" factors than for a model which consists only of Gender Schemas.

#### Internal consistency of the CAS

To examine internal consistency of the CAS, Cronbach's alpha coefficients of every sub-scale of the CAS were calculated by sex. As the results reveal in Table 3.4, the alpha coefficients showed higher than 0.7 in all the sub-scales, except for the alpha coefficient for the scale of negative-communion for female university participants, which was a little low ( $\alpha = .693$ ). It was concluded that a sufficient reliability was identified. Table 3.4 shows the sub-scale scores by sex and the results of *t*-tests conducted on the differences of average values between female and male participants. No significant difference was found between females and males in all the sub-scale scores except for the sub-scale score for negative-communion. In the case of negative-communion, the sub-scale score was significantly high for female participants.

Sub-scale	Fem	ales	Ma	les	t-value
Sub-scale	$\alpha$ coefficient	Mean (SD)	$\alpha$ coefficient	Mean (SD)	t-value
Positive-communion	.707	18.8 (2.5)	.753	18.5 (2.9)	t (482.3) = -1.47 (n.s.)
Positive-agency	.767	15.3 (15.3)	.817	15.5 (3.6)	t(931) = .788 (n.s.)
Negative-communion	.693	17.2 (3.2)	.751	16.4 (3.6)	t(931) = -3.30, p < .01
Negative-agency	.725	11.8 (2.8)	.737	12.1 (3.1)	t(931) = 1.06 (n.s.)

**Table 3.4** Alpha coefficients, sub-scale scores and differences of means by sexes (*t*-test) for the Communion-Agency Scale

### Toward studies about Gender Personality: Going with the tide

#### Changes of gender stereotypes among males

The first purpose of this study was to identify whether the sub-scale items of the Communion-Agency Scale (CAS; Dohi & Hirokawa, 2004) are recognized as descriptive gender stereotypes. For this purpose, examination focused on whether communion (femininity) can be estimated as seen more often among females than males and whether agency (masculinity) can be estimated as seen more often among males than females. The results showed that female participants recognized all the scale items identically with stereotypes, and thus it confirmed the constructive validity of the scale.

This can be interpreted as meaning that, at least for university female students today, gender stereotypes are recognized consistently with traditional ways. Male participants, however, revealed the ratio of males having agency (masculinity) as much lower than what female participants estimated. This result suggests that the tendency to see themselves by following stereotypes is growing weaker among male participants. The scale scores of self-concepts (see Table 3.4) also show that there is no significant difference between males and females in agency, which is expected much more from males traditionally. This contrasts with the tendency whereby females are still sharply conscious about their communion (femininity). In studies previous to the author's, males had always had stronger Gender Schemas than females and this indicated that males were sharply aware of their gender stereotypes. Dohi conducted a study in 1998, for example. The study was similar to the study in this chapter, and female and male partici-

pants were asked to estimate ratios having masculine traits and feminine traits based on an MHF-scale (Masculinity-Humanity-Femininity Scale; Ito, 1978). The results showed that the differences of estimated ratio made by the male participants were bigger than the differences of ratio made by the female participants. The previous results were showing the opposite results from the present study. This present study shows that it is males who have weaker gender-related recognition and self-awareness than females. This can be interpreted as meaning that female participants think that males still have agentic traits though males' self-awareness about agentic traits had weakened, and as far as a cognitive point of view goes, females have unexpectedly a more traditional viewpoint about gender.

There is a possibility that this significant difference was found only in the case of female university students because the number of female students was much greater than the number of male students in this study. However, when the data for female students (N = 246) in only two universities, where the numbers of male and female students were almost equal, were isolated and a t-test was conducted, a significant difference was shown in all the items in the data for the female students (N = 86) of one of the two universities, and a significant difference was also shown in all the items except one item of negative-agency ("I can't tolerate incompetence") in the data for the female students (N = 160) of the other university (t = 1.96, t = 1.96

# Factor validity of the CAS and the effect of Gender Identity among females

The second purpose of this study was to examine the factorial validity of the CAS. A hypothesized factor structure was recognized among the male participants, according to the formative indicators of the sub-scale components of principal component analyses. This proved the factorial validity of the CAS of the male participants. The female participants, on the contrary, had mixed cases in the scale of items, as it was found, for example, that the scale items of negative-agency and positive-communion formed the same component in the first principal component. This suggests the possibility that positive-communion and negative-agency are estimated as similar traits in accordance with the self-concepts of females.

Nevertheless, the results of the evaluation of descriptive gender stereotypes, which was the first purpose of this study, showed that, in comparison to the estimation made by male participants, a larger number of female participants estimated that communion was something seen more commonly among females, and agency was something seen more commonly among males. This suggests that such concepts are differentiated cognitively. So how should the discrepancy between self-concepts and stereotypes be understood? Gender Identity is, probably, established more and stable among females than males, and therefore, though females may be strongly gender-schematic, they may hesitate to apply it to their self-concepts. It is also possible to understand that the reason why different sub-scale items are mixed in the same component is not because these traits are dependent on each other but because they are integrated. This is supported by other suggestions that females have a similar degree of agency to males as their concept and that females make a distinction between what they expect from the opposite sex and what they expect from themselves, and use this in accordance with the situations they are in. Accordingly, it will be necessary to re-examine whether the factorial validity of gender-related scales is adequate, especially in the case of female participants.

Thinking about males again here, males have less sharp gender stereotypes than females, whose factor structure is clearly constructed of agency and communion, though. The reason will probably be that males separate agency from masculinity, and communion from femininity. In other words, males may have a "pure," i.e., not-related to gender, concept of agency and communion. In fact, females and males have possibly become gender aschematic in their particular original ways.

# Constructive validity which is supported by confirmative factor analyses

The results of confirmatory factor analyses showed that effective indexes from Gender Schema's factors were consistent with the hypothesis of the determinant model of femininity/masculinity. In addition, Gender Identity factors showed positive effects on positive communion and agency, "unmitigated" factors also showed positive effects on negative communion and agency, and an inter-factor negative correlation was found between the factors of Gender Identity and "unmitigated" factors. These facts suggest that the constructive concepts of the sub-scale and the relation between the concepts are valid for both groups of female and male participants. The results of confirmative factor analyses of this study are also consistent with the results of the analyses which were conducted by Dohi & Hirokawa (2007) by using the same model with female university students as participants. The compatibility between the data and the model is not necessarily satisfactory,

and thus analyses of the scale items should be conducted further.

#### Further examination

Discriminant analyses are required in further examinations, in order to clarify whether the four categories of gender types are discriminated by Gender Schemas and Gender Identity, which are specified by the high-low combinations of positive-communion and positive-agency. A typical gender type can also be identified by using negative-communion and negative-agency when discriminant analyses are conducted. Thus, examinations should also be conducted on the typical gender type. Furthermore, in addition to the examination of constructive validity, the criterion-related validity of the CAS should also be examined by using various indexes, including the physical, mental and social adaptabilities of people.

In Study II, observed variables of Gender Schemas and Gender Identity will be added to the confirmatory factor analyses for the purpose of the examination of constructive validity.

# Study II: Discrimination of gender type and examination of determinant model

#### Typical gender types with negative aspects

Dohi & Hirokawa (2004) argued that the cores of femininity and masculinity are communion and agency, respectively (Bakan, 1966; 1990), and showed that they contain negative and positive aspects. They also proposed typical gender types (Dohi, 2006) by using Bakan (1966) as well as Spence et al. (1979) as references and by taking the high-lows of negative-communion and negative-agency into account in addition to the high-lows of positive-communion and positive-agency.

Identifying typical gender types requires the Gender Identity (Dohi, 1996) and Gender Schemas (Bem, 1981) of the determinant model of femininity/masculinity by Dohi (1995a). Typical undifferentiated individuals have low Gender Schemas and little persistence to sex differences and a cognitive frame based on gender, and they have no conception of a sextyped self-concept. Such individuals' Gender Identity—a kind of ego identity for males or females with acceptance of their own sex—is not amply established, and this produces a resulting low communion and agency for both positive and negative aspects, regardless of being male or female.

Typical masculine individuals and typical feminine individuals are sextyped or cross sex-typed under the influence of Gender Schemas. However, their Gender Identity is not fully established and this brings about the result that only agency for both positive and negative aspects is high among typical masculine individuals, while only communion for both positive and negative aspects is high among typical feminine individuals. The Gender Identity of typical androgynous individuals is established, and thus they understand that they require both positive-agency and positive-communion. Such individuals are not affected by Gender Schemas, at least when their self-concept is formed, and thus their agency and communion for negative aspects are presumably low.

So, the first purpose of this study is to examine whether the high-lows of negative communion and negative agency for each gender type are consistent with the hypothesis by using the CAS for measuring agency and communion for both positive and negative aspects.

#### Possibilities for sex-typed scores as an index of Gender Schemas

This study re-examines and revises the Gender Identity scale and the sextyped scores which are an index of Gender Schemas, and they will be added as observed variables. Dohi (1998) tried to discriminate gender types in her study and calculated the sex-typed scores as follows. First, participants were asked to write their opinions about how many percentages of males and females in general have a certain number of personal traits. Based on the collected data, the absolute values of the percentage differences were calculated for females and males for each trait, and the figures were set as sex-typed scores of each trait. The scores of the six items of each sub-scale were next summed up and the figures were set as the final sex-typed scores. The higher the score, the stronger the tendency to be sex-typed, and a higher score indicated a stronger tendency for Gender Schemas. For example, if a participant estimates that a trait such as "active" is held by most of the male population, the participant may write in "80 %," and if the participant estimates the same trait such as "active" is held by half of the female population, then the participant may write in "50 %." Based on the responses, the study's researchers calculate the absolute value of the percentage differences. The sex-typed score for "active" is calculated as: |80 - 50| = 30. Other items with masculine traits are also calculated for sex-typed scores in the same way, and the figures calculated by adding all of the scores of all the items of masculinity become the participant's sex-typed scores for the

masculine items.

The results of the study by Dohi (1998) showed that Gender Schemas that were measured by using the sex-typed scores above were effective only among male university students as a determinant factor for masculinity and femininity. This suggests that the higher the sex-typed score is, the more likely it is for individuals to be categorized as masculine. In the case of female university students, however, the differences in the sex-types scores were not related to gender types. This is possibly a reflection of the mindsets of today, where masculinity is considered more valuable than femininity, and thus there are few merits in females increasing femininity and decreasing masculinity along with Gender Schemas.

However, there is another possibility, namely that the system of the sex-typed scores itself has problems, as explained in the following. First, according to the frequency distribution of the sex-typed scores, the distribution of the scores shows a disproportionate emphasis on the lower ends, and the degree of skew tends to be minus and far from a normal distribution. Secondly, the sex-types scores are calculated with an absolute value for the estimated ratios of males and females, and therefore, which of the male or female ratios is higher is not taken into consideration. Such a consideration is necessary since, though it is rare, there are participants who estimate a higher percentage for females on the masculine items as well as those who estimate a higher percentage for males on the feminine items of sub-scales. These facts were not reflected in the sex-typed scores.

### Gender-diagnostic ratio as a new index of Gender Schemas

Based on such problems, this study adopted a gender-diagnostic ratio based on the concept of gender diagnosticity which was formulated by Lippa & Connelly (1990). The gender-diagnostic ratio was applied to this study, instead of sex-typed scores, as a new index of Gender Schemas. The gender-diagnostic ratio is an index for the tendency of individuals with certain traits to be diagnosed as females or males. The diagnostic ratio is calculated as shown in Formula 3.1.

#### Formula 3.1

In the case of stereotypically femininity items (ex., obedient)

The percentage of the target who is a female (i.e., 50 %)

\* The estimated percentage females are obedient

The estimated percentage of males and females are obedient

If the gender-diagnostic ratio is 0.5, for example, it means that the estimated percentages for males and females are the same, and this shows that there are no gender stereotypes. For example, when it is estimated that 50 % of both males and females have the female trait "I can cooperate with others," the gender-diagnostic ratio of the participant is calculated as: the percentage of females (0.5) × the estimated percentage of females (0.5) / the estimated percentage of males and females together (0.5) = 0.5. If the diagnostic ratio becomes higher than 0.5 and closer to 1.0, it will mean that the general gender stereotypes are strong. In the example above, when the estimate is 100 % for females and 0 % for males, the gender-diagnostic ratio of the participant is calculated as: the percentage of females  $(0.5) \times$  the estimated percentage of females (1.0) / the estimated percentage of males and females together (0.5) = 1.0. If the diagnostic ratio becomes lower than 0.5 and becomes closer to 0.0, it means that those gender stereotypes which are the opposite of the regular stereotypes are strong. This suggests that the traits of agency which are stereotyped as masculine in general are possessed more by female individuals than males, and the traits of communion which are stereotyped as feminine in general are possessed more by males than females. In the example above, when the estimate is 0 % for females and 100 % for males, the gender-diagnostic ratio of the participant is calculated as: the percentage of females  $(0.5) \times$  the estimated percentage of females (0.0)/ the estimated percentage of males and females together (0.5) = 0.0.

#### Reconstruction of the Gender Identity Scale

A study by Dohi (1998) measured Gender Identity with a Gender Identity Scale also developed by Dohi (1996). The scale consists of 30 items. The results of the study supported only some parts of the hypotheses based on the determinant model; the study was unable to discern "androgynous" and "masculine" gender types. Individuals of an "androgynous" gender type are supposed to have higher Gender Identity than individuals of the "masculine" gender type, and the femininity of the "androgynous" individuals should have a high femininity as well as masculinity. Accordingly, the study in this section re-examines whether Gender Identity is effective as a determinant factor of gender types by using the methods of a principal component analysis of Gender Identity Scale items and a reconstruction of the scale items, which consist only of effectual items for the data of this study.

In addition, the validity of the determinant model of femininity/masculinity (Dohi, 1995a) is examined by using Structural Equation Modeling

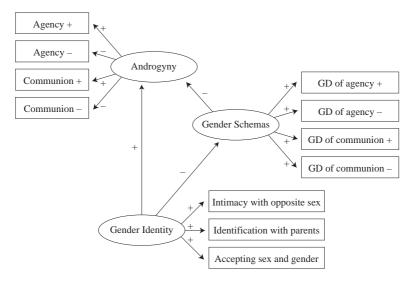


Figure 3.3 The hypothesized path diagram about determinants of gender personality

Note: GD; gender-diagnostic ratio

(SEM) as the second purpose of this study. Hypothetically, when Gender Schemas are high, "androgyny" becomes suppressed, but when Gender Identity is high, Gender Schemas become suppressed and "androgyny" becomes facilitated. The hypothetical model shown in Figure 3.3 will be examined based on the hypothesis of the causal connection explained above.

### Research participants

Questionnaires were administered to female university students who attended psychology-related classes on various days. The number of valid respondents was 343. All of the participants wrote their own academic year, their mother's birth date and year and the initials of their own mothers every time they responded to the questionnaires as their own identification number. This identification number helped the researchers merge the data individually. The 273 participants completed all of the questionnaires and the data was used for Structural Equation Modeling (SEM).

The contents of the questionnaires for evaluation of communion/agency are the following: Participants were asked to respond to each item, the CAS for measuring communion (femininity) and agency (masculinity) for both

positive and negative aspects by indicating how well each item was describing them, choosing one from four different levels of responses. The Likert-type scale was adapted to this survey. The scores of the scale range from "1. not at all" to "4. very true," and the higher the score was, the stronger the tendency for the particular trait in the respondent. The score range of each sub-scale (consisting of six items each) was between 6 and 24 points.

The contents of the questionnaires for Gender Schemas are the following: Participants were asked to respond to a total of 24 items of the CAS for sex-typed scores and a gender-diagnostic ratio (for measuring Gender Schemas) by showing their estimates of how much of a percentage (a range of 0-100 %) of males and females belong to each item. Then, at first, sex-types scores were calculated based on the estimations. This is the total sum of the absolute values which were calculated based on the differences in the estimated percentages of the six items in each sub-scale for both sexes. The score range of each sub-scale was from 0 to 600 points. Secondly, a gender-diagnostic ratio for the items of positive and negative communion was calculated. The calculation was made for every sub-scale by summing up the scores based on the formula in Formula 3.2.

#### Formula 3.2

The percentage of the target who is a female (i.e., 50 %)

× The estimated percentage females are trait A

The estimated percentage of males and females are trait A

Likewise, a gender-diagnostic ratio for the items of positive and negative agency was calculated. The calculation was made for every sub-scale by summing up the scores based on the formula in Formula 3.3. This method of calculation can produce the same results as the gender diagnosticity put forward by Lippa & Connelly (1990).

#### Formula 3.3

The percentage of the target who is a male (i.e., 50 %)

\* The estimated percentage males are trait B

The estimated percentage of males and females are trait B

The score range of each sub-scale was from 0 to 6 points. For the sub-scales of positive and negative communion, the higher the score is, the

higher the estimated ratio of females is, and this indicates high Gender Schemas. For the sub-scales of positive and negative agency, the higher the score is, the higher the estimated ratio of males is, and this indicates high Gender Schemas.

The contents of the questionnaires for Gender Identity are the following: The participants were asked to respond to the Gender Identity Scale (Dohi, 1996) consisting of three sub-scales of "Accepting one's sex or gender," "Identification with parents," and "Intimacy with the opposite sex." Each sub-scale has 10 items, and the scale consists of a total of 30 items. The 30 items are separated into a group of items common to both female and male participants and groups of items common to either female and male participants. Only the items for female participants were used in this study. The participants were asked to rate them by choosing the most suitable from: "4. strongly agree," "3. slightly agree," "2. moderately disagree," and "1. strongly disagree." A higher score indicates a stronger tendency for the item concerned.

#### Results of gender types and ratios of typical gender types

The participants were divided into four gender types of "androgynous," "masculine," "feminine," and "undifferentiated" in accordance with the median score of positive-agency and the median score of positive-communion. Furthermore, typical-type individuals of every gender type were identified based on the median scores of negative-communion and negative-agency. Concretely speaking, the "typical androgyny" gender type was specified as "androgynous" individuals who have both negative-agency and negative-communion which are below the medians. The "typical masculine" gender type was specified as "masculine" individuals whose only negative-agency score was above the median. The "typical feminine" gender type was specified as "feminine" individuals whose only negative-communion score was above the median. The "typical undifferentiated" gender type was specified as "undifferentiated" individuals who have both negative-communion and negative-agency scores which were low.

Table 3.5 shows the ratios for each typical gender type and the individuals' mean scores of negative-communion and negative-agency. Table 3.5 also shows the results of a one-way ANOVA (analysis of variance) of which independent variables are gender types and dependent variables are negative-communion and negative-agency. More than half of the individuals of the "masculine" gender type were identified as typical, but less than 10 %

Gender types	Androgynous	Masculine	Feminine	Undiffer- entiated
N	116	63	58	105
Rates of typical gender categories (%)	34.5 %	55.6 %	39.7 %	9.5 %
Negative-communion $F(3,333) = 13.84 ***$	16.33 b	15.78 b	18.44 a	18.20 a
Negative-agency $F(3,337) = 19.65 ***$	11.50 с	14.11 a	10.34 d	12.61 b

**Table 3.5** Rates of individuals of typical gender types and their mean scores of negative communion and negative agency

 $\textit{Notes} \colon \text{Different letters} \ (a,\,b,\,c,\,d) \ \text{show that there are significant differences between them}.$ 

of the individuals of the "undifferentiated" gender type were identified as typical.

The result for the "undifferentiated" was contrary to the hypothesis based on the determinant model, and this was caused by the scores of both negative-agency and negative-communion being high. However, the hypothesis was supported by the following facts: the negative-agency score of the "masculine" being high, the negative-communion score of the "feminine" being high, and both the negative-communion score and the negative-agency score of the "androgynous" being low.

### Index of Gender Schemas

Table 3.6 shows the sex-typed scores and gender-diagnostic ratios of each item. The results of a paired *t*-test showed that the estimated ratios of females were significantly higher than the ratios of males in all of the communion items for both positive and negative aspects. Meanwhile, the results of a paired *t*-test showed that the estimated ratios of males were significantly higher than the ratios of females in the 12 items of agency for both positive and negative aspects. These results suggest that the estimated percentages of males and females are consistent with gender stereotypes in general. However, as shown in Table 3.6, counter-typed participants exist in the range of 5.3-28.7 %, depending on the items, and their diagnostic ratios were under 0.5. Non-stereotyped participants also exist, and the range of their existence was between 13.2 % and 44.3 %, depending on items, and their diagnostic ratios were 0.5.

<sup>\*\*\*</sup> *p* < .001

Table 3.6 Estimated rate of agency and communion and rates of anti-stereotyped and non-stereotyped respondents

		Estimate	Estimated rate (%)	-		Rates of counter-stereo-	Rates of non-stereo-
		Males	Females	sex-typed score	Sex-typed score Diagnostic ratio	typed respondents (%)	typed responders (%)
	I can express my thanks in words.	09	74	14.0	.56	5.3	26.6
	I can empathize with others.	54	65	10.7	.55	6.7	37.0
Positive-	I'm not afraid to apologize.	54	65	10.1	.55	12.0	32.9
communion	I'm good at praising others.	49	89	19.1	95.	7.6	19.8
	I can cooperate with others.	45	69	4.7	.52	13.4	42.3
	I'm kind to others.	09	89	7.5	.53	8.7	40.8
	I am proactive.	70	61	9.5	.54	13.7	27.7
	I assert my opinion.	89	56	11.5	.54	13.5	29.5
Positive-	I have confidence.	62	56	6.1	.55	15.5	44.3
agency	I can face difficulties.	4	54	10.2	.55	12.0	29.7
	Once I decide something, I take action.	65	54	10.9	.55	13.7	25.1
	I have a strong will and beliefs.	29	57	6.6	.54	11.1	31.9
	I am easily hurt by what others say.	4	69	25.5	.62	6.1	13.2
	I have trouble expressing my opinions in front of people.	46	57	11.7	.56	14.9	25.4
Negative-	I think about relying on other people automatically.	43	99	22.7	.61	10.2	18.7
communion	I worry too much about what others say and do.	48	89	19.4	.59	8.2	21.1
	I worry so much about others that I can't take action.	38	54	16.2	.59	9.1	26.9
	I analyze too much what others say.	42	62	20.5	09.	6.7	19.9
	I can't tolerate incompetence.	59	56	3.1	.51	28.7	27.0
	I make others comply with me.	99	64	15.6	.57	13.7	17.0
Negative-	I don't listen to other people's opinions.	57	49	7.8	.54	17.8	32.7
agency	I take an aggressive attitude toward others.	09	46	14.3	.57	12.0	20.5
	I can't accept an opinion different from mine.	99	47	8.9	.55	14.6	32.2
	I have no patience about mistakes made by other people.	53	48	5.1	.53	20.2	35.2

**Table 3.7** The results of principal component analysis of the Gender Identity Scale

0.1.7		Loading	
Scale item	I	II	III
o Intimacy) I would have rather started talking to the opposite sex earlier.	.71	00	13
o Intimacy) I often go for a date with my boyfriend.	.69	04	.16
o Intimacy) I can't confess my interest to my favorite person of the opposite sex. (R)	.65	.07	24
o Intimacy) I have many friends of the opposite sex.	.64	02	.03
o Intimacy) I'm very nervous in front of the opposite sex. (R)	.62	.06	55
o Intimacy) I show people who I am without pretending.	.61	.04	.21
<ul> <li>Intimacy) I'm a person with a strong personality to my favorite partners of the opposite sex.</li> </ul>	.61	.04	.07
Intimacy) I have plenty to talk about with people of the opposite sex.	.60	20	.18
Intimacy) I can accept the wants of the person whom I am dating.	.35	.11	.16
o Identification) I wish I was born as a child in another family. (R)	10	.73	.06
Identification) My parents understand me well when I talk to them.	.12	.59	02
o Identification) I still have some resentment or opposition to my parents. (R)	.09	.57	07
o Identification) My parents often say to me "it's because you are a woman" (R)	.04	.57	11
Identification) My parents reprimand me for coming home late. (R)	12	.55	28
Accepting) My own gender is against me. (R)	.05	.52	.23
· Accepting) I would have been happier if I were a man. (R)	03	.47	.22
Identification) My parents do not allow me to travel because I am a woman. (R)	26	.43	06
Accepting) I would like to be reborn as a male. (R)	05	.42	.25
Identification) I have never been on a trip with my parents. (R)	08	.42	.19
Identification) I am always expected to do household work because I am a female. (R)	.16	.40	23
Identification) My parents are very close to each other.	.03	.31	.10
Intimacy) I can accept the wants of the person whom I am dating. (R)	.17	.20	.04
Accepting) I'd like to find some pleasure in being a female.	13	10	.62
Accepting) I often read articles about romantic relationships.	05	16	.61
Accepting) I have no intention of having babies.	.04	.17	.56
o Accepting) My life will not be complete if I don't give birth.	.05	.05	.55
Identification) I discovered how to live as a woman from my mother.	01	.17	.53
Accepting) Loving someone is something valuable in my life.	.28	.01	.51
<ul> <li>Accepting) I have a/some friend/friends whom I can talk with about somebody I like of the opposite sex.</li> </ul>	.27	01	.50
Accepting) I have a rough plan to have my own children someday.	.28	.08	.42
Variance explained by each component	4.12	3.51	3.70

Notes: (R) are reverse items, (Accepting) accepting one's sex or gender, (Identification) identification with parents, (Intimacy) intimacy with the opposite sex.

Items with "o" mark in the head were used for SEM.

### Item-analysis of Gender Identity Scale

A principal component analysis was conducted by using the scores obtained from self-estimations on the 30 items of the Gender Identity Scale. Three principal components were set as the number of sub-scales for Dohi (1996), and they were rotated according to the promax-rotation method. The formative indicators (factor loadings) are shown in Table 3.7.

Since the three principal components were almost identical to the subscales of the existing scale, the first, second and third principal components were termed "intimacy with the opposite sex," "identification with parents," and "accepting one's sex or gender," respectively. Seven items were selected from every sub-scale and they were used as sub-scale items for data analyses in order to find out the balance of the number of items among the sub-scales, alpha coefficients of sub-scales and the balance for the principal components.

#### Basic statistics of scale scores and reliability of scales

Table 3.8 shows the means of the scale scores and alpha coefficients of the CAS, the diagnostic ratios and the revised Gender Identity Scale-scores.

Scale	Sub-scale	Means of scale scores (SD)	$\alpha$ coefficient
	Positive-communion	18.5 (2.8)	.768
C	Positive-agency	14.9 (3.5)	.802
Communion-Agency Scale	Negative-communion	17.1 (3.3)	.691
	Negative-agency	12.1 (3.1)	.775
	Positive-communion	3.3 (.30)	.636
Discounting	Positive-agency	3.2 (.33)	.703
Diagnostic ratio	Negative-communion	3.6 (.47)	.761
	Negative-agency	3.3 (.40)	.707
	Accepting sex and gender	21.4 (3.5)	.716
Revised Gender Identity Scale	Identification with parents	21.3 (3.7)	.694
	Intimacy with opposite sex	16.3 (4.4)	.731

**Table 3.8** Statistics of scale scores and alpha coefficients

The alpha coefficients of almost all of the scales were over 0.7, and this suggests that their scales' reliability was supported. Since the diagnostic ratio was better than the sex-typed scores in the extent of skewness, the diagnostic ratios were used as an index of Gender Schemas in the following Structural Equation Modeling (SEM).

### Examining Structural Equation Modeling

The hypothesized model in Figure 3.3 was analyzed by means of Structural Equation Modeling (SEM). The results of the analysis showed that the Goodness of Fit Index (GFI) was .939 and the Adjusted Goodness of Fit Index (AGFI) was .896. It was judged that the fit of the data and the model was not satisfactory, and thus a deletion was made of some observed variables with low effective indicators. Accordingly, the "androgyny" factor was revised to consist of only positive-agency and positive-communion, and Gender Identity was revised to consist only of "accepting one's sex or gender" and "intimacy with the opposite sex." The results of the analysis of this revised model (see Figure 3.4) showed GFI = .960 and AGFI = .922, and it was judged that the fit of the data and the model was satisfactory as the fit had increased. However, as the causal coefficients of the revised

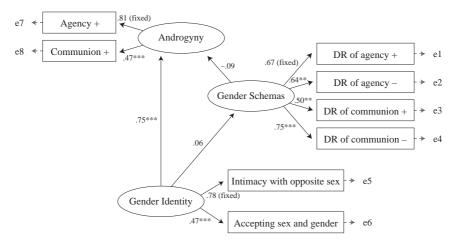


Figure 3.4 The best result of SEM about determinants of communion and agency

*Notes*: Numerals are standardized coefficients, \*\*\* p < .001.

DR: Diagnostic Ratio

model show, it did not verify the hypothesis that Gender Identity suppresses Gender Schemas and Gender Schemas suppress androgyny, though it did verify the hypothesis that Gender Identity facilitates "androgyny."

# Toward studies for more clearly defined Gender Personality

### Consideration of the negative aspects of Gender Personality

The first purpose of the present study was to measure both positive and negative aspects of communion and agency by means of the CAS and to examine whether the high-lows of negative-communion and negativeagency among gender types were consistent with the hypothesis of Dohi & Hirokawa (2004). The results showed that in the gender types which were identified by the high-lows of positive-communion and positive-agency, the percentage of participants who were defined as typical gender types—which means that they were consistent with the prediction in accordance with the negative aspect of the model—was relatively high among the "masculine" individuals but was not even up to 10 % among the "undifferentiated" individuals. The main reason for these results was that the "undifferentiated" individuals had a tendency for their negative-communion and negativeagency to be at a high level, in contradiction to the hypothesis of the model. Dohi & Hirokawa (2004) hypothesized that "undifferentiated" was the first step for the development of femininity/masculinity, and thus it was hypothesized that the negative-communion and negative-agency of "undifferentiated" individuals would be underdeveloped. However, this hypothesis was not supported, and this suggests that the participants in the study were in the latter period of adolescence and their negative-communion and negativeagency were adopted prior to positive-communion and positive-agency as they had been socialized regarding gender, though the positive aspects might increase and the negative aspects might be suppressed eventually.

The determinant model of femininity/masculinity was supported for "androgynous," "masculine," and "feminine" gender types, as it was found that "androgynous" individuals have low negative-communion and negative-agency, "masculine" individuals have high negative-agency and low negative-communion, and "feminine" individuals have high negative-communion and low negative-agency. However, the results are inadequate for determining the influence of Gender Schemas. The results of an analysis of variance (ANOVA) on the gender-diagnostic ratio showed the main ef-

fect of gender type was not significant. This does not support the hypothesis of the determinant model that Gender Schemas have an influence on the formation of femininity/masculinity. Further research is thus required in the future.

# Problems of Gender Schemas as determinant factors of femininity/ masculinity

The second purpose of the present study was to examine the validity of the determinant model of femininity/masculinity by using SEM. The evaluation based on SEM showed that the fit between data and the model was not satisfactory. Though the causal coefficient from Gender Identity to androgyny was satisfactorily high, the casual coefficients both from Gender Identity to Gender Schemas and from Gender Schemas to androgyny were significantly low, and this is a serious concern. This clarified that even though the new index of gender-diagnostic ratio was used, the determination of gender types by using Gender Schemas was not possible. This result is the same as the result of the previous study conducted by Dohi (1998). It indicates that Gender Schemas are not a determinant factor for femininity/masculinity in the case of female university students.

According to Lippa (1998), diagnostic ratios change depending on jobs, hobbies or other fields of Gender Schemas. Dohi (1995b) suggested that Gender Schemas are something unique in regard to the characteristic traits of the self, and thus they are different from Gender Schemas which are not related to the self. The study by Kashio & Dohi (2000) also showed no connection between Gender Schemas and femininity/masculinity. There was speculation that one of the reasons for this was because "androgynous" individuals take on different Gender Schemas based on different situations. Thus, future studies require a measuring of self-characteristics and other various ranges of the gender-diagnostic ratio, and also an examination of how Gender Schemas differ depending on their ranges and which ranges exert the most influence on femininity/masculinity of individuals.

# Issues requiring consideration in the future in relation to negative aspects

Another cause of the determinant model not being supported was that the effective indicators of negative-communion and negative-agency of "androgyny" were not satisfactory, while the indicators of positive-communion

and positive-agency were satisfactory. This suggests that it is difficult for individuals to recognize their own negative aspects, or that negative aspects are possibly something subliminal, and thus the aspects may not be easily assessed in self-rating questionnaires. Femininity and masculinity have been measured using self-rating questionnaires since the study conducted by Bem (1974). The results above suggest, however, the necessity for including the aspect of unconsciousness when femininity and masculinity are measured in the future. Anima and animus described by C. G. Jung are well known as part of the concepts of unconscious femininity and masculinity. Though anima and animus have not been recognized empirically yet, it might be worth measuring unconscious agency and communion using the same method as, for example, automatic information processing (Chaiken & Trope, 1999).

A projective test may also have the possibility of becoming an index of communion and agency, and this is possible not only for case studies of individual characteristics but also for the study of cognitive tendencies using illustrations. Mizusawa et al. (2008) attempted to connect the agency and communion tendency shown by Rorschach test and the tendency found in questionnaire surveys. The illustrations used in Rorschach tests are made by folding and unfolding inkblots, and participants of the test may see the inkblots as one shape or as two shapes which are symmetry. The tendency to recognize in them either one figure or two figures may be correlated with agency (self-expansion, self-assertion, self-reliance, etc.) and communion (companionship, cooperation, mutuality, etc.) More specifically, communion-oriented individuals may see the inkblots as consisting of two shapes and they may recognize that they are somehow related, while agency-oriented individuals may see the inkblots as one shape.

Future studies are needed to develop methods other than the self-rating questionnaire in an effort at understanding communion and agency.

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# The development of Gender Personality among female university graduates:

A study through interviews about their lives at work and home

This study was performed by having interviews with seven Japanese female university graduates about their lives at work and at home as well as their interpersonal relationships with their intimate male friends. All of the participants had been working for a couple of years. The study examined how their new interpersonal environment, which was different from their university life, had impacted on their Gender Schemas, Gender Identity, daily life and life planning for the future. The results of the survey suggested that the participants had come to recognize some kind of expectations at work for their female roles, but they could also take on Gender Schemas depending on situations and understand Gender Schemas as something multidimensional. They seemed to have come to "accept their sex or gender" of Gender Identity. However, this was only on the surface in many cases. Thus, "accepting one's sex or gender" seemed to have little effect on their personality formation. In their relationships with intimate members of the opposite-sex, the participants were oriented to have a relationship of equals as workers, and they associated with their partners while maintaining their own lifestyles. The relationship with their parents was emotionally sound and showed a strong tendency to dependency. However, their Gender Identity did not seem to be facilitated by their parents, though the parents were supposed to be models for children.

# Development of femininity/masculinity

Femininity/masculinity is similar to concepts used in various areas of psychology which are not directly related to gender. The concepts which are

similar to masculinity are, for example: attainment motive, which is one of the two biggest social motives; performance function in the PM theory of leadership; instrumental traits, which Parsons & Bales (1955) hypothesized as characteristics which facilitate the father-role in nuclear families; autonomy, which Angyal (1965) stated was one of the two basic human motives; and, Bakan's agency (1966), which is the best known. The concepts which are similar to femininity are, for example: affiliation motive; maintenance function in the PM theory of leadership; expressive traits, which are expected mainly from the mother in domestic relations; harmony, which is one of the basic human motives; and Bakan's communion which is also the best known (Dohi, 1999; Guisinger & Blatt, 1994).

Block (1973; 1984) proposed a developmental model of the gender concept for individuals by reference to the ego development stages described by Loevinger (1966) and on the basis of the questions of how femininity and masculinity are accepted into the self-concept of each individual. According to Block, prior to the adolescent period, boys get agency and girls get communion under the influence of gender socialization, and they begin having a balance between agency and communion from the adolescent period on. Then, at the final stage of their lifecycle, agency and communion are integrated for both males and females. Proger & Bailey (1985) collated the results of sentence-complete tests which were related to psychological development and gender types which were identified by using the BSRI (Bem Sex Role Inventory). The results of the study showed that the gender type of individuals changed through the stages of "undifferentiated," "masculine" or "feminine," and finally, "androgynous," as psycho-social development progressed.

# The author's model for development

Dohi (1999) hypothesized Gender Schemas (Bem, 1981) and Gender Identity (Dohi, 1996) as the determinant factors of femininity and masculinity. In general, femininity/masculinity of both female and male individuals develops from the state of undeveloped, undifferentiated. As Gender Schemas are developed, school-age children accept personalities which are expected from society, depending on their biological sex, and boys accept masculinity and girls accept femininity into their own self-concept. From adolescence onward, children come to recognize that both masculinity and femininity are important for self-identity, regardless of being boys or girls,

as Gender Identity is being established. This helps in forming psychological androgyny, which has both masculinity and femininity.

Gender Identity is one's own way of living, and this is based on one's individual responses to social expectation after accepting his/her sex. Gender Identity is, according to Yui (1995), "the disposition which continuously entrusts the self to unique and creative socially beneficial activities." More specifically speaking, ego identity requires a compromise between what is demanded from society and the intrinsic social motives which are formed as an individual develops, and the process can be applied to gender. Female individuals are, for example, eager to have both communion, which is demanded as a female social-role, and agency, which is thought of as intrinsic to humans. As a result, both communion and agency are intensified as they get older.

### Social expectations for femininity/masculinity

Some empirical studies have been conducted on the determinant model of femininity and masculinity, and the results clarified that females are, in comparison to males, less likely to follow the effects of Gender Schemas as the determinant factor for femininity and masculinity in the hypothesized Model (Dohi, 1998; Dohi et al., 2009). This is possibly a reflection of the mindset of today (Magolda, 2000), namely that masculinity is considered more valuable than femininity, and thus there are few merits for females in increasing femininity and decreasing masculinity along with Gender Schemas. There is another possibility that the expectations for females to have femininity are not as high as the expectations for males to have masculinity. When the determinant factors for femininity and masculinity are examined, it is necessary to take into account the social situations of individuals, as well as the interpersonal environment around them.

Stake et al. (1996) developed the Social Expectations Scale (SES), which measures the volume of expectation on instrumentality and expressiveness in family, school and workplace. A study was conducted with 289 participants comprising of the general public and students (168 females and 121 males), and then a hierarchical regression analysis was conducted in order to predict factors such as self-concepts and social adaptation in accordance with the SES. It was found that the expectation of instrumentality increased self-esteem, a feeling of well-being and a sense of competence. It was also found that the expectation of expressiveness increased a sense of satisfac-

tion and preference from others, but that if only expressiveness is expected, it decreases self-esteem and the sense of competence. Furthermore, it was found that when both instrumentality and expressiveness are expected, it increases all of self-esteem, the sense of well-being, the sense of competence, and the sense of satisfaction and preference from others. This study's results also suggested the necessity of paying attention to the question of what kinds of individuals are expected to be in terms of femininity and masculinity, and also how such expectations may influence individuals psychologically.

# Development of femininity/masculinity in daily interpersonal environments

This study examines the determinant model of femininity/masculinity from the standpoint of daily interpersonal environments. Individuals in adolescence experience many important changes in their interpersonal environments, and one of the changes is the transition from a student's life to an occupational life as an adult. Various studies have been conducted for the purpose of finding out how the occupational life of an individual is related to the development of masculinity and femininity.

For example, Magolada (2000) conducted a telephone survey of 39 participants (22 females and 17 males) who graduated from university 12 years ago. The survey was conducted by having 1 or 1.5 hours of interview with each participant on the telephone. The aim of the survey was to examine the factors for developing identity which are necessary in order to build intimate interrelationships with others. In the traditional male-dominated society, agentic factors, such as separation from others and autonomy, were considered important (Erikson, 1968). However, today awareness is heightened regarding the importance of individuals having both agency and communion and integrating them (Kohlberg, 1984; Kegan, 1994). The results of the survey showed that the participants experienced a turning point in their interpersonal development in their mid-twenties. At around this period of their life, they experienced getting a job, living alone, getting married and quitting a job. The results also clarified that they developed their interpersonal skills in an effort at making adjustments and compromises between imposition from others and their inner voice.

Another example is a study conducted by Clarey (1985). According to Clarey, the participants (19-57 years of age) of a re-socialization program

which was run for 2.5 hours per week for 10 weeks experienced a transition from the traditional "feminine" gender type to the "androgynous" gender type. They also experienced an increase in their self-esteem and their career-preference changed. Dohi et al. (1990) also conducted a survey about the role attainments achieved by female individuals as a worker, wife and mother, and the research suggested that high masculinity was related to a sense of achievement obtained from playing a role as a worker, while high femininity was related to the sense of achievement obtained from playing a role as a wife and mother. The research result showed that, though there were no causal relationships between role involvements and femininity/ masculinity, having a job facilitated their masculinity and living as a wife and mother facilitated their femininity.

It was predicted, based on the previous studies, that the occupational life of individuals after graduating from university can change their masculinity and femininity. Accordingly, this study hypothesizes that the chance of having a consciousness of being a worker increases among female university graduates through their working experiences and by the expectations placed on them as members of society. This study examines how such interpersonal environments affect Gender Schemas and Gender Identity while referring to the scale scores of masculinity, femininity, Gender Schemas and Gender Identity as additional considerations.

#### Procedures of the survey

In 2009, semi-structured interviews were carried out with seven female university graduates. Each interview had one interviewee and two interviewers (one note-taker and one questioner) and ran for about one hour. Table 4.1 shows the questions asked to each interviewee. After the interview was completed, each interviewee was asked to complete the items on three scales for masculinity/femininity, Gender Schemas and Gender Identity.

The contents of the questionnaires are the following: Gender-diagnostic ratio was executed as an index of Gender Schemas. Participants were asked to respond to a total of 24 items from the CAS (Dohi & Hirokawa, 2004) by showing their estimates of how many percent (a range of 0-100 %) of males and females in general belong to each item. They were asked to respond based on their subjective judgment. Next, gender-diagnostic ratios were calculated based on the responses. For the calculations, Formula 3.2 (Chapter 3) was used for calculating 12 items related to communion and Formula 3.3 (Chapter 3) was used for calculating 12 items related to agency. The higher

Table 4.1 Questions asked to each participant in relation to Gender Schemas and Gender Identity

	Work place	Intimate person of the opposite sex	Parents	Self
Gender Schemas	Male-to-female ratio of personnel     Expectations for using clothes and make-up femininely and speaking and behaving femininely.     Rules on how males and females socialize together     With or without divisions of work related to sex-roles at the work place     Differences of ability between males and females at the work place	Femininity expected from intimate friend of the opposite sex     Role behavior and payment during dating     Requirements for an ideal marriage partner     Going on a diet     Johr transfer of one another     Order of priority between work and intimate friend of the opposite sex	Expectations from parents for marriage     Blind date     Helping out around the house     Sharing living expenses	Training to be a bride     Activities for getting married
Gender Identity	With or without having a female model for life     Will to change or leave job     Acquisition of qualifications and licenses     Forming and training for career for females	Understanding of working     Discussion about getting married and planning for having children     Whether having a regular relationship or not     Intention of economic independence	Family devolution and being conscious about family     Relationships with parents after marriage     Will to ask for help with childcare and household chores to continue working     Identification with parents	Accepting being a female     Enjoyment only as a female     Motto     Life insurance, savings

the score is, the stronger the Gender Schemas are.

A Gender Identity Scale (Dohi, 1996) was executed. The scale originally consisted of three sub-scales of "accepting one's sex or gender," "identification with parents," and "intimacy with the opposite sex," and each sub-scale consisted of 10 items. However, this study uses scale items which were revised based on the results of a re-examination of the study conducted by Dohi et al. (2009; see Table 3.7). The revised scale consists of three sub-scales and each scale has seven items, so that there are 21 items in total. Each participant was asked to respond how much each item was agreeable to her. The score range of each sub-scale was between 7 and 28 points. The higher the score is, the stronger the trait is.

A CAS (Communion-Agency Scale; Dohi & Hirokawa, 2004) was executed to measure femininity/masculinity. The participants were asked to rate themselves on each scale-item by choosing the most suitable number for them from: "1. strongly disagree," "2. moderately disagree," "3. moderately agree," and "4. strongly agree." Each sub-scale consisted of six items and the score range of each sub-scale was between 6 and 24 points. The higher the score is, the stronger the traits are. All of the interviewees were, next, to be categorized into four different gender types. The categorization was conducted by referring to the medians, based on study results by Dohi et al. (2009). The median of positive-agency was 16 points and the median of positive-communion was 19 points. As a result, there was no participant who belonged to the "undifferentiated" gender type, and thus the seven interviewees were divided into "androgynous", "masculine" and "feminine" gender types. Each interviewee was coded with A1, A2, A3, A4, F1, M1, or M2 in what followed. The letters A, F, and M stand for "androgynous," "feminine," and "masculine" gender types, respectively.

# What were found and considered through the interviews

### Attributes and scale scores of participants

Table 4.2 shows a summary of the attributes of the participants and the scale scores of femininity/masculinity, Gender Schemas and Gender Identity for the participants. The table shows that, except for A2, the scores of Gender Schemas of almost all of the participants are much lower than the means obtained from the study by Dohi et al. (2009). All of the participants took some lectures related to gender psychology when they were at university,

Table 4.2 Gender Personality of the participants for interviews

				Femininity/masculinity (CAS)	sculinity (C	AS)		Gender Schemas (Gender-diagnostic ratios)	Schemas nostic ratio	(s		Gender Identity	, t <sub>1</sub>
Initials for the participants	Age	Gender type	Positive- agency	Positive- Positive- agency communion		Negative- Negative- agency communion	Positive- agency	Positive- Positive- agency communion		Negative- Negative- agency ommunion	Accepting one's sex or gender	Identification with parents	Intimacy with person(s) of the opposite sex
M1	23 year-old	Masculine	17.0	18.0	13.0	19.0	2.92	2.80	2.46	2.79	23.0	20.0	19.0
M2	24 year-old	Masculine	17.0	14.0	16.0	14.0	3.04	2.72	2.58	2.92	17.0	26.0	20.0
F1	24 year-old	Feminine	14.0	19.0	11.0	12.0	2.93	2.85	2.87	2.87	18.0	23.0	17.0
A1	23 year-old	23 year-old Androgynous	18.0	23.0	10.0	14.0	2.52	2.45	2.69	2.69	23.0	28.0	20.0
A2	23 year-old	23 year-old Androgynous	21.0	22.0	7.0	10.0	3.21	3.42	3.48	2.70	23.0	25.0	27.0
A3	23 year-old	23 year-old Androgynous	17.0	22.0	0.6	17.0	3.11	2.50	2.80	1.46	27.0	27.0	18.0
A4	22 year-old	22 year-old Androgynous	19.0	20.0	13.0	11.0	3.70	2.00	2.60	2.50	24.0	26.0	23.0
Scale scores by Dohi et al. (2009)	Dohi et al. (2)	(600	14.9	18.5	12.1	17.1	3.20	3.30	3.30	3.60	21.4	21.3	16.3
<i>SD</i> by Dohi et al. (2009)	1. (2009)		3.5	2.8	3.1	3.3	0.33	0:30	0.40	0.47	3.5	3.7	4.4

Note: \* In accordance with the means of Dohi et al. (2009), a figure with a mean value of 1 and over by 1 SD is shown in boldface, and a figure with a mean value of 1 and less by 1 SD is underlined.

and thus there is a possibility that they have formed meta-cognition with which they can criticize and revise their own Gender Schemas objectively.

# Development of multiple-dimensional Gender Schemas in the work place

The participants of the study told the interviewers that the necessity of behaving like adult females was higher in the work place in comparison to the time when they were at university. They were expected to, for example, use make-up and to speak and behave femininely (M2, A2, A4). This suggests that they are expected to a high degree to follow Gender Schemas in the work place. Such an expectation of behaving femininely appears to be influenced by the clear divisions of work content in accordance with sex roles. According to the participants of the survey, tasks such as serving customers (A2) and handling calls (A1) are considered to be jobs for females, and most of the jobs outside, sales and marketing tasks, are considered to be work for males (M1, M2). In addition, divisions of work related to sex-roles are still practiced in accordance with the traditional norms. According to the examples provided by the participants, preparing food or drinks are jobs for female workers (M2, A3) and throwing shredded waste away and work related to personal computers are jobs for male workers (A2, A3).

However, most of the participants are aware that they behave femininely not to show flattery to males but so as to show good manners as an adult (F1, M2, A1, A2). One of the participants thought that putting on no make-up is etiquette (A1) and one participant was sure to show a smile while dealing with customers. They were also flexible and they could act in accordance with factors such as the age, status, sex and type of job of the people they deal with (M1, F1, M2, A1, A2). This is the result of the fact that they have obtained skills to apply themselves to the reality in front of them flexibly, instead of feeling that they are having Gender Schemas imposed by others.

# Having a fifty-fifty relationship with an intimate person of the opposite sex

In the questions related to role behavior with intimate person of the opposite sex, some participants responded that payment, driving and providing transportation to and from places are all the roles of the person of the opposite sex (M1, A2), and some others responded that they are sharing roles such as expenses and having reciprocity with the person of the opposite

sex (M2, A1, A3, A4). They answered the question about the order of priority between boyfriend and work with: work on weekdays and boyfriend on holidays (M1); work because of money received as a salary (F1); work because she has just started working (one year) (A1); the first priority being on study in order to get qualifications and the second being the boyfriend (A2); and, it being not possible to have a boyfriend unless being allowed to put priority on work (A3). These responses suggest that the participants are eager to put priority on their work, but they also suggest that this is showing their confidence about working and making money for themselves as part of the single life.

In contrast, one participant has been asked by her boyfriend to be more feminine by wearing skirts and such since the beginning of their relationship (M1), and some others were asked to cook and use feminine language (M2, A2). This suggests that they are highly expected to be feminine. Most of the participants, however, expect their future husband to play a role as a breadwinner (F1, M2, A1, A2, A4), and this shows that they distinguish between their love life and married life.

There are cases of having questions about gender roles. One of the participants (M1) tried to suppress Gender Schemas when her boyfriend showed some expectations from her as a woman by saying, "because you are a woman...", when they were with another person. The participant explained that she felt hesitation about her gender roles. Another participant also explained that she had feelings of resistance towards her boyfriend when he demanded her to wear the clothes and have the hairstyle that he liked (M2). The survey suggests that influence from an intimate person of the opposite-sex has a big influence on how people recognize Gender Schemas and how they connect Gender Schemas to their behaviors.

### Factors which facilitate identification with parents

Findings in the interviews' responses were looked at and described in terms of "identification with parents," "accepting one's sex or gender," and "intimacy with the opposite sex."

Most of the participants listed their mother (F1, A1, A3) and a female senior member in their work place (F1, A4) as a model person for their lives. It was found that the participants who chose their mother as a model person for their lives had high scores in the scale items related to "identification with parents" in the survey. This indicates that these participants have a good relationship with their mothers. One of the participants had a

plan to live near to her parents' home and receive help in raising children in the future (A3). Another participant also had a plan to receive help from her parents and this plan was made based on her memory of her own mother receiving support from the participant's grandparents so that her mother could continue working (A2). Similarly, there was a case of wishing to live near the parents' home where this idea derived from the relationship between the participant's parents and grandparents (A4). The chance for married couples to live with the husband's parents is decreasing while the chance to live with the wife's parents is increasing today. Some participants of this study were no exceptions, and their plans for the future were not to leave home so that they could receive help with raising children.

The study results showed that some participants reflected their close relationships with their parents not only in themselves but also in their intimate relationship with persons of the opposite sex. For example, the parents of some participants often went out together and thus the participants longed for such a relationship as a married couple (F1, A4, A3). However, in the comparisons among the participants' scores of "intimacy with the opposite sex" in accordance with the means of score of Dohi et al. (2009), the score for A4 was relatively high but the scores for F1 and A3 were not so high.

The study results also show that identification with parents was emerging not as a form of independence but as a form of dependency. For instance, some participants were interested in cooking (M1, F1), but actually most of them were not doing any cooking (A1, A2, A3, A4), though most of them were doing laundry and cleaning (M2, A1, A2, A3). The average amount paid by some participants to parents as living expenses every month was 30,000 yen, and this is far from what can be called economic independence. This indicates that the participants had no plans to get married, and they wished to continue their comfortable relationships with their parents.

### Influences on the development of accepting one's sex or gender

All of the participants in this study indicated that they were clearly accepting of being females. However, the reasons for their acceptance of their own sex or gender were as trivial as: females are less likely to be scolded in the work place (M1, M2, A1); females have no responsibility to feed their own family (A2, A3); females can change their appearance by using clothes or make-up (M1, M2, A2, A4); and females can enjoy shopping (M1, A1). Moreover, they cited that going out and having fun only with other females (F1, A1, A3) and chatting with females (F1, A1, A3, A4) are a joy privi-

leged only to females. These responses suggest that occupational life has given the participants a chance to accept being females, but it is difficult to believe that this has facilitated their Gender Identity. In addition, none of their scores related to "accepting one's sex or gender" was high in comparison to the results from the study by Dohi et al. (2009).

#### Factors which facilitate intimacy with the opposite sex

In the survey, the participants were interviewed in relation to how "intimacy with the opposite sex" and future plans are developed by their occupational lives. The results of the interviews showed that many participants were not enthusiastic about continuing working. They responded to the question about their willingness to continue working with "not decided yet" (F1, A2) and "not strong" (M2, A1, A4). The two participants who showed a strong willingness to continuing working responded that the importance of continuing to work was related to a working environment in which childraising leave was easily taken (M1) and that it was a shame to leave a job if that job was on the regular payroll (A3). These responses of a positive motive toward jobs suggest that if the working environment improves for female workers, their willingness to continuing working will increase and this could result in facilitating Gender Identity. The study showed that most of the participants thought that it was important to have their boyfriends understand about their jobs (M1, M2, A1, A2, A3, A4). This indicates the importance of working environments as factors for job continuation and the facilitation of Gender Identity.

There are various cases, however, and one of the participants expressed her determination and efforts to continue her job as her life-time work (M1). She had this determination because of the salary of the person with whom she had an intimate relationship. She expected him to be her future husband but his salary was low and she expected herself to continue working after getting married. In other words, this case suggests that the lack of economic resources of the spouse can facilitate the identity of female persons as working women. The identity of the participant (M1) as a working woman was facilitated, though her Gender Schemas had been low. A case contrary to the case of M1 was that of M2. M2's job was demanding and she had to work late. Because of this, she had begun thinking that it would be difficult to raise children while working at her job, and thus she began thinking that she would quit her job when she gets married. The case of M2 indicates that her Gender Identity was molded while she was still involved in her working

life, and consequently she made a choice of being a full-time housewife. In the future she would perform and feel a sense of achievement as a wife and mother rather than by being a worker.

# Reviewing flexible use of Gender Schemas which are facilitated by working life

This study examined how Gender Schemas and Gender Identity are influenced and developed by the changes of interpersonal environments between university life as students and working life as adults, as well as by the expectations placed on the participants in their working lives. This was examined based on the results of the survey using interviews.

According to the survey, many of the participants of the study experienced some demands for more feminine behaviors and appearances, and in this aspect they are expected to exhibit a higher-degree of Gender Schemas in comparison to the time when they were at university. However, working environments did not affect the femininity of the participants. It is more likely that their masculinity was facilitated, as masculinity was demanded in many situations such as making personal statements or completing and achieving tasks with goals.

Gender Schemas may be differentiated depending on the targets they are used for. Gender Schemas may act differently on the functions of cognitive processing depending on whether the targets are the self or others, and Gender Schemas can also be multi-dimensional. Career women, for example, have work at the center of their identity and compete equally with males, but their appearances are often feminine. Kashio & Dohi (2000) conducted a survey on female college students and the results of the survey showed that androgynous individuals, who are supposed to have low Gender Schemas of personality traits, tended to have a Gender Schema related to their behaviors involving clothing and make-up, so that their Gender Schema was as high as for feminine individuals. This also suggests that individuals' appearance and their Gender Schemas are different dimensionally. A flexible use of Gender Schemas depending on daily situations and interpersonal relations makes it possible for individuals to learn flexibility of behavior and social adaptation.

The participants of this study generally showed a strong tendency to have a more feminine appearance in comparison to their university period as they had changed their ways of wearing clothes and make-up, and some of them had changed from wearing glasses to wearing contact lenses.

However, four out of the seven participants belonged to the "androgynous" gender type, in which both femininity and masculinity are high. This suggests that when female students graduate from university and take up occupations, their Gender Schemas develop to have more multi-dimensional aspects. A typical example of these multi-dimensional Gender Schemas are to be found in the case of one of the participants (M1) who belonged to the "masculine" gender type. M1 had a high sense of professionalism and her Gender Schemas were low in the scores obtained from the questionnaires. However, she seemed to manage to control her gender by putting her first priority on work during weekdays and on her intimate boyfriend on weekends.

# Relationships with an intimate person of the opposite sex and plans for life in the future

Discussion should be offered in this section concerning Gender Identity, which is developed by interactions with an intimate person of the opposite sex. During the interviews in this study, only a few participants talked in detail about what their marriage or relationship with their husband would be in the future. However, it seems to be necessary for couples to discuss their future before getting married as a part of their life planning for their own future. According to an interview-survey conducted by Funabashi (2004) on 17 married couples who had children (or a child) aged under 10 years old, wives were often expected by their husbands to adjust their will. However, the survey result also suggested that a new balance between wife and husband—that is a "gender contract" (Ahrne & Roman, 1997)—can be created through negotiating with each other. The "gender contract" is a mutual agreement made on sharing roles such as household chores and childcare between wife and husband. This contract was established in Swedish society, where the majority of the families have double incomes.

### A systematic and eclectic research method as a challenge for the future

Study methods using interviews are discussed in this section. The study in this chapter employed a method of comparing the scale scores of femininity and masculinity and the results obtained from interviews. Allport (1968) mentioned that we needed to examine the communality of personality, to which most attention was paid in this study, and which is a kind of horizontal dimension found in all individuals, and that we also need to examine whether such a communal dimension could be applied to the personality

of certain individuals—that is, a kind of vertical dimension—in reality. He argued for the need of taking an eclectic approach complementary in the study of the two dimensions. This view is known as systematic eclecticism, and Ono (2010) proposed a "systematic eclectic research method" which is based on this view.

The first and standard procedure of this method is to select research dimensions which are effective for examining a hypothesis. Secondly, verification of reliability and validity, as well as analogical reasoning of causality, are performed by using data from questionnaires. Thirdly, participants are selected based on the dimensional research mentioned above and interviews are performed with the selected participants. These processes are expected to achieve: an understanding how the scores obtained from different dimensions signify the consciousness and behaviors of individuals in their daily lives; a verification of the content validity of the dimensions; a comparison among the study participants by scores; finding the factors which affect the dimensional scores; and an examination of causality.

Discussion of the study in this chapter was conducted by making reference to both the contents of interviews and scale scores. However, it was difficult to find any tendency developed by the differences in responses which might be caused by the difference of gender types, because the number of the participants was small. The systematic eclectic research method should be applied continuously in the future in order to have an inclusive understanding of femininity and masculinity.

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# Review of femininity/masculinity as main part of Gender Personality

In Part I, Gender Personality and the author's determinant model of femininity/masculinity were reviewed and the CAS (Communion-Agency Scale) was introduced as a scale which measures femininity/masculinity. Next, discussion was carried out in accordance with the studies in order to examine the validity of the determinant model empirically by using the CAS and questionnaires, and finally reports were made on the survey conducted using interviews. Based on such discussion and reports, this section will conclude the studies and at the same time discussion will be offered on other studies conducted by the author earlier.

# The importance of distinguishing between biological sex and gender

The main concept of this book is femininity/masculinity, and femininity/masculinity observed by the degrees of gender stereotypes that individuals take in as a part of their own personality. The approach of focusing on social sex, which is also known as "gender," is a different approach from the view of "sex-difference psychology," of which the focus is obviously sex. Biological sex and social sex are mixed and exist physically, mentally, and behaviorally, and how these are mixed and exist was shown in Figure 1.1 of Chapter 1.

Making a distinction between sex and gender is important for understanding human behaviors. Reproductive behaviors such as giving birth to children are, for example, deeply related to biological sex, while nurturing children and mating behaviors (such as selecting a spouse) are deeply related to gender. Without such distinctions, people are confused and make mistakes by believing things such as females should take care of children since they have given birth to them and motherhood is an instinct inherited by all females. Individuals who are not aware of the presence of gender believe that every aspect of an individual is determined by biological factors, and how they behave and their personality is formed within the frame of social gender.

### Changes of gender stereotypes over a period of time

Femininity/masculinity is determined by the extent to which gender stereotypes are accepted as self-concepts of individuals. As described in Study I in Chapter 3, some of the contents of gender stereotypes have not changed over the years, while some of them have gradually become something disagreeable and invalid in society. The empirical study described in Chapter 3 also found some traits which are invalid as stereotypes. For example, some traits belonging to agency are found more among females than males, and thus these masculine traits have come to be recognized as no longer masculine ones.

It was also found in Chapter 3 that how stereotypes are perceived varies among individuals. For example, in Study II, a survey was conducted with female university students as its participants. On the whole, the participants tended to show that the items related to masculinity were judged as more common among males than females and the items related to femininity were judged as more common among females than males. However, a close examinations of individuals' responses indicate, as shown in Table 3.6, that some items of the CAS were evaluated differently and in opposition to the traditional stereotypes, while some items of the CAS were not evaluated even as items of gender stereotypes. Such tendencies are found clearly in the CAS items such as, for example, "I can cooperate with others" and "I can't tolerate incompetence." For the item "I can cooperate with others" (positive-communion), more that 40 % of the participants did not recognize the trait as a stereotype which is more commonly found among females than males, and nearly 30 % of the participants thought that the trait "I can't tolerate incompetence" (negative-agency) is found more commonly among females than males.

As we see above, the responses to the items of gender stereotypes will

change gradually. In Japanese society today, it is said that males have become gentler and males are made fun of for being more feminine. The term "males like grass-eating animals" has been coined as a description of males who stop having masculinity. Such a phenomenon would have been foreseen from the results of the studies. Attention should be paid to whether the contents of the items are recognized and whether the scale items are valid for showing gender stereotypes.

# Gender Schemas as determinant factors of femininity/masculinity

According to the hypothesis made based on the author's determinant model of femininity/masculinity, when male and female individuals have strong Gender Schemas, the female individuals have disproportionately high femininity, and the male individuals have disproportionately high masculinity. In contrast, individuals with low Gender Schemas have either high masculinity and femininity or low masculinity and femininity. In order to examine the hypotheses, Study I in Chapter 3 conducted confirmatory factor analyses after measuring the Gender Schemas of the participants of the study by using the sex-typed scores of the CAS items. Study II in Chapter 3 executed SEM after measuring the Gender Schemas of the female participants by using a gender-diagnostic ratio.

The observed variables for measuring the Gender Schemas of Study I were sex-typed scores of the revised items from Dohi (1988), a self-rating scale of femininity and masculinity, and the amount of clustering in memories of feminine and masculine traits. The results of the confirmatory factor analyses supported the hypothesis on the effective indicators from Gender Schemas. The results were also consistent with the results of the study conducted by Dohi (1994). This means that the effective indicators from the constructive concept of Gender Schemas are basically supporting the hypothesis regarding the variables measured by every method (see Figure I.1).

However, the results of Study II did not clarify the hypothesis that Gender Schemas suppress psychological androgyny. This suggests that the prediction should be more precise than when only the influence of Gender Schemas is examined, in order to find connections of all the constructive concepts related to the determinant model. Moreover, the participants of Study II were only females, and this could be another cause of the failure to clarify the hypothesis. Though this was touched upon in the section of

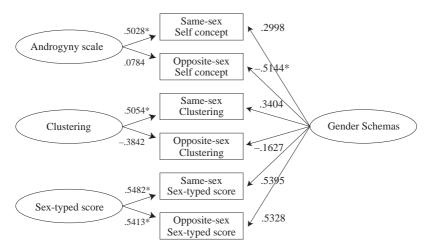


Figure I.1 Path diagram of gender schema model

Note: Numbers are standardized solutions; fixed parameters have '\*' Source: Dohi, I. (1994). A comparison of two models of gender-related schematic processing. The Japanese Journal of Psychology, 65, 61-66.

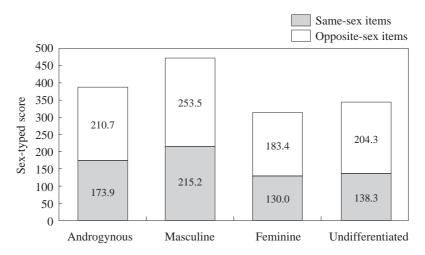


Figure I.2 Males' sex-typed score by gender type

Source: Dohi, I. (1988). A study of psychological androgyny: Androgyny scale and "sex-typed" score. Kwansei GakuinUniversity Sociology Depertment Studies, 57, 89-97.

"Problems of Gender Schemas as determinant factors of femininity/masculinity" in Chapter 3, making a prediction of femininity/masculinity in accordance with Gender Schemas is more difficult for females than for males. The study by Dohi (1998) also clarified that if males had high sexed-typed scores (the index of Gender Schemas), they tended to become the "masculine" gender type (see Figure I.2), though no clear relation was found between the sex-typed scores and gender types in the case of females.

In addition, there was an interesting finding about the intentions of females in the results of Study I in Chapter 3. Females follow traditional gender stereotypes when they describe males. Females are also more complicated than males in terms of cognition, and when it comes to talking about themselves, they do not apply and follow stereotypes. Females seem to make a distinction in the application of Gender Schemas to themselves and to males.

### Multi-dimensionality of Gender Schemas

As mentioned above, females do not seem to apply Gender Schemas to themselves but do apply them to others, especially to males. Males, however, showed an opposite tendency to females. It was found that males were unlikely to apply Gender Schemas to others, especially to females, but they apply them to themselves. It is known that the information processing of Gender Schemas is cognitively different for the self and for other individuals, and this relates to the puzzle of the difference between males and females described above. It suggests that Gender Schemas are established and function variously depending on their targets, and this implies that Gender Schemas are multi-dimensional.

In the questionnaire research conducted by Kashio & Dohi (2000), the "androgynous" individuals, who were predicted to have low Gender Schemas based on the theory of Gender Schemas offered by Bem (1981), had a high tendency to Gender Schemas for behavior related to clothing and make-up. This tendency was as high as for the individuals of the "feminine" gender type. This also suggests that the Gender Schemas about appearance and the Gender Schemas about personality are different in dimension. Using different Gender Schemas in different situations and differentiating Gender Schemas depending on fields are possibly related to the flexibility and social adaptability of their behaviors.

The survey using interviews in Chapter 4 found that the participants,

female university graduates, acquired new Gender Schemas as their occupational life began. However, the survey also found that the participants seemed to recognize the Gender Schemas as something they needed for their jobs and to think of them as separate from their own personality. As described earlier, if the personalities of males are formed in accordance with their Gender Schemas, then when male university graduates acquire new Gender Schemas in their new workplace, the new Gender Schemas presumably have a stronger influence over their personal life and traits than is the case for female graduates. If such males are masculine, aggressive and competitive and have a high motive towards attainment, they may have a high risk of becoming an excessively work-oriented person and may fall ill mentally and physically.

#### Decrease of the influences from Gender Schemas

Study I in Chapter 3 suggested that Gender Schemas prevent males from having femininity and females from having masculinity. Then, how can we reduce the chances of having influences from Gender Schemas in our everyday life? One of the methods is to create social environments where people do not feel the need to have sex differences in their work place, home, schools and interpersonal relationships. According to a study by Ito (2001), "motherhood" (a stereotype toward females), "lack of adequate ability in public fields" (a discriminating stereotype toward females), and "reliability" (a stereotype toward males) become salient when the sense of sex differences is aroused. The study also found that females had a tendency to play feminine stereotypes beyond the expectations of males and males had a tendency to play masculine stereotypes beyond the expectations of females. In other words, both male and females were trying to perform their gender roles beyond their social expectations. Thus, if people are shown that males and females do not have such strong expectations about the persons of their opposite sex, as regards masculinity from males and femininity from females, then the weight from Gender Schemas will be lifted from their shoulders.

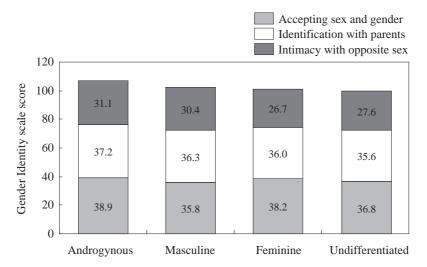
Nevertheless, as Gender Schemas have, like schemas other than gender, a function which decreases the load of cognitive processing of individuals, it is impossible to remove only the schemas related to gender. This is why Gender Identity works effectively within individuals. Having an identity which can control Gender Schemas independently, it becomes possible for

us to know what kind of Gender Schemas we have and how we should use them. Therefore, if a female has strong Gender Schemas and her femininity becomes strong, and if her femininity with positive aspects become stronger, then this should be thought of as ideal. If, however, her femininity with negative aspects becomes stronger, this is not ideal. It should then be controlled by using Gender Identity, which will be discussed below.

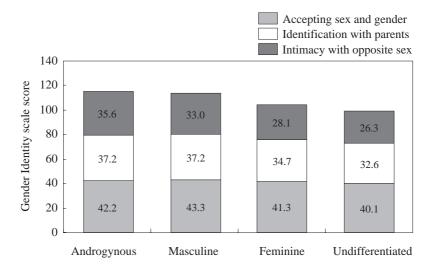
# Gender Identity as a determinant factor of femininity/masculinity

According to the author's determinant model, one of functions of Gender Identity is to make us understand that suppressing Gender Schemas and making a compromise between the sex we feel comfortable with and the sex that society expects us to have is important for establishing self-identity. Thus, it is hypothesized that we accept femininity and masculinity of a positive aspect. As a result, "androgynous" individuals have high Gender Identity, and these individuals have low femininity and masculinity of a negative aspect. On the other hand, the Gender Identity of individuals who belong to gender types other than "androgynous" are not well established, and they accept any negative aspects of gender roles into their self-concepts as long as the aspects coincide with their sex. Accordingly, it is hypothesized that masculinity of a negative aspect is also high among "masculine" individuals and femininity of a negative aspect is also high among "feminine" individuals. To verify this hypothesis, Study I in Chapter 3 conducted a confirmatory factor analysis which included constructive concepts of Gender Identity and unmitigated, as well as the Gender Schemas described earlier. The results of this study supported the determinant model. Study II in Chapter 3 also executed a SEM of the constructive concepts of Gender Identity and observed variables are the sub-scale scores from "intimacy with the opposite sex" and "accepting one's sex or gender." The results of this study also supported the hypothesis that Gender Identity facilitates androgyny.

The correlation between Gender Identity and femininity/masculinity was largely supported by the previous studies conducted by the author. Dohi (1998) conducted a survey of male and female university students by using a 30-item Gender Identity scale (see Figure I.3). The results of the study showed that the female participants with androgyny had a higher rate of "accepting one's sex or gender" (F (3, 297) = 4.72, p < .01) than any of the other female gender types. The female "androgynous" participants



**Figure I.3** Gender Identity scale scores by gender type (Females) *Source*: Dohi, I. (1998). An Empirical examination of the determinant model of masculinity and femininity. *The Bulletin of International Buddhist University*, *30*, 92-107.

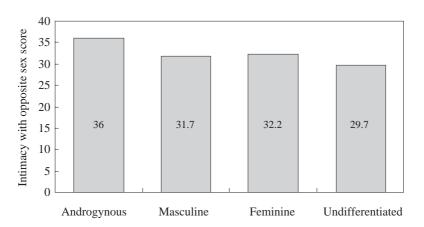


**Figure I.4** Gender Identity scale scores by gender type (Males) *Source*: Dohi, I. (1998). An Empirical examination of the determinant model of masculinity and femininity. *The Bulletin of International Buddhist University*, 30, 92-107.

also had a higher score for "intimacy with the opposite sex" than did the "feminine" and "undifferentiated" participants (F (3, 297) = 7.94, p < .001). However, differences among gender types were not found for "identification with parents" (F (3, 297) = 1.02, n.s.). The male participants showed differences among gender types at sub-scale scores (see Figure I.4), and the male "androgynous" gender type had higher scores for Gender Identity in comparison to the male "undifferentiated" and the male "feminine" participants (accepting one's sex or gender was F (3, 154) = 2.52, p < .10; identification with parents was F (3, 154) = 8.69, p < .001; and, intimacy with the opposite sex was F (3, 154) = 19.67, p < .001).

Likewise Kashio and Dohi (2000) conducted a survey on female university students and the results showed that the "androgynous" gender type participants scored higher for "intimacy with the opposite sex" than did the participants of other gender types (F (3, 258) = 16.66, p < .001) (see Figure I.5), and that the "androgynous" gender type participants also scored higher for "accepting one's sex or gender" than did the participants of "masculine" and "undifferentiated" gender types (F (3, 258) = 6.92, p < .001) (see Figure I.6).

Note that the factor loadings for every sub-factor were not constantly high enough when the exploratory factor analysis was executed on the



**Figure I.5** Intimacy with the opposite sex scores by gender type (Females)

Source: Kashio, M. & Dohi, I. (2000). A study on the multi-dimensionality of gender schema: In the case of personality traits and clothing, make-up behavior. Journal of the Japan Research Association for Textile End-uses, 41, 884-894. Reproduced in part by author.

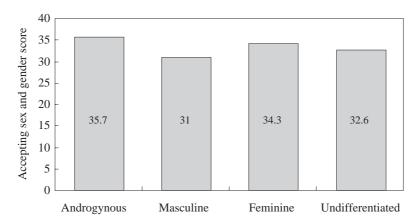


Figure I.6 Accepting sex and gender scores by gender type (Females)

Source: Kashio, M. & Dohi, I. (2000). A study on the multi-dimensionality of gender schema: In the case of personality traits and clothing, make-up behavior. Journal of the Japan Research Association for Textile End-uses, 41, 884-894. Reproduced in part by author.

original 30-item Gender Identity Scale. For this reason, some scale items were not used from all of the research data when the sub-scale scores were calculated, and a total of 24 items—eight items from accepting one's sex and gender, nine items from intimacy with the opposite sex and seven items from identification with parents—were used for the calculation. Study II in Chapter 3 selected and used seven items from each sub-scale. It will be necessary to develop Gender Identity scales with more stable factors in the future.

# The merits of focusing on the negative aspects of femininity/ masculinity

Only the positive aspects of femininity/masculinity have traditionally been the targets of studies. This has resulted in an assumption that androgyny, which has both masculinity and femininity, is ideal. This means that the studies have been conducted on the issue of how positive gender stereotypes are taken into the self. However, the study in Chapter 2 used the CAS, which can measure negative aspects, and examined the dichotomy (high-low) of negative aspects for the CAS gender types. The individuals of the "an-

drogynous" gender type, whose masculinity and femininity of positive aspects were high, were found to be low in both masculinity and femininity of negative aspects. It was also found, however, that "masculine" individuals had a high masculinity of negative aspects as well as positive aspects, and likewise "feminine" individuals had a high femininity of negative aspects as well as positive aspects. This result is consistent with the author's determinant model, and it suggests that those individuals with high Gender Schemas cannot distinguish negative aspects from positive aspects and come to have either positive or negative masculinity or positive and negative femininity. This also supports the hypothesis advanced by Helgeson that positive-masculinity suppresses negative-femininity and positive-femininity suppresses negative-masculinity. These results indicate that it is reasonable to think that femininity/masculinity has an inter-influence of independent elements, including negative and positive aspects.

Paying attention to negative aspects is effective when the psychological influence of femininity/masculinity is taken into account. Having low femininity and masculinity of positive aspects is not the same as having high femininity and masculinity of negative aspects, and each element influences an individual's psychology independently. This suggests that the negative-side of an aspect is especially useful as one of the characteristic traits when depression and other modern illnesses are explained. The influence of the negative aspects of femininity and masculinity on individuals will be shown clearly in Chapter 6.

# Activation of negative stereotypes, and the negative aspects of femininity and masculinity

It is known that stereotypes have an activation stage and an application stage. It is also known that individuals make decisions and take action without having control over the stereotypes consciously at the activation stage (Devine, 1989). Activation here means remembering and processing stereotypes, rapidly and unconsciously, within a second after meeting the person who is the object of the activation. Experimental research conducted by Nodera & Karasawa (2004) showed that negative gender stereotypes were more easily activated than positive gender stereotypes. If the Gender Schemas of an individual, for example, contain many components related to negative-femininity or negative-masculinity, it will act easily on the behavior and cognition of the individual. Individuals are required to recognize

what kind of Gender Schemas they have and to judge the good and bad impact of Gender Schemas on themselves by using Gender Identity.

The activation of implicit Gender Schemas was shown in an experiment of subliminal priming using sex-typed colors (Dohi & Hirokawa, 2003). The study prepared two conditions, one of which was a case of showing "female" or "male" in Japanese letters as a priming stimulus, and the other condition was a case of showing nothing (control condition). After the subliminal priming, the participants were shown Japanese letters which described sex-typed feminine colors (peach, red, white, etc.) and masculine colors (gray, blue, black, etc.). When the participants were shown the letters describing colors, they were asked to judge and push one of the buttons which were labeled "masculine" or "feminine" by following their judgment on the color being either "masculine" or "feminine." This showed that the faster they pushed the buttons, the more active their Gender Schemas were. The results of the study showed that Gender Schemas which were activated by the priming stimuli had an impact later on judging colors. For example, when a priming stimulus was "female" and the color of the gender was stereotypically feminine (i.e., a case of stimulus and color belonging to the same gender), the latent response time was short. However, when a priming stimulus was "female" and the color of the gender was stereotypically masculine (i.e., a case of stimulus and color indicating opposite genders), the latent response time was long.

Figure I.7 shows the latent response time of every combination of priming ("female," "male," or "nothing") and the colors of the genders (feminine or masculine). This study demonstrated that stimulating materials which have no negative component, such as colors, could activate Gender Schemas. If stimulating words which contain negative components had been used, the impact of Gender Schemas could have been more significant.

# Deficiency of involvement in social roles: In the case of unmitigated and undifferentiated gender types

"Undifferentiated," one of the four gender types, has low femininity and masculinity of positive aspects, and this type was, in contradiction to the determinant model, sometimes found to have high femininity and masculinity of negative aspects. This suggests that the functions of Gender Schemas and Gender Identity based on the determinant model are not adequate. Supposing that "undifferentiated" individuals already have Gender Schemas and

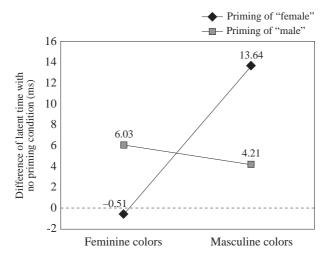


Figure I.7 Difference of latency between no priming and "female" or "male" priming

Source: Dohi, I. & Hirokawa, K. (2003). An Examination of gender schema by subliminally priming stimuli. Shoin Review (Kobe Shoin Women's University Scientific Research Society), 44, 19-36.

that consequently their femininity and masculinity of negative aspects are high, this hypothesis will not be supported since both masculinity and femininity of positive aspects are low. Moreover, if it is hypothesized that the "undifferentiated" gender type contains a Gender Identity, femininity and masculinity of negative aspects should be low while femininity and masculinity of positive aspects should be high. However, this hypothesis is not supported since the study produced completely opposite results. Therefore, a new concept is necessary in order to explain the mechanism for becoming "undifferentiated."

In Study I of Chapter 3, the model containing "unmitigated" factors worked well. It is estimated that the "undifferentiated" gender type has a higher level of "unmitigated" factors than other gender types. According to the prediction made based on the CAS items, "unmitigated" can be defined in terms of aggressiveness, poor sociability and excessive attention to the self. These traits may derive from a deficiency of involvement in masculinity, femininity and other social roles. When individuals who lack such involvement have low femininity and masculinity of positive aspects, their negative aspects cannot be mitigated, unlike the hypothesis put forward

by Helgeson. Deficiency of involvement in social roles may be related to "deficiency of self-identity," which should be established before Gender Identity is established. For example, once the self-identity of individuals is established up to a certain degree, those individuals' Gender Identity is also gradually formed by making some arrangements in order to adapt themselves to society as female or male. However, "undifferentiated" individuals may have never attained the stage. It is often said that the issue of "sex" is the issue of "life," and the results shown in Part I demonstrate what exactly is meant by this. The features of the "undifferentiated" gender type will be mentioned again later.

### Development of femininity/masculinity

Chapter 4 focused on the interview surveys of female university graduates who had just started their occupational lives and examined how femininity/ masculinity developed under the influence of Gender Schemas and Gender Identity. The results indicated that Gender Schemas were effective for the participants to adapt to their new gendered work place as Gender Schemas became multi-dimensional, and that Gender Identity did not have a strong influence on the formation of their personality, though Gender Identity was effective for them to keep smooth relationships with their family and with persons of the opposite sex.

The participants in this study were only seven females, and four of them were "androgynous" though none of them was "undifferentiated", and thus insufficient data may have been collected for examining the development of femininity/masculinity from the results. Dohi (1998) had found previously that both male and female university students played their gender roles, regardless of their gender types, when they were alone with an intimate person of the opposite sex. For example, female university students played roles which are considered feminine, such as making lunch, cleaning rooms and keeping up contacts, while male university students played roles which are considered masculine, such as driving cars, picking up and dropping off their intimate friend and asking about going out at the beginning of their intimate relationship. The study had also suggested that, in reality, it was difficult for them to play their femininity/masculinity, which they had formed, in the ways they wished. Getting ahead individually in a gendered society becomes possible by maximizing the use of femininity/masculinity, but it is also difficult to do so in real life. This may be possible by having role models of the same sex and having people who provide encouragement, confidence and other mental support when facing difficulties.

# Becoming androgynous when getting older: Based on a cross-sectional study of femininity/masculinity

The study in Chapter 4 showed changes among people through the transition from the university period to the occupational period of their lives, and the study was conducted by holding interviews with a small number of participants. Though this study must be considered a small-sized cross-sectional study, another cross-sectional study was conducted by H. Yamashina, I. Dohi, R. Lee, and H. Tamashiro, and on that occasion the study was conducted by using a bigger and wider range of age samples (Dohi, 2011). The study began in March, 2004 when a questionnaire survey-form titled "Research on gender and sexuality consciousness" was set up and put up on a website called "Doshin net," on an Internet monitoring system of the Doshin Information Institute. Next, 850 "Doshin net" participants (16 years of age or older) were informed about the set-up of the survey. They were also asked to access the questionnaire site and to answer the questionnaire related to the CAS, male and female roles in one's social life, gender and sexuality consciousness and attitudes toward marriage.

The prediction made based on the author's determinant model of femininity/masculinity was that both males and females were more likely to be "undifferentiated" when they are younger, and that their communion and agency would be facilitated as they got older, with them more likely to become "androgynous," which has both communion and agency. On the basis of this hypothesis, analyses were conducted on the percentages of the numbers of participants who belonged to gender types which were categorized by gender type, biological sex and age. The results showed that a significant difference was found among male participants, as the percentages of numbers for the male participants were different in every gender type among various age groups. It was found that: more than half of the males in the age group in their teens and 20s were "undifferentiated"; the percentages of "masculine" and "androgynous" individuals increased for the age group in their 30s-50s; and in the age group in their 60s or older, the percentages of "undifferentiated" and "masculine" individuals continued to decrease while the percentage of "androgynous" individuals increased and became more than half (see Figure I.8). In the case of females, there was no statistically

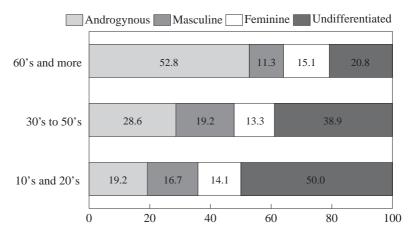


Figure I.8 Males' gender type by generations

Source: Dohi, I. (2011). Gender and self. Enomoto, H. (Ed.) The Most front of self psychology. Kyoto: Airi Shuppan, 34-43.

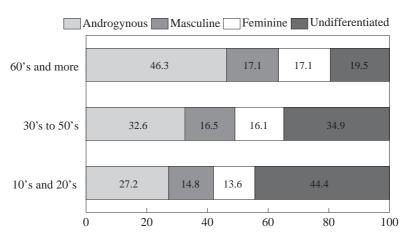


Figure I.9 Females' gender type by generations

Source: Dohi, I. (2011). Gender and self. Enomoto, H. (Ed.) The Most front of self psychology. Kyoto: Airi Shuppan, 34-43.

significant relation found between age group and gender type (see Figure I.9). Examination was also made into how the scores of communion and agency were affected by sex and age group. As a result, a difference was found in communion by age groups, and differences were also found in agency by sex and age groups. The scores for both communion and agency increase when the participants get older, and the score for agency was higher in males than in females.

These results basically supported the determinant model of masculinity and femininity advanced by Dohi (1999). The results of both studies showed that Gender Schemas become less apparent as people get older and that they become less conscious of differences by sex. In addition, as people get older and as their Gender Identity becomes more established, they come to understand that both agency and communion are necessary for their identity and for their ways of life. Consequently, they become "androgynous". However, the relationship between age and femininity/masculinity was vague in females. One reason for this ambiguity may be the diversification of lifestyles among females today. There used to be some social norms for females about their marriage and ways of life as people used to talk about a marriageable age. However, such social norms have become less significant and females have begun making their own choices regarding, for example, whether they continue to work or leave work for their marriage. They have also begun making their own choices as to whether they will continue to stay home as a house wife or go back to work after giving birth to children. These choices might have caused individuals to be different largely in terms of when and how they form their femininity/masculinity.

# The features of "undifferentiated" gender type from the viewpoint of attitudes toward gender and sexuality

The web research through "Doshin net" mentioned earlier compared differences of attitudes toward gender and sexuality by male and female groups and by gender types. The results of the study are shown in Table I.1. Comparisons were made among gender types for how many participants agreed to the attitudes described in the items shown in the table, and the percentages of agreement for each of the items were different among gender types for the male participants. This indicates that "undifferentiated" males do not consider masculinity and femininity as genetic but rather that they consider them as something created by society and culture. This has made them be-

Table I.1 Agreement percentages of attitudes about sexuality by sex and gender type

Agreement percentages (%)	ges (%)				
Males $(n = 234)$ ; items which had significant differences between gender types	Androgynous $(n = 101)$	Masculine $(n = 58)$	Feminine $(n = 46)$	Androgynous Masculine Feminine Undifferentiated $\chi^2$ -value $(n=101)$ $(n=58)$ $(n=46)$ $(n=129)$ $(df=3)$	$\chi^2$ -value ( $df = 3$ )
I do not think it is problem that social roles are decided by sex, with some little complaints, though.	8.9	6.9	2.2	14.7	7.16†
Consciousness and attitude about masculinity and femininity must be inherent.	39.6	31.0	39.1	24.0	7.54†
Consciousness and attitude about masculinity and femininity must be made by society or culture.	20.8	22.4	19.6	33.3	6.44†
Making love without promising marriage can be permitted.	88.8	91.2	93.2	97.5	6.87
It is acceptable to have sex with a prostitute.	5.4	12.5	0.0	9.1	6.57
It is acceptable that males go to sexual amusements.	64.8	69.2	74.4	9.08	6.57
The AIDS issue is much related to me.	50.5	39.3	53.5	36.9	6.28†
Females $(n = 340)$ : items which had significant differences between gender types	Androgynous $(n = 112)$		Feminine $(n = 53)$	Masculine Ferninine Undifferentiated $(n = 55)$ $(n = 53)$ $(n = 120)$	$\chi^2$ -value ( $df = 3$ )
In general, sexual experience does not matter even for junior and senior high school students	4.1	0.0	2.0	10.8	10.31*
The AIDS issue is much related to me.	43.3	25.0	30.6	45.5	8.18*
It does not matter if couples live together before marriage.	50.5	53.1	44.2	65.4	7.51‡
It does not matter that couples get married after they have their first baby.	29.0	44.9	32.7	50.0	11.15*

lieve that having different roles between males and females is not of great importance. As to sexual norms, the "undifferentiated" male individuals had the weakest tendency towards conformity to the norms among the four gender types, and they had a strong tendency to believe that they were allowed to have sexual relations without the premise of getting marriage or that they were allowed to use sexual entertainment and amusements such as prostitution. In addition, many individuals of the "undifferentiated" male gender type showed their agreement with the items relating to having sexual relationships by using money or goods, and the percentage was as high as the percentage of the individuals of the "masculine" gender type. This suggests that such individuals have failed to monitor social desirability in attitudes toward sexuality.

Such significant differences among gender types were also found among the female participants. However, among the female individuals of the "undifferentiated" gender type, strong tendencies were found to think that it was no problem for young people (including junior and senior high school students) to have sexual relationships, to get married after pregnancy or to live together before or without marriage by law. These results suggest that their Gender Schemas, which are supposed to be facilitated by recognizing gender expectations, have not formed adequately.

### From androgyny to adulthood

Chapter 4 presented a quantitative study using interviews. The study suggested that Gender Schemas can be multi-dimensional, and individuals have come to use them from their own choice. Individuals chose not to use Gender Schemas, or they chose not to use Gender Schemas at least in fields such as their own personality traits, which they consider important. The author's empirical study conducted with female university students as a questionnaire survey (Dohi, 1995) also showed that deficit of Gender Schemas concerning personality traits could facilitate androgyny. As shown in Figure I.10, "deficit of Gender Schemas" was measured by the tendency to think of "masculine" traits being also important for females and to think of "feminine" traits being also important for males. Androgyny was measured by the masculinity and femininity items on the MHF scale (Masculinity-Humanity-Femininity Scale; Ito, 1978). Adulthood was measured by the scale of "motherhood, fatherhood, adulthood" put forward by Yamaguchi (1985). According to Yamaguchi, "motherhood" is the image

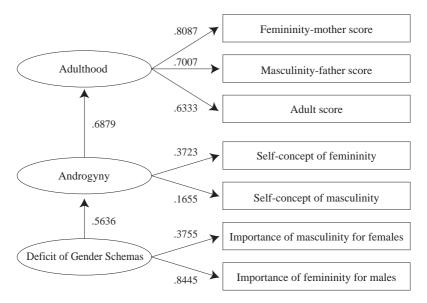


Figure I.10 Path diagram of causal model of motherhood/fatherhood *Note*: GFI = .9576; AGFI = .9086 *Source*: Dohi, I. (1995). Gender-related role evaluation of self-concept and gender schema: A causal analysis of motherhood/fatherhood. *Japanese Journal of Social Psychology*, 11, 84-93.

of a mother towards her own children and "fatherhood" is the image of a father towards his own children, and these images are a part of the femininity of each mother and a part of the masculinity of each father. "Adulthood" is an image of socially desirable adults of both sexes. If individuals have a tendency to aspire strongly to become like such desirable adults, this means that the individuals have high "adulthood." SEM was conducted by using these observed variables and factors, and the result was consistent with the causal model which showed that "adulthood" (Yamaguchi, 1985) increased as Gender Schemas became weaker and, next, that the "deficiency of Gender Schemas" facilitates "androgyny," and finally "androgyny" facilitates "adulthood."

This result of the study suggests that the femininity/masculinity of university students is effective for constructing motherhood, fatherhood, adulthood and other forms of matured personalities in their future. If the androgyny of individuals is facilitated in adolescence, they can make use of their "androgynous" gender type for their relationships with their children or in-

timate partners. Recently, the balance between work and life has been paid attention to by everybody, and consequently males have come to enjoy their lives outside the work place more and females have come to participate in social activities more. This trend should be accompanied by aspirations for both sexes to take part in both motherhood and fatherhood and to employ new role sharing in their behaviors in the family. If the wife and husband of such a family are both androgynous, their family life may become more smooth and flexible.

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# The relationships between femininity/ masculinity, mental health, and social adaptability

Part II will present some empirical research and experiments, and the ways that femininity/masculinity is related to mental health and social adaptability will be examined. In particular, regarding mental health, Type A behavior will be discussed in Chapter 5, self-esteem and depression will be discussed in Chapter 6, and interpersonal anxiety and strain measured by eye blinks on a first male-female meeting will be discussed in Chapter 7. With regard to social adaptability, social support will be discussed in Chapter 6, and communication skills will be discussed in Chapter 7.

In addition, in this part, the following points will be mentioned to discuss psychological influences specifically. Firstly, in Chapter 5, the hypothesis that masculinity facilitates Type A behavior and that femininity will moderate the relationship between masculinity and Type A behavior is presented. In other words, focus is placed on the interrelationship between femininity and masculinity.

Secondly, in Chapter 6, certain negative influences of negative-communion and negative-agency when using the CAS (Communion-Agency Scale) are presented. Also, the possibility that high negative aspects of communion and agency have different meaning in terms of psychological influences from low positive aspects is shown.

Thirdly, in Chapter 7, two experiments related to interpersonal relationships are conducted, in which the psychological influences of femininity/masculinity not only as one unit consisting of only one person but also as one unit consisting of two persons are investigated in communicative situations. This aspect is related to the uniqueness of gender in Japan, which will be discussed in Part III. In Japan, there are some norms in which groups and

fields are supposed to be more valuable than individuals, so that a married couple should be "one body, one mind." Therefore, in the case of femininity/masculinity, it could also be a valid hypothesis that more value is placed on what kind of personality two persons have as one unit rather than what kind of personality—for example psychological androgyny—each person has.

# The relationship between masculinity and the Type A behavior pattern:

The moderating effects of femininity

The purpose of this study was to examine whether a high level of masculinity is associated with the Type A behavior pattern, and whether a level of femininity moderates any of the main effects of masculinity. The participants were 743 male and 560 female undergraduate students. In the statistical analysis, evidence was found of the effect of masculinity on every Type A score, and of a moderating effect of femininity on the "speed-power" sub-scale score. The validity of four models of the functions of masculinity and femininity are discussed, and the moderating effect of femininity in the light of the interactive androgyny model is considered.

### Four models of the functions of femininity/masculinity

Biological sex is one factor determining social status, while gender is the social role connected to a sex. The self-concepts related to gender are masculinity and femininity. Masculinity and femininity are social roles and so, regardless of biological sex, one can contain both of them in one's self-concept (i.e., psychological androgyny). In Japanese society, as in many Western societies, masculinity is characterized by self-assertiveness, attainment, and the enhancement of individual ability. On the other hand, femininity is characterized by sensitivity, harmony with other people, affiliation, and good communication (Dohi, 1995a).

It is popular in social psychology to examine the effects of masculinity and femininity on performance in an experimental situation as well as their effects on mental health and psychological well-being. In addition, we like to examine their correlations with various personality traits. Taylor & Hall (1982), Whitley (1983), and Markstrom-Adams (1989) reviewed research on the functions of masculinity and femininity. Marsh & Byrne (1991) developed their ideas into the following four models:

- The sex-typed model, in which high-masculine males and high-feminine females (i.e., traditional sex-role orientations) yield favorable outcomes.
- The masculinity model, in which regardless of sex, only masculinity is desirable.
- The additive androgyny model, in which regardless of sex, masculinity and femininity are both related to psychological adjustment.
- The interactive androgyny model, in which for both sexes high masculinity and high femininity at the same time are desirable.

Femininity has not been found to affect many psychological variables (Bernard, 1980; DeGregorio & Carver, 1980; Zeldow et al., 1985), and recent studies have not been encouraging with respect to the interactive androgyny model (Lubinski et al., 1981; 1983; Stokes, 1983). Of these four models, the masculinity model has therefore been seen as more appropriate than the other models (Kelly & Worell, 1977; Taylor & Hall, 1982; Zeldow et al., 1985).

## Fitness of the masculinity model for Type A behavior

The purpose of the present study was to ascertain whether the masculinity model is appropriate as a psychological index that influences physical health. In spite of evidence that masculinity yields favorable outcomes for members of American society, this response style might be problematic in a medical sense (Stevens et al., 1984). Considerable research in behavioral medicine has implicated a risk factor known as the Type A behavior pattern in the etiology of coronary heart disease (Jenkins, 1978). Participants classified as Type A were found to be twice as likely (in the case of males) to suffer from coronary heart disease as Type B participants (characterized by the relative absence of Type A characteristics) (Rosenman, 1975). The Type A behavior pattern has also been studied in Japan. For example, Yamasaki et al. (1992) constructed a Type A questionnaire for Japanese adults. It consists of three sub-scales: aggression-hostility, hard-driving-time urgency, and speed-power.

Most researchers have found a strong relationship between masculinity

and Type A behavior (DeGreggorio and Carver, 1980; Stevens et al., 1984). However most of them used the Jenkins Activity Survey (JAS; Jenkins, 1979) as their measuring instrument. Stevens et al. (1984) concluded that future investigations should include a broader selection of instruments to assess Type A behavior patterns. Therefore, in the present study, an attempt has been made to ascertain the degree to which Type A behavior patterns are associated with masculinity among both males and females in Japan, by using the questionnaire made by Yamazaki et al. (1992)

# Moderating effect of femininity on masculinity for Type A behavior

An examination was also conducted as to whether femininity has any role as a moderating factor in any relationship between Type A and masculinity. Even if someone has a high-masculinity behavior pattern, a certain degree of femininity may restrain their Type A behavioral pattern, as asserted in the interactive androgyny model. The reasoning behind this hypothesis is as follows: Misumi (1976) examined the relationship between leadership style and a physical index. He suggested that performance-orientated leadership facilitates an increase in the participants' heart rates and blood pressures, which raises their level of physical arousal. On the other hand, maintenanceoriented leadership facilitates a decrease in the participants' heart rates and blood pressures, which lowers the level of physical arousal. In summary, if a group is compared to a living organism, then performance-oriented functioning and maintenance-oriented leadership work interactively to maintain the participants' homeostasis, which is needed by every living thing. Masculinity has been thought of as identical to performance functioning, and femininity has been thought to be identical to maintenance functioning (Ito, 1986). Therefore, masculinity and femininity can be thought of as regulating each other. Unfortunately, no evidence for a femininity × masculinity interactive effect on Type A behavior has yet been found.

The hypothesis is that a high level of masculinity is associated with Type A behavior, and that a level of femininity will moderate this effect on masculinity.

The method for our research was as follows. Four separate samples of Japanese university students provided the data for this study. The participants were 743 male and 560 female undergraduate students. Their mean age was 19.0 years (male) and 18.8 years (female). By participating in this

study, they could obtain a partial credit toward their introductory psychology course grade.

The contents of the questionnaires are as follows: Firstly, the MHF scale was executed which Ito (1978) originally constructed the instrument for measuring masculinity, femininity, and humanity. The participants were instructed to indicate on a 5-point (1 to 5) Likert-type scale the degree to which each characteristic was true of them. In this study, 10 masculine items (e.g., self-assertive, decisive, strong) and 10 feminine items (e.g., lovely, submissive, devoted) were used. All 20 items were ascertained as being considered desirable for males (the masculine items) or desirable for females (the feminine items) by Dohi (1995b). Humanity-related items (e.g., far-sighted, healthy, faithful) consisted of items which were considered desirable for both of males and females. However, they were not used in this analysis (see Appendix 1).

Secondly, KG style Type A scale was executed which Yamasaki et al. (1992) constructed an instrument for measuring behavioral patterns related to 18 aggression-hostility items, 16 hard-driving-time urgency items, and 15 speed-power items which are assumed to have negative implications for cardiovascular health. The participants were instructed to indicate on a 3-point (0 to 2) 55-item Likert-type scale whether each item was appropriate to them or not. Eleven items irrelevant to Type A characteristics were included to stop respondents ticking all items similarly low or high, and therefore the scores for these items were not included in the analysis reported under the results (see Appendix 2).

Lastly, other items such as locus of control, the size of the social support network (SSQ9; Matsuzaki et al., 1990) and habits related to health were investigated. However they were not used in the analysis reported below.

### Descriptive data and sex differences of the research

The means and standard deviations for all independent and dependent variables are shown in Table 5.1. There were no significant sex differences in the total Type A score (male M = 42.2, SD = 12.0, vs. female M = 43.0, SD = 12.1), nor in the sub-scale scores. On the other hand, there was a significant sex difference in the femininity score (male M = 28.4, SD = 6.0, vs. female M = 27.3, SD = 5.7), t (1294) = 2.81, p < .01; but not in the masculinity score (male M = 30.8, SD = 7.6, vs. female M = 30.7, SD = 7.6).

	Males (/	V = 743)	Females (	N = 560)
	Mean	SD	Mean	SD
Masculinity	30.8	7.6	30.7	7.6
Femininity	28.4	6.0	27.3	5.7
Total Type A	42.2	12.0	43.0	12.1
Aggression-hostility	21.1	6.7	21.6	6.7
Hard-driving-time urgency	12.9	5.5	12.7	5.5
Speed-power	13.3	5.5	13.4	5.8

**Table 5.1** Mean and SD of all variables

#### Correlations between all variables

The correlations among the variables are shown in Table 5.2. For both sexes, masculinity scores were highly correlated with all Type A scores. In contrast, there was little correlation between femininity and Type A scores. In fact, with the female participants femininity scores were negatively correlated with two of the three Type A sub-scores and total Type A scores. Masculinity and femininity were more highly correlated in the male than in the female participants.

### Analyses of variance

In the analyses of variance (ANOVAs), the participants were classified as either high or low on both the masculinity and femininity scales, using the median scores (Masculinity = 31, Femininity = 28) as cut-off points. Summaries of *F*-tests for the ANOVAs are presented in Table 5.3. Masculinity main effects were found in males and females for Type A total and subscale scores. High-masculinity participants scored significantly higher than low-masculinity participants on the Type A total and on all sub-scale scores. Femininity main effects were found for the hard-driving and speed-power scores (Table 5.4). High-femininity participants had a significantly lower speed-power score but a higher hard-driving-time-urgency score than low-femininity participants.

Masculinity × femininity interactions were found for speed-power and

Table 5.2 Correlations among independent and dependent variables

Variables	(1)	(2)	(3)	(4)	(5)	(9)
(1) Masculinity		.033	.485**	.225**	.397**	.549**
(2) Femininity	.266**		071	660	.108*132*	132*
(3) Total Type A	.502**	.132**		.791**	.754**	.786**
(4) Aggression-hostility	.291**	.114*	.810**		.399**	.387**
(5) Hard-driving-time urgency	.385**	.149**	**///	.476**		.500**
(6) Speed-power	.513**	.043	.737**	.354**	.449**	

Notes: Male data are shown on the lower left and female data on the upper right.

\* p < .01, \*\* p < .001.

Table 5.3 Type A variables as a function of sex, masculinity and femininity

V.				F ratio	tio		
variables	Mas.	Fem.	Sex	Mas. × Fem.	Mas. × Sex	Fem. × Sex	Mas. × Fem. Mas. × Sex Fem. × Sex Mas. × Fem. × Sex
Type A	263.69***	0.93	99.0	2.79‡	98.0	8.14**	0.76
Aggression-hostility	58.64***	0.59	1.78	0.42	3.66†	8.36**	0.02
Hard-driving-time-urgency	142.43***	5.51*	0.53	1.61	0.01	0.21	1.12
Speed-power	342.41***	11.62*** 0.28	0.28	5.36*	0.24	7.17**	1.60

Notes: Mas. = masculinity, Fem. = femininity.

p < .10, p < .05, p < .01, \*\* p < .01, \*\* p < .001.

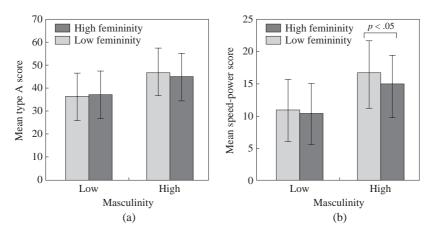


Figure 5.1 Mean and SD (bar) Type A total scores (a) and speed-power scores (b) as a function of masculinity and femininity

**Table 5.4** Mean and SD of variables for which ANOVAs detected simple and interactive effects

	Total Type A	Aggression- hostility	Hard-driving- time-urgency	Speed-power
<masculinity effect=""></masculinity>				
High masculinity	47.20 (10.80)	22.63 (6.21)	14.43 (5.23)	15.75 (5.18)
Low masculinity	37.30 (11.17)	19.85 (6.89)	10.97 (5.20)	10.66 (4.75)
<femininity effect=""></femininity>				
High femininity	-	-	13.28 (5.40)	13.03 (5.37)
Low femininity	_	_	12.37 (5.56)	13.64 (5.83)
<pre><femininity effect="" sex="" ×=""></femininity></pre>				
High femininity				
Males	43.04 (11.53)	21.51 (6.63)	-	13.40 (5.20)
Females	41.76 (12.13)	20.81 (6.80)	-	12.46 (5.57)
Low femininity				
Males	41.11 (12.42)	20.50 (6.67)	-	13.26 (5.78)
Females	44.24 (12.04)	22.51 (6.50)	-	14.32 (5.83)

total Type A scores (see Figure 5.1). According to subsequent Tukey multiple range tests, for the speed-power score moderating effects of femininity were found for high-masculinity participants more than for low-masculinity participants. Also, femininity × sex interactions were found for the total Type A, and also for the aggression-hostility and speed-power scores (see Table 5.4). The relations between femininity and Type A (total and aggression-hostility and speed-power scores) were differentiated by sex. In the case of females, femininity decreased these scores. Finally, a masculinity × sex interaction was found for aggression-hostility. According to subsequent Tukey multiple range tests however, there were no significant interactions. No masculinity × femininity × sex interaction was found.

### Multiple regression analyses

To examine whether the relationship between masculinity and Type A behavior would be moderated by the level of femininity, multiple regression analyses were conducted. In this analysis sex difference was entered as a dummy variable at the initial step. With the second step, the masculinity score was added. Finally, at the third step, a masculinity × femininity interaction was added.

The results of the multiple regression analyses are summarized in Table 5.5. At the second step, masculinity scores were then regressed on every dependent variable (i.e., total Type A scores and all sub-scale scores). In addition, significant increments in  $R^2$  occurred at this step. With the third step,  $R^2$  for the speed-power sub-scale was increased by adding the masculinity × femininity interaction. The increment was significant (p < .01).

### Suffering from "masculine" diseases for both sexes

The present research, consistent with the findings of Stevens et al. (1984) and DeGregorio & Carver (1980), suggests that males and females who identify themselves as having high masculinity have significantly higher Type A behavior patterns than those who identify themselves as having low masculinity. In addition, this study clarified the relationship between masculinity and Type A by means of a Type A scale other than the JAS. This result was not surprising because the Type A behavior pattern coincides with several stereotypically masculine characteristics (e.g., aggressiveness, ambition, dominance, self-reliance, instrumentality). However, the origins of Type A and masculinity are entirely different, and the correlation between

Table 5.5 Multiple regressions of sex, masculinity, and the interaction between masculinity × femininity on Type A scores

		Total Type A			Speed-power	
Parameters $(\beta)$	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Sex	.764	.824	.740	.400	070.	077
Sex, masculinity		.784*	.841***		.390*	.488**
Sex, masculinity, masculinity × femininity			002			003***
$R^2$	.001	.246***	.247***	000.	.280***	.291***
Difference in R <sup>2</sup>						
	*			*	*	

Note: \*p < .05, \*\*p < .01, \*\*\*p < .001

Type A and masculinity in many studies falls well below the magnitude of association that would indicate a single trait. It should be noted that there is no significant sex difference in this relationship. According to Twenge (1997), masculinity in females rose from 1973 to 1994. Furthermore, in the present study, no sex differences in the masculinity level were found. Females may, therefore, begin to suffer from "masculine" diseases in the future.

#### Minor moderating effects of femininity on exceeding masculinity

The second purpose in the present study was to investigate the possible moderating effects of femininity on the relationship between masculinity and Type A behavior. In the ANOVA, masculinity × femininity interactions were found for speed-power and total Type A scores. Among high-masculinity participants, the speed-power scores of participants in the high-femininity group were lower than those of participants in the low-femininity group. This suggests that femininity had minor moderating effects on the relation between masculinity and Type A behavior. Therefore, the integration of masculinity and femininity in individuals may be of significance for social and psychological adaptation.

### Four models of the functions of Gender Personality

Next the validity of the four models of the functions of masculinity and femininity mentioned before will be compared. At first, strong effects of masculinity on every dependent variable were found (see Table 5.3), and in the results of the multiple regression analyses masculinity scores were regressed on every dependent variable. From these results, it could be concluded that the masculinity model is valid. However, it must be noted that this was supported in a negative psychological index as well: masculinity has strong psychological influences on behavior patterns that may cause both positive and negative adjustments.

Secondly, it is possible to partly support a traditional model in the case of females, because femininity × sex interactions were found: females (but not males) with high femininity had lower aggression-hostility and speed-power scores. It can be supposed that there is some common trait between accepting one's sex (i.e., being female) and gender (the personality traits expected for females) and having the ability to reduce Type A behavior. Accepting one's sex and gender and having the skills to reduce Type A behavior require a determination to resist social expectations. It is difficult to

possess femininity because masculinity is valued more. It is also difficult to abolish a Type A life-style, because it is believed that a Type A person will be more highly regarded than a type B person in modern society.

Thirdly, two masculinity  $\times$  femininity interactions were found in the ANOVA, and significant increments in  $R^2$  on the speed-power sub-scale were found by adding in masculinity  $\times$  femininity in the multiple regression analysis. Femininity had minor moderating effects on the relation between masculinity and Type A behavior. Therefore, the interactive androgyny model is partly supported, at least in the study sample.

Finally, it can be supposed that there may be good reasons not to reject a moderating effect and the interactive androgyny model, even if these results have not strongly encouraged the moderating effect of femininity. Contrary to masculinity's simple factor structure, there seem to be several factors underlying femininity. According to an additional analysis carried out in conjunction with this study, at least two such factors were found. One is overt femininity (e.g., sexy, fashionable, lovely), while the other is internal and human-relational femininity (e.g., submissive, devoted, polite in speech). Only one or other of these factors may have a moderating effect. In this study, femininity was measured only at the personality-trait level. However, at another level, for example the cognitive level, femininity seems to have a moderating effect.

Furthermore, it would be advisable to study the femininity effect using other participants and situations. Possibly the participants in this study felt little stress, and so femininity may not have been apparent in its moderation of Type A behavior. According to Fiedler's contingency model of leadership, the best leadership style for a group depends on the character of the group or its performance task. There may be some situations in which a moderating effect of femininity does exist.

#### Further studies about the negative aspects of femininity/masculinity

The studies in this chapter were conducted before the CAS (Communion-Agency Scale; Dohi & Hirokawa, 2004) was developed. Therefore, femininity/masculinity was measured with a MHF scale (Masculinity-Humanity-Femininity Scale). Unfortunately, the MHF scale consists only of the items which are socially desirable. If the CAS had been used, and both positive and negative aspects had been measured, the following results and areas of discussion would probably have been found.

Firstly, as mentioned before, this study found a positive correlation be-

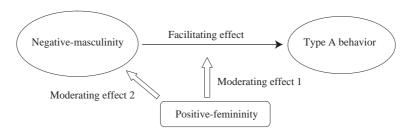


Figure 5.2 Hypothetical model of the moderating effect of femininity on the relationship between masculinity and Type A behavior

tween the positive aspects of masculinity and Type A behavior. If the negative aspects of masculinity had also been measured, a higher correlation between the negative aspects of masculinity and Type A behavior would have been found. The reason for this prediction is that the negative aspects of masculinity contain items, such as "I can't permit others' failure," or "I'm aggressive toward other people," which are common features of Type A behavior (see Figure 5.2; facilitating effect).

Secondly, if the negative aspects of masculinity had also been measured, it would have been possible to assess empirically whether these are negatively correlated with the positive aspects of femininity (see Figure 5.2; moderating effect 1). Furthermore, it would have been possible to support the view that the positive aspects of femininity could weaken the negative aspects of masculinity directly and, as a result, moderate Type A behavior (see Figure 5.2; moderating effect 2).

# Additional considerations concerning sex differences in Gender Personality

As an additional analysis, it is important to focus on the sex differences of the masculinity and femininity scale scores. As shown in Table 5.1, few sex differences for both of masculinity and femininity were found. This is consistent with the results of previous studies that were examined. It was predicted that the masculinity scores would be higher in the case of males than for females, and that the femininity scores would be higher in the case of females than for males. However, the results were different from the predictions. The following two causes of this are proposed.

Firstly, individuals may have a tendency not to apply gender stereo-

types easily to themselves. For example, in the case of females, even if they recognize that one personality trait (e.g., modesty) is expected of females, they will not always apply it to themselves (i.e., I don't want to be modest). This is a contradiction with the Gender Schema theory advanced by Bem (1981). According to the Gender Schema theory, people decide what kind of personalities they should take up in the same way as processing all other information relating to gender. The mechanism of the self is frequently studied in social psychology today. For example, the self-relevance effect, false consensus, self-defense attribution, etc. Furthermore, the self-schema is supposed to be one of social schemata. Therefore, information about the self may be processed differently from information about other people or one's environment. Probably, the self may release itself from gender stereotypes. In the model of determinants for femininity and masculinity (Dohi, 1999; see Figure 1.2), Gender Identity is supposed to perform this role.

Secondly, it is important to focus on problems about with whom people compare and evaluate themselves. According to the social comparison theory (Festinger, 1954), we select people who are like ourselves and who are members of the same group as targets for social comparison, because comparison with similar people makes evaluation more valid. Applying the social comparison theory to self-evaluation about femininity/masculinity, females will select females who are close to them as targets of comparison. They can easily observe and understand a diversity of personality in the same-sex group. Consequently, they will not have a tendency to estimate themselves as high-feminine and low-masculine people in accordance with gender stereotypes. In other words, comparison between same-sex people can prevent a kind of self-stereotyping in femininity/masculinity. In the case of males, by comparing themselves with the same-sex group, they will not have a tendency to estimate themselves as high-masculine and low-feminine people.

Moreover, these processes will be salient in a strictly gendered society, in which the distinction between males and females is always clear (see Figure 5.3(a)). This is because, in a gendered society, people have few chances to compare themselves with people of the opposite sex as they don't live in a similar domain, and therefore people have a strong tendency to compare themselves with each other within a same-sex group. Furthermore, females also compare their own masculinity within a same-sex group, and they sometimes estimate themselves to be high-feminine (Guimond et al.,

2006).

In contrast, in a moderately gendered society, in which there are many chances to compare oneself with people of the opposite sex, self-stereotyping can rather easily be made, and consciousness of one's own sex can be easily referred to in the process of self-evaluation. Females evaluate themselves as high-feminine and low-masculine, in accordance with gender stereotypes, and males evaluate themselves as high-masculine and low-feminine (see Figure 5.3(b)).

The fact that there are few studies according to the author's research that show the sex differences of masculinity and femininity would suggest that Japanese society is strictly gendered, and that there are few variables in comparison between males and females. In the case of junior and senior high school students who did not study in a co-ed school, they do not have to be conscious of their own sexes. However, once they enter into mixed-sex universities, or begin job hunting, they have to be aware of the reality

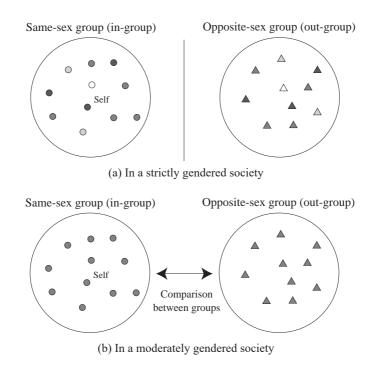


Figure 5.3 Self-stereotyping in a strictly gendered society and a moderately gendered society

of Japan's strictly gendered society, which has problems of inequality between the sexes over the possibility of employment, wage discrepancy, and chances of promotion.

In conclusion, no sex differences in femininity/masculinity may be desirable in respect of individual psychological influences, because it means negative influences caused by gender rarely happen. However, even if partly, this may be the phenomenon of a strictly gendered society, i.e. a non-desirable society.

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# **Appendix 1** Masculinity-Humanity-Femininity scale items (Translated; Humanity items are not shown)

How well does each of the following items describe your personal situation on a scale? Please answer with a number from: "5. very true" to "1. not at all."

- <Masculinity items>
- 1. Adventurous
- 3. Daring

- 2. Strong
- 4. Having qualities of leadership

5. Having belief	6. Reliable
7. Active	8. Self-assertive
9. Strong-will	10. Decisive

< Femininity items>

Polite in speech
 Mild
 Lovely
 Submissive
 Affectionate
 Devoted
 Fashionable
 Lovely
 Sensitive
 Elegant
 Sexy

#### **Appendix 2** The Type A scale items (Translated)

How well does each of the following items describe your daily life on a scale? Please answer with a number from: "2. appropriate", "1. not decided", or "0. not appropriate."

#### <Aggression-hostility items>

- 1. I gesture a lot while talking.
- 2. Someone who talks to me while working makes me irritated.
- 3. I still get angry if I remember the event which had made me angry.
- 4. I always have a lot to do. (also included in hard-driving-time urgency items)
- 5. I hate to lose.
- 6. In summer holidays I prefer to go to the beach than the mountains.
- 7. I occasionally quarrel with others.
- 8. It doesn't take much time for me to get bad tempered.
- 9. I like something exiting.
- 10. I want to hurry up someone with whom I'm talking, but he takes time to get to the point. (also include in speed-power items)
- 11. I always have one or two rivals. (also included in hard-driving-time urgency items)
- 12. I get angry if I worked well but my accomplishment wasn't validly estimated.
- 13. My temper changes quickly.
- 14. I often become serious.
- 15. I get angry with a person who orders and forces me, even if the person is older.
- 16. I'm conscious about others' accomplishments.
- 17. I'm quick-tempered.
- 18. I can't stand it if someone makes fun of me or if I am treated unfairly.

#### <Speed-power items>

- 1. I worry about what has already been done.
- I can't keep calm without always doing something. (also included in hard-driving-time urgency items)
- 3. I can't be satisfied with my own character and behavior in many ways. (reversed item)
- 4. I can cope with my work quickly.
- 5. I often act in the center of a group.
- 6. My voice volume is normal or rather weak. (reversed item)

- 7. I eat a lot.
- 8. I want to hurry up someone with whom I'm talking, but he takes time to get to the point. (also included in aggression-hostility items)
- 9. I'm quiet, if anything. (reversed item)
- 10. I eat faster than others.
- 11. I'm easygoing. (reversed item)
- 12. I talk fast, if anything.
- 13. I can often make others consent while discussing something.
- 14. I'm not good at keeping still without doing something. (also included in hard-driving-time urgency items)
- 15. I walk fast.

#### <Hard-driving-time urgency items>

- I can't keep calm without always doing something. (also included in speedpower items)
- 2. It is my friends' judgment that I am a stickler.
- 3. I want to spend an ordinary life. (reversed item)
- 4. I always have a lot to do. (also included in aggression-hostility items)
- 5. I am always relaxed after meals. (reversed item)
- 6. Sometimes I think that time for going to the toilet is wasteful.
- 7. It is difficult for me to have time to go to a hairdresser.
- 8. I think I make efforts more than others.
- 9. I sometimes state things in figures, such as not "a little more" but "5 minutes more."
- 10. I have little time to relax in a day.
- 11. I always have one or two rivals. (also included in aggression-hostility items)
- 12. I am sometimes too busy to have lunch.
- 13. I always have one or two tasks which have deadlines.
- 14. I often watch television.
- I'm not good at keeping still without doing something. (also included in speedpower items)
- 16. I often study or work until late at night.

#### <Items irrelevant to Type A characteristics>

- 1. I usually get up in a good temper.
- 2. I like animals such as dogs and cats.
- 3. I like to play sports.
- 4. I prefer dynamic music to quiet music.
- 5. I can fall asleep easily.
- 6. I often tidy up in my room.
- 7. I often read newspapers.
- 8. I can't sometimes get asleep because of worries.
- 9. I often see dreams.
- 10. I often want to live overseas.
- 11. I like winter more than summer.

# Agency and communion related to mental health in Japanese young adults

Based on Bakan's (1966) theory, Helgeson (1994) presented a conceptual model of the relationships of biological sex, agency, and communion with psychological and physical well-being. This study was designed to examine the relationships of agency (M<sup>+</sup>: masculinity), unmitigated-agency (M<sup>-</sup>: negative-masculinity), communion (F<sup>+</sup>: femininity), and unmitigatedcommunion (F-: negative-femininity) with mental health in Japanese young adults. Participants were 602 (247 males, 355 females) undergraduate students and vocational school students in Japan. The average age of the participants was 20.0 years (SD = 4.1). The results showed that communion ( $F^{+}$ ) was positively associated with social support, unmitigated-communion (F<sup>-</sup>) was strongly and positively associated with dysphoria for both males and females, and unmitigated-agency (M<sup>-</sup>) was also positively associated with dysphoria for females. Both M<sup>+</sup> and F<sup>+</sup> were positively associated, and F<sup>-</sup> was negatively associated with self-esteem for both males and females. M may moderate F<sup>-</sup>, and social support may moderate M<sup>-</sup> for females. Thus, the findings partially supported Helgeson's model.

## Agency, communion, and psychological well-being

Bakan (1966) proposed that the personality traits of agency and communion are two basic dimensions of human existence. Agency refers to concerns about self-affirmation and individualization, and it leads to a focus on self-protection and self-assertion by emphasizing separation. Communion, on the other hand, refers to a focus on cooperation, nurturance, empathy, and attachment by emphasizing the creation of unions. Bakan theorized that

both agency and communion play important roles in an individual's wellbeing.

Previous studies have shown agency to be associated with psychological well-being (Bassoff & Glass, 1982; Whitley, 1983), especially in the reduction of depressed moods and anxiety (Holahan & Spence, 1980; Roos & Cohen, 1987). Communion has been shown to be related to increased social support, which promotes healthy behavior (Budra et al., 1984; Krames et al., 1988) and satisfactory interpersonal relationships (Antill, 1983). However, some researchers have pointed out that agency and communion are negatively related to psychological well-being. For instance, a higher agency score has been correlated with a higher Type A behavior score (e.g., Batlis & Small, 1982; Dohi et al., 2001), as well as with higher levels of problematic behaviors, including aggressiveness and deficiency in affinity (Horwitz & White, 1987; Payne, 1987). Furthermore, a communion score has been found to be positively correlated with psychological stress (Frank et al., 1984). One of the reasons for such discrepancies among the results of previous studies may be that communion and agency are not independently and linearly associated with mental health. Bakan (1966) suggested that negative effects on psychological and physical well-being may occur when the agentic orientation is not mitigated by communion and when the communal orientation is not mitigated by agency.

# Helgeson's model of gender-related personality traits and psychological well-being

Based on Bakan's (1966) theory, Helgeson (1994) presented a conceptual model of the relationships of biological sex, agency, and communion to psychological and physical well-being. Her model was based on evidence from research that used measures of the gender-related traits of masculinity and femininity, including the Personal Attributes Questionnaire (PAQ; Spence & Helmreich, 1978), an extended version of the PAQ (EPAQ; Spence et al., 1979), and the Bem Sex Role Inventory (BSRI; Bem, 1974), because males are usually higher in agency, whereas females are usually higher in communion. Helgeson (1993; 1994) focused on the unmitigated aspects of agency/communion, as they were expected to be the most predictive factors for psychological well-being and physical health.

In Helgeson's (1994) model, self-control, over-involvement with others, and social support, rather than biological sex, are mediators, or moderators,

between unmitigated agency/communion and psychological well-being or depression.

Unmitigated traits mean that when the presence of one trait is extremely high, the other is precluded (Helgeson, 1994). An extreme orientation (i.e., unmitigated) would involve qualitatively different characteristics from a non-extreme orientation. For example, an extremely self-focused person loses any sense of other focus, and an extremely other-focused person loses any sense of self-focus. Both unmitigated agency (M<sup>-</sup>) and unmitigated communion (F<sup>-</sup>) are related to a lack of available support, but communion (F<sup>+</sup>) has been related to perceiving support as available from others and to providing support for others (Helgeson & Fritz, 1999; 2000). Bruch (2002) examined the relationships of agency (M<sup>+</sup>, M<sup>-</sup>) and communion (F<sup>+</sup>, F<sup>-</sup>) to predisposing factors of depression, including autonomy (i.e., exerting control over others) and sociotropy (i.e., desiring supportive relationships with others). Her study evidenced Helgeson's assumption that biological sex is not a moderator. The results also showed that agency (M<sup>+</sup>) was inversely related to scores of dysphoria, whereas unmitigated-agency (M<sup>-</sup>) was positively related to dysphoria after Bruch controlled for factors that predispose depression. Furthermore, she suggested that M<sup>+</sup> may be the most predictive factor for dysphoria, which contradicts Helgeson's hypothesis that M and F would be the most predictive factors for mental illness. In a recent study by Trudeau et al. (2003), M<sup>+</sup> was positively associated with life satisfaction and negatively associated with psychological distress in people with rheumatoid arthritis, whereas both M<sup>-</sup> and F<sup>-</sup> were positively associated with psychological distress. Moreover, in several longitudinal studies, higher levels of F have been associated with higher levels of psychological distress (Danoff-Burg et al., 2004; Fritz, 2000; Helgeson & Fritz, 1996). However, it can be suggested that the moderating effects of M<sup>+</sup> and F<sup>+</sup> for M<sup>-</sup> and F<sup>-</sup> have not been thoroughly examined.

# Agency and communion in Japanese samples

The issue of whether self-concept is more agentic or communal has here-tofore been discussed in the context of a construct being created through a lifetime of experience with social norms and expectations (Cross & Madson, 1997). Therefore, whether self-concept is more agentic or communal depends on the influence of culture (Cross & Madson, 1997; Markus & Kitayama, 1991). For example, in many Western individualistic societies, in-

cluding the U.S.A., people are more likely to be expected to be independent and to focus on their own abilities, whereas in many East Asian collective societies, including Japan, people are more likely to be expected to pursue harmony with others. In fact, Japanese individuals have been shown to have greater collective values than French individuals (Hirokawa et al., 2001). Many studies on agency and communion as related to mental health have been conducted in Western societies. In related Japanese studies, however, agency and communion have not been thoroughly examined. Recently, Dohi & Hirokawa (2004) designed a Japanese version of a scale to assess the unmitigated aspects of agency and communion (see Table 2.1 in Chapter 2). The results suggested that  $M^{\scriptscriptstyle +}$  may have a moderating effect on  $F^{\scriptscriptstyle -}$  and that  $F^{\scriptscriptstyle +}$  may have a moderating effect on  $M^{\scriptscriptstyle -}$ , even though the latter moderating effect was marginal.

The purpose of the present study was to examine the relationships of agency  $(M^+, M^-)$  and communion  $(F^+, F^-)$  to mental health in Japanese young adults. The following hypotheses were tested: (a)  $F^+$  is the most predictive factor for social support; (b)  $M^+$  and  $F^+$  are negatively related to dysphoria and positively related to self-esteem; (c)  $M^-$  and  $F^-$  are positively related to dysphoria and negatively related to self-esteem, and they are both more strongly related to mental health factors than are  $M^+$  and  $F^+$ ; (d) social support is a moderator between  $M^-$  and  $M^+$  and mental health factors, and  $M^+$  is a moderator between  $M^-$  and mental health factors, and  $M^+$  is a moderator between  $M^-$  and mental health factors.

#### Research participants

The 602 participants (247 males, 355 females) were Japanese undergraduate and vocational school students recruited as volunteers. They were recruited from basic psychology classes in several universities and schools in Japan. The participants were informed about the outline of the present study, and those who were interested filled out the questionnaires described below. It took about 20 minutes to complete the questionnaires. The completed questionnaires were collected at the end of the class. The average age of the participants was 20.0 years (range = 18-49 years of age, mean = 21.9 years (SD = 5.2) for males, and mean = 18.7 years (SD = 2.3) for females).

### The contents of the questionnaires

Firstly, the participants were asked to respond to the CAS, designed (Dohi

& Hirokawa, 2004; see Table 2.1 in Chapter 2) to measure both the positive and negative aspects of agency and communion. Its validity and reliability were examined in an earlier study. A masculinity and femininity scale in the Japanese version (Ito, 1978), which is in almost the same style as the Bem Sex Role Inventory (Bem, 1974), showed high correlation with the subscales of the CAS. The CAS consists of 24 items, which cover agency (M<sup>+</sup>) (six items,  $\alpha = .75$ ), communion (F<sup>-</sup>) (six items,  $\alpha = .70$ ), unmitigated agency (M<sup>-</sup>) (six items,  $\alpha = .72$ ), and unmitigated communion (F<sup>-</sup>) (six items,  $\alpha = .70$ ). Participants respond to each item by indicating how well it describes their personal situation on a scale from "1. not at all" to "4. very true." A higher score indicates a higher tendency for the particular trait.

Secondly, participants were asked to respond to the Center for Epidemiologic Studies Depression Scale (CES-D Scale; Radloff, 1977) to assess their dysphoria. The CES-D Scale was translated into Japanese by Shima et al. (1985). The scale consists of 20 items ( $\alpha = .85$ ) that ask the respondent to determine the frequencies of experiencing specific depressive symptoms in the past week. A higher score indicates a higher level of dysphoria.

Thirdly, self-esteem was assessed with the Japanese version of Rosenberg's (1965) self-esteem scale (Yamamoto et al., 1982). The self-esteem scale consists of ten items ( $\alpha = .80$ ), to which the participants respond by indicating how well each item describes their personal situation on a scale from "1. not at all" to "5. very true." Sample items are 'On the whole, I am satisfied with myself' and 'I feel that I have a number of good qualities.' A higher score indicates a higher level of self-esteem.

Lastly, the participants' satisfaction with their social support resources was assessed with the Social Support Questionnaire 9 (Fischer et al., 1988), which was translated into Japanese by Matsuzaki et al. (1990). Participants were asked to rate ten items ( $\alpha = .88$ ) regarding their social support resources and to indicate their satisfaction with each resource from 0 points "not at all satisfied" to 10 "very satisfied." Sample items are 'Persons in a pinch' and 'Persons who have financial support.' A higher score indicates a higher level of satisfaction with the social support resources.

#### The results of sex differences in all of the variables

Means, standard deviations, and Pearson's correlation coefficients for all of the variables are presented in Table 6.1. A multi variate analysis of variance (MANOVA) was computed contrasting sex on all of the variables, F (5, 542) = 5.74, p < .001. Univariate tests revealed that males scored sig-

Table 6.1 Mean, SD, and Pearson's correlation coefficients

	Males mean (SD)	Males mean (SD) Females mean (SD) (1)		(2)	(3)	(4)	(5)	(9)	(7)
(1) Dysphoria	17.36 (9.16)	19.23 (9.45)		53***	32***	36***	28**	.17**	.57***
(2) Self-esteem	34.31 (6.89)	32.11 (6.11)	50***		.30***	.50***	.30***	02	45***
(3) Social support	71.18 (20.11)	65.26 (20.89)	10	.15**		.31***	.38**	14*	23***
(4) Agency (M <sup>+</sup> )	16.16 (4.67)	14.99 (3.09)	34***	.59***	.07		.46**	02	39***
(5) Communion (F <sup>+</sup> )	18.76 (2.93)	18.75 (2.24)	16**	.30***	.17**	.30***		32***	17**
(6) Unmitigated-agency (M)	11.92 (3.09)	11.51 (2.94)	.27*** .02	.00	10	.18*	.18***22***		.12*
(7) Unmitigated-communion(F) 15.66 (3.57)	15.66 (3.57)	16.96 (3.13)	.46***	.46***42***	.02	50***02	02	.03	

Pearson's correlations for males are above the diagonal; correlations for females are below the diagonal. *Notes*: \* p < .05, \*\* p < .01, \*\*\* p < .001

nificantly higher in M<sup>+</sup>, F (1, 548) = 8.73, p < .01, self-esteem, F (1, 548) = 13.66, p < .001, and social support, F (1, 548) = 10.56, p < .01, than females did, whereas females scored significantly higher in F<sup>-</sup> than males did, F (1, 548) = 22.35, p < .001.

# Associations of positive and negative agency/communion with dysphoria and self-esteem

Intercorrelations showed that  $M^+$  and  $F^+$  were positively correlated, r=.46 (p<.001) for males and .30 (p<.001) for females,  $M^-$  and  $F^-$  were weakly but positively correlated, r=.12 (p<.05) for males and r=.03 (n.s.) for females,  $M^+$  and  $F^-$  were negatively correlated, r=-.39 (p<.001) for males and -.50 (p<.001) for females, and  $F^+$  and  $M^-$  were also negatively correlated for both males and females, r=-.32 (p<.001) for males and r=-.22 (p<.001) for females. The correlation coefficients among all of these four measures were less than .50. These correlations support the notion that, despite some overlap, the four gender-related traits are largely independent of one another.

Table 6.2 shows the results of the multiple regression analyses of the relationship with social support. The results showed that  $F^+$  was positively and solely associated with social support ( $\beta = .29$  for males and .13 for females).

The regression results for dysphoria and self-esteem are presented in Table 6.3 and Table 6.4, respectively. In Step 1, social support was entered to assess this factor's unique relationship with dysphoria and self-esteem.  $M^+$  and  $F^+$  were then entered in Step 2 to assess each variable's unique rela-

	Males		Females	
	Standardized-β	p	Standardized-β	p
Agency (M <sup>+</sup> )	.12	n.s.	.10	n.s.
Communion (F <sup>+</sup> )	.29	***	.13	*
Unmitigated agency (M <sup>-</sup> )	04	n.s.	09	n.s.
Unmitigated communion (F <sup>-</sup> )	13	n.s.	.09	n.s.
R-square	.18	***	.04	**

Table 6.2 Multiple regressions for social support

*Note*: \* p < .05, \*\* p < .01, \*\*\* p < .001

Table 6.3 Multiple regressions for dysphoria

		Males	SS			Females	ales	
Parameters		Standardized- $\beta$	ized- $\beta$			Standardized- $\beta$	lized-β	
	Step 1	Step 2	Step 3	Step 4	Step 1	Step 2	Step 3	Step 4
(1) Social support	32**	22**	15*	59	10	07	07	.45
(2) Agency (M <sup>+</sup> )		25***	07	.34		34**	20**	.42
(3) Communion (F <sup>+</sup> )		07	08	.29		05	.02	51
(4) Unmitigated-agency (M <sup>-</sup> )			.05	.59			.32***	.36
(5) Unmitigated-communion (F)			.49***	.49			.39***	.39
(1)*(4)				.12				25
(1)*(5)				.40				40
(2)*(4)				39				06
(2)*(5)				13				55**
(3)*(4)				39				.16
(3)*(5)				18				98.
R-square	.10***	.18***	.39***	.40***	.01	.13***	.36***	.38***
Difference of R-square	* *	* *	* *	* *	* *	* *	* *	* *

Note: \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 6.4 Multiple regressions for self-esteem

		Males	se			Females	Jes	
Parameters		Standardized- $\beta$	ized- $\beta$			Standardized- $\beta$	ized-β	
	Step 1	Step 2	Step 3	Step 4	Step 1	Step 2	Step 3	Step 4
(1) Social support	.30***	.13*	60.	07	.15**	80.	*60.	58*
(2) Agency (M <sup>+</sup> )		.42**	.29***	.16		.56***	.48***	37
(3) Communion (F <sup>+</sup> )		.12	.17*	18		.18***	.19***	*77.
(4) Unmitigated-agency (M <sup>-</sup> )			60.	17			02	11
(5) Unmitigated-communion (F)			30***	82*			14**	36
(1)*(4)				12				**09.
(1)*(5)				.30				.23
(2)*(4)				.13				.39
$(2)^*(5)$				.03				**09
(3)*(4)				.25				60
(3)*(5)				.31				57
R-square	***60.	.30***	.38***	.39***	.02**	.42***	.44**	.47***
Difference of R-square	*	* *	* *	* *	*	*	* *	*

*Note*: \* p < .05, \*\* p < .01, \*\*\* p < .001

tionship with dysphoria and self-esteem, after controlling for overlaps with social support.  $M^-$  and  $F^-$  were entered in Step 3 to assess each variable's unique relationship with dysphoria and self-esteem, after controlling for social support,  $M^+$ , and  $F^+$ .

Finally, in Step 4, the six two-way interactions of  $M^- \times$  social support,  $F^- \times$  social support,  $M^- \times M^+$ ,  $F^- \times M^+$ ,  $M^- \times F^+$ , and  $F^- \times F^+$  were entered to determine whether social support,  $M^+$ , and  $F^+$  moderate the strength of any relationship between  $M^-$  and  $F^-$ , and either dysphoria or self-esteem. In Table 6.3 and Table 6.4, the total R-square and differences of R-square for all six interactions are presented.

The results for dysphoria showed that  $M^+$  had a significant inverse association with dysphoria for both males ( $\beta = -.25$ ) and females ( $\beta = -.34$ ). However, when  $M^-$  and  $F^-$  were entered into the model for males, the association between  $M^+$  and dysphoria was reduced ( $\beta = -.07$ ). For females,  $M^-$  and  $F^-$  were positively associated with dysphoria ( $\beta = .32$  and .39 respectively), whereas  $M^+$  was inversely associated with dysphoria ( $\beta = -.20$ ).  $F^-$  showed a strong and positive association with dysphoria for both males ( $\beta = .49$ ) and females ( $\beta = .39$ ).

The results for self-esteem showed that  $M^+$  was strongly and positively associated with self-esteem for both males ( $\beta$  = .42) and females ( $\beta$  = .56).  $F^+$  was also positively and moderately associated with self-esteem ( $\beta$  = .12 for males and .18 for females).  $F^-$  showed a strongly inverse association for males ( $\beta$  = -.30) and a moderately inverse association for females ( $\beta$  = -.14).

Neither of the two-way interactions evidenced any unique relationships with dysphoria or self-esteem for males. However, the interaction of  $M^+$  and  $F^-$  showed an inverse association with dysphoria ( $\beta = -.55$ ), and a positive association with self-esteem ( $\beta = .60$ ) for females, which indicates that social support was a moderator of  $M^-$ .

When the single interaction effect of  $M^+ \times F^-$  was entered into the model for females, it was significantly associated with dysphoria (standardized  $\beta$  = -.43, p < .05, R-square = .37, p < .001) and self-esteem (standardized  $\beta$  = .50, p < .01, R-square = .45, p < .001). When the single interaction effect of social support  $\times M^-$  was entered into the model for females, it was significantly associated with self-esteem (standardized  $\beta$  = .56, p < .01, R-square = .45, p < .001). These results were the same for the six interactions entered into the model, and when the other single interaction effect was entered, there was no significant association found with either dysphoria or self-esteem.

# Toward studies for clarifying the relationships between mental health and gender

#### Sex differences and intercorrelations of the CAS

There were several sex differences found in the present study. Males scored significantly higher in  $M^+$ , self-esteem, and social support than females did, whereas females scored significantly higher in  $F^-$  than males did. Furthermore, results from the intercorrelations were almost the same as those found in previous studies (Dohi & Hirokawa, 2004; Helgeson, 1993; Saragovi et al., 1997; Spence et al., 1979). The current findings showed that  $F^+$ , defined as a tendency to desire connections with others, was positively related to social support when it was controlled for overlaps with other variables. This finding supports, in part, Helgeson's (1994) conceptual model, which indicates that  $F^+$  is associated with relationship satisfaction.

# Positive effects of $M^+$ and $F^+$ , and negative effects of $M^-$ and $F^-$

The unmitigated aspects of agency and communion are considered to be reflective of more specific negative, or socially undesirable, agentic and communal behavioral patterns. In the present study, when  $M^{\scriptscriptstyle +}$  and  $F^{\scriptscriptstyle +}$  were entered in the model,  $M^{\scriptscriptstyle +}$  showed a direct and unique association with dysphoria. However, when  $M^{\scriptscriptstyle -}$  and  $F^{\scriptscriptstyle -}$  were entered in the model,  $F^{\scriptscriptstyle -}$  also showed a strong association with dysphoria.

For females,  $M^-$  was also positively associated with dysphoria. Furthermore,  $M^+$  was strongly and positively associated with self-esteem even after  $M^-$  and  $F^-$  were controlled, and this was also more significant for females. In the present study,  $F^-$  appeared to be the most predictive factor for depressive symptoms, whereas both  $M^+$  and  $F^+$  appeared to be predictive factors for psychological well-being. These findings suggest that both  $M^+$  and  $F^+$  may play a role in positive psychological aspects, and they replicate the results of studies in which  $M^+$  and  $F^+$  each contributed to greater positive affect (Bruch, 2002). Furthermore, both  $M^-$  and  $F^-$  may play a role in negative symptoms.

# The relationships between other personality traits, $M^-$ and $F^-$

M<sup>-</sup> and F<sup>-</sup> have until this point been considered narrower constructs with clearer relations to self-relevance and relationship outcomes. In that sense, they should be more strongly related to mental health outcomes than are

 $M^+$  and  $F^+$  (Helgeson & Fritz, 2000). Regarding other personality traits that are said to be predictive of mental health, Helgeson & Fritz (2000) have argued that  $M^-$  is correlated with Type A behavior, whereas  $M^+$  is not. Liste (1999) has also suggested that  $F^-$  may overlap with Type C behavior (i.e., a cancer-prone personality characterized by repressing emotions and suppressing one's needs in favor of serving others). Helgeson & Fritz (1999) reported that  $M^-$  was distinct from  $M^+$  and  $F^+$  but not from  $F^-$ . However, in the present study  $F^-$  seems to be consistent with Helgeson's conceptual model. Lippa (2001) pointed out that unmitigated and mitigated agency and communion overlap with the Big Five dimensions (i.e., extraversion, agreeableness, conscientiousness, neuroticism, and openness). In order to verify the concepts of  $M^-$  and  $F^-$ , as well as the validity of their measurement, the relationships of unmitigated and mitigated agency/communion to other personality traits should be examined further in future research.

# The moderating effects of social support, $M^+$ and $F^+$

The moderating effects of social support, M<sup>+</sup>, and F<sup>+</sup> on associations between M-, F-, dysphoria, and self-esteem were examined in the present study. No significant moderating effect was shown for males. However, M<sup>+</sup> moderated F<sup>-</sup>, and social support moderated M<sup>-</sup>, for females. In an earlier study (Dohi & Hirokawa, 2004), such a moderating effect of M<sup>+</sup> on F<sup>-</sup> along with a marginal effect of F<sup>+</sup> on M<sup>-</sup> was also found. F<sup>+</sup> was a direct and unique factor associated with social support in the present study, and therefore its moderating effect on M may be marginal through social support. Furthermore, there are sex differences in the moderating effects. Females are twice as likely as males to experience psychological distress, depressive symptoms, and major depression according to previous studies (e.g., Angst & Merikangas, 1997; Kessler, 2003). Differences in hormones are considered to be one of the explanations for these sex differences with regard to depression, though psychological factors, including social support, assertive communication skills, and other psychological aspects also have been considered (Cyranowski et al., 2000). Aggressive people who tend to exert control over others (unmitigated agentic people) may find establishing supportive relationships to be helpful in increasing self-esteem. People who are dependent on others and repress their own needs (unmitigated communal people) may find assertive and instrumental skill training to be helpful in reducing depressive symptoms. Social support and assertive skills are more likely to be effective for females, whereas other moderating factors may be

more appropriate for males, and these should be clarified.

# *Independence of* $M^+$ , $F^+$ , $M^-$ , and $F^-$

Several researchers have pointed out problems in distinguishing trait measurements of  $M^+$  from  $F^-$  and  $F^+$  from  $M^-$  (Helgeson & Fritz, 1999; Saragovi et al., 1997). The results of the present study's intercorrelations among  $M^+$ ,  $F^+$ ,  $M^-$ , and  $F^-$  were consistent with those of previous studies (Dohi & Hirokawa, 2004; Helgeson, 1993; Spence et al., 1979; Saragovi et al., 1997). Conceptually speaking,  $M^-$  is a lack of  $F^+$ , and therefore these two variables are inversely correlated. The same relationship exists for  $F^-$  and  $M^+$ . However, strong intercorrelations may deny the independency of the four constructs, and thus measurement errors may lead to some biased outcomes. In the present study, no intercorrelation was higher than .50, and therefore it may be concluded that the four gender-related traits measured by the CAS were independent from one another. However, possible factor overlaps should be considered to clarify the specific attributions of  $M^-$  and  $F^-$  to the outcomes.

#### Limitations of the present study

There are several limitations of the present study. The current sample was comprised primarily of undergraduate students. As these individuals are largely dependent on their families for social and financial support and have yet to begin their careers, it is possible that unmitigated agency and communion have not fully developed (Helgeson & Fritz, 2000). When individuals become independent from their families, they have to learn how to gain rewards and make relationships with others by themselves, and only then might their unmitigated agency and communion become fully developed. Due to the fact that the present study was cross-sectional, it is impossible to clarify whether there were any cause-effect relationships among M<sup>+</sup>, F<sup>+</sup>, M, F, and mental health. Future researchers should conduct a longitudinal study in order to clarify whether M<sup>+</sup>, F<sup>+</sup>, M<sup>-</sup>, and F<sup>-</sup> are risk or protective factors for depression. In the present study, the CAS was used to assess the participants' agency and communion levels. It consists of sentence-type items and is a different measurement than that used in Helgeson's studies. However, there were no other measurements available that allowed for an assessment of unmitigated agency and communion in Japan, and, as the CAS had already been validated, it was chosen for the present study. Other

possible measurements related to mental health, such as those related to life events, depressive vulnerabilities, and other socio-demographic variables, should be considered for use in future studies.

#### Need of further consideration of cultural influences

In conclusion, the present study demonstrated that F¯ can be focused on as a factor associated with the mental health of Japanese young adults. It is also noteworthy that the present study is the first Japanese study to examine Helgeson's (1994) conceptual model and partially support it. The nature of self-concept, as more agentic or communal, continues to be considered influenced by culture. In the present study, both male and female participants scored higher in communion than in agency, which suggests that this trait is of greater value in a collective culture such as Japan. Cultural influences, therefore, should be considered in greater depth in future studies.

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# The effects of femininity/masculinity on interpersonal adjustment and stress during a first encounter

The following two studies examined the effects of femininity/masculinity on interpersonal adjustment and stress. These two studies were carried out in the same experimental situation, in detail, during a first encounter with a partner of the opposite sex. First, Study I was conducted to compare the effects of sex, self gender type, and partner's gender type on interpersonal adjustment during a five-minute first encounter of androgynous and stereotypically sex-typed couples. Next, Study II was conducted to determine how gender type differences (i.e., androgynous vs. stereotypically sex-typed) impact on interpersonal stress. In this study, interpersonal stress means the anxiety or uneasiness that occurs during a first meeting. To assess this interpersonal stress, people's blink rate was adopted as a psycho-physiological index. The hypothesis was that androgynous individuals may have better interpersonal adjustment and comparatively little stress.

# Study I: Interpersonal adjustment during a first encounter

# Biological and social factors of sex differences

Sex-role and gender studies have been popular since the 1970s, when they largely replaced studies of sex differences. Gender studies suggest that sex differences may arise not only from biological but also from social factors. On the other hand, it is presumed that femininity/masculinity may not be on just one bipolar continuum (see Figure 7.1), but may be two independent concepts (see Figure 7.2). Thus, an individual could at once be considered both masculine and feminine.



Figure 7.1 One bipolar continuum model of femininity/masculinity

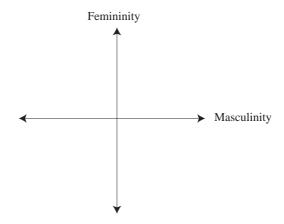


Figure 7.2 Independent model of femininity/masculinity

Examining only an individual's adjustment even in an interpersonal situation

Many studies of gender self-concept have focused on the psychological effects that stem from femininity/masculinity or androgyny. For instance, in some studies, participants have been categorized into four gender types, "masculine," "feminine," "androgynous," and "undifferentiated," according to the scores they obtained for femininity and masculinity or androgyny scales. Others have examined femininity and masculinity as independent variables, or they have used just one of these personality traits to examine correlations with other variables. The main purpose of such studies has been to examine the relationships between femininity/masculinity and external factors such as performance in experimental tasks, personality variables like self-esteem, psychological health, and social adjustment (Marsh & Byrne, 1991; Taylor & Hall, 1982). Most of these studies have focused on the individual, and few have examined the interpersonal adaptation of two or more persons. In cases where the interpersonal situation was examined, femininity/masculinity was measured separately in each of the individuals compris-

ing the couple, and subsequent discussion usually focused on individual adjustment.

# Interactive effects between self gender and partner's gender on interpersonal adjustment

To communicate with a stranger, it is presumably necessary to be able to carry out an instrumental function, such as initiating discussion of an appropriate topic, as well as an expressive function, such as agreeing with the partner, thereby reducing the partner's unease. The former functional trait is commonly associated with masculinity and the latter with femininity. In other words, masculine traits and feminine traits may be two important factors in an interpersonal situation. Many studies have suggested that androgyny is associated with better interpersonal adjustment in comparison to either masculine or feminine traits (Campbell et al., 1981; Jones et al., 1990; Kelly et al., 1981; Wiggins & Holzmuller, 1981). Some studies, however, have demonstrated that stereotypically sex-typed traits may be more suitable in early adolescence (e.g., Lamke, 1982), or that masculine traits may be more desirable in some modern societies (e.g., Marsh et al., 1987; Whitley, 1983). Dohi (1995) examined sex-role orientation/participation and its influence on the loving/liking of a partner. The results suggested a modest influence. In detail, it was clarified that in both the cases of males and females, regardless of their own gender type, males played stereotypically masculine roles, such as driving, carrying heavy baggage, and proposing marriage. In contrast, females played stereotypically feminine roles, such as cooking lunch, communicating with their partner, and cleaning their partner's room. In other words, strict gender role divisions in dating participation between romantically attracted partners were found. Therefore, it may be taken for granted that even if a person is not androgynous, i.e. being stereotypically gender typed, his/her partner should compensate the deficit personality. This idea may be salient in Japanese couples or male-female role divisions. Dohi therefore recommended that both the individual's and the partner's gender types be examined in studies of interpersonal relationships, and suggested that, in studies of intimate relationships especially, it may be necessary to extend the self-concept of individual masculinityfemininity to examine the effect gender has on a couple's relationship. In summary, Dohi's suggestion was that the interaction between self-gender and partner's gender may have an effect on interpersonal adjustment.

# Relationships between the femininity/masculinity of an individual and interpersonal adjustment

The relationships between the femininity/masculinity of an individual and interpersonal adjustment are not wholly clear. It may be proposed that the effects of the femininity/masculinity of a couple may differ from those of an individual. As Bem (1975) hypothesized, androgyny may increase the capacity for flexibility in interpersonal situations, although this would need to be demonstrated in interpersonal behaviors with various kinds of partner. Experimental studies on the effect of psychological androgyny have previously discussed it in terms of individuals. It has not been investigated within a couple relationship.

# Communication between a male and a female as an index of interpersonal adjustment

To analyze interpersonal adjustment within a couple, communication between a male and a female during their first encounter was investigated. Watzlawich et al. (1967) discussed five hypothetical principles of communication, one of which concerned complementarity and symmetry: every interactive communication was either complementary or symmetrical, with the former based on difference and the latter on equality. While the symmetric relationship has risks of competition and conflict, it also has merits, such as mutual respect and positive confirmation. Complementarity is reinforced when there are bigger differences within a couple, and de-individualization and/or power imbalances emerge in these relationships. Nevertheless, effective interpersonal communication between a couple requires both symmetry and complementarity.

# Hypothesized symmetric and complementary relations in mixed-sex couples associated with gender types

In the present study, these hypotheses of symmetric and complementary communication are adapted to a relationship between a male and a female of different gender types. For example, both a male and a female who have the masculinity trait would be expected to have a symmetric relationship (masculinity-masculinity). A couple who have both masculinity and femininity traits would be able to have a complementary relationship (masculinity-femininity or femininity-masculinity). As outlined in Table

7.1, there can only be a complementary relationship between a "masculine" male and a "feminine" female (the stereotypically sex-typed couple). For the relationship between an "androgynous" couple, it is possible to have a symmetric relationship and also a complementary relationship, depending on their masculinity and femininity traits. In other cases, such as a "masculine" male and an "androgynous" female, or an "androgynous" male and a "feminine" female, it is hypothesized that the symmetrical relationship may be increased, unlike with a stereotypically sex-typed couple, although these couples may have less symmetric and less complementary relationships than an exclusively "androgynous" couple. The present study investigated the hypothesized relationships as mediators of communication: a couple featuring androgynous traits would be expected to communicate better, and therefore to have better interpersonal adjustment.

#### Contrasting four different couple types in previous studies

In a previous study, Ickes & Barnes (1978) suggested that a couple in which one or both members were androgynous was adaptable. In their study, they tested 507 undergraduate university students on the Bem Sex Role Inventory (BSRI; Bem, 1974). Then, according to masculinity and femininity scores, 43 male and 43 female students were categorized as stereotypically sex-typed or androgynous. The design contrasted four different couples: 1) a "masculine" male and a "feminine" female, 2) a "masculine" male and an "androgynous" female, 3) an androgynous male and a feminine female, 4) both "androgynous." They video- and audio-recorded an interpersonal situation for five minutes, and measured the participants' body posture, gaze, expressive gestures, conversation, personal space, and duration of silence before starting a conversation. After five minutes, they assessed the participants' feelings, performance, and attraction toward their partner using a questionnaire. The results showed that the couples comprised of "masculine" males and "feminine" females produced the least gaze, gestures, and perceived attractiveness. Lamke & Bell (1982) also compared encounters among pairs of "androgynous", feminine, and "undifferentiated" females at an initial encounter, and the results indicated that the greatest interpersonal adaptation (talking, gazing, and gesturing) was seen between "androgynous" females.

#### Comparing interpersonal adaptation in the present study

Similar to the studies by Ickes & Barnes (1977; 1978), this study compared interpersonal adaptation among couples consisting of different combinations of androgynous and stereotypically sex-typed individuals. In an unstructured situation with strangers, there is little context for interaction between the participants, so that the influence of their internal sex-role identity and ideology on their conversation is unimpeded (Ickes & Barnes, 1978). Furthermore, if the couples are together only briefly, they will not have an opportunity to interact with anyone else. In the present study, communication between a male and a female, androgynous and stereotypically sex-typed, during a first encounter was investigated, and the effects of sex, self gender type, and partner's gender type on interpersonal adjustment were examined.

#### The hypotheses of the present study

Two hypotheses were tested. Firstly, an androgynous individual will show more interpersonal adjustment than a sex-typed individual, according to whether he/she has both masculine and feminine traits. Secondly, as outlined in Table 7.1, since androgynous (AA) couples are supposed to have both complementary and symmetric relationships, the couple will show better interpersonal adjustment than any other sex-typed couple. In contrast, a stereotypically masculine-feminine (MF) couple, which consists of both a sex-typed male and a sex-typed female, is supposed to have only a complementary relationship, and so may have the poorest interpersonal adjustment.

## Research participants and pre-testing

Ito's (1978) MHF scale was administered to 262 male and 255 female university students attending psychology classes in the Department of Commercial Science, Sociology, and Arts at K University. The MHF scale consists of 10 masculinity and 10 femininity items, rated from "1. never true," to "5. always true." From the scores obtained, participants were divided into four categories, "androgynous," "masculine," "feminine," and "undifferentiated," based on a masculinity median score (males 31.5, females 30.0) and a femininity median score (both 29.0). Specifically, "androgynous" was defined as such that both masculinity and femininity were above the respective median scores, "masculine" such that only the masculine score was above the median, "feminine" such that only the feminine score was

Table 7.1 Hypothesized symmetric and complementary relations in mixed-sex couples associated with gender types

Sex	Males	Males Females	Males	Females	Males	Males Females	Males Females	Females
Self gender type Androgynous Androgynous Feminine	Androgynous	Androgynous	Androgynous	Feminine	Masculine	Masculine Androgynous Masculine Feminine	Masculine	Feminine
Couple type	AA	A	AF		\ \text{\tint{\text{\tint{\text{\tin}\text{\text{\text{\text{\text{\text{\text{\text{\text{\ti}\text{\text{\text{\text{\text{\text{\text{\text{\tin}\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tin}\tint{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\ti}\}\tin}\tint{\text{\tin}\text{\text{\text{\text{\text{\text{\tex{\tex	MA	MF	
Symmetric	Masculinity-Masculinity Femininity-Femininity	Masculinity Femininity	Femininity-Femininity	emininity	Masculinity	Masculinity-Masculinity		
Common Company	Masculinity-Femininity	-Femininity	Masculinity-Femininity	emininity	Masculinity	Masculinity-Femininity	Masculinity-Femininity	emininity
Complementary	Femininity-Masculinity	Masculinity						

	Androgynous	Masculine	Feminine	Undifferentiated	Total
Males	79	52	57	74	262
Females	74	67	57	57	255

Table 7.2 Number of students categorized into four gender types

above the median, and "undifferentiated" such that both scores were below the median (see Table 7.2). The candidates were contacted by telephone and arrangements regarding participation in the experiment were made. Finally, 14 "androgynous" and 12 "masculine" males, and 13 "androgynous" and 13 "feminine" females were selected. The 52 participants (mean age 20 years) were assigned to one of four mixed-sex couple types: MF, "masculine" male and "feminine" female; MA, "masculine" male and "androgynous" female; AF, "androgynous" male and "feminine" female; AA, "androgynous" male and female. Masculine male and feminine female were defined as stereotypically "sex-typed."

#### Questionnaires

Before their encounter, the participants were instructed to fill out the 20-item Japanese State-Trait Anxiety Inventory (STAI; Kishimoto & Terasaki, 1986), and the 6-item Japanese Iceberg Profile (IP; Oka et al., 1994). The STAI was used to detect changes in anxiety (on a scale from "1. I do not feel at all anxious," to "4. I feel extremely anxious"), and the IP to detect changes in uneasiness (on a Likert-type scale from 0. low to 6. high) from pre- to post-encounter (note that on both scales, higher scores indicate increased anxiety/uneasiness). After their encounter, the participants again completed the STAI, and the IP.

### Experiment

Participants comprising of each combination of masculinity-femininity types were telephoned by the investigator and told when and where to meet. Times were always scheduled so that the pairs did not see each other before the encounter. Each participant was led separately into a waiting room, in the same building as the experimental room. In the waiting room, sitting back to back, participants were asked to complete the questionnaires. The investigator then re-entered the waiting room and led the participants into

the experimental room. In the center of this room were a table ( $120 \times 180 \times 70$  cm) and two chairs. Shelves in the room were covered with black cloth and two video cameras were located behind the cloth. Each video camera was focused on one of the pair's face and upper body. While participants were filling out the questionnaires, the investigator switched on the video cameras. When the participants were seated face to face, the investigator explained that the purpose of the study was to assess each person's impression of her/his partner during a five-minute encounter. The investigator announced that she would return after five minutes. At the end of the five minutes, the investigator let the participants back to the waiting room, where they were again asked to fill out questionnaires. Once these were completed, the investigator revealed the true purpose of the study and asked permission to analyze the participants' videotapes. All participants consented, and promised they would not reveal the nature of the study to other participants. The total duration of each session was about 25 minutes.

#### Video assessment

The judges were two females and two males (25-40 years old), all unaware

**Table 7.3** The video assessment inventory

Item no.	Behavior rated
1	He/she started a conversation.
2	He/she was nervous. (reversed item)
3	He/she was interested in his/her partner.
4	He/she led the conversation.
5	He/she seemed to be enjoying the interaction.
6	He/she gave his/her own opinion.
7	He/she nodded.
8	He/she seemed attractive.
9	The conversation was interesting.
10	There was abundant conversation.
11	The couple's personal space seemed to be close.
12	The couple gazed at each other.
	·

of the participants' gender type. While watching each participant, they were instructed to rate the 12 items of the video assessment inventory (see Table 7.3) to assess attractiveness, interest, self-assertiveness, and interpersonal adjustment on a 5-point scale ranging from "1. not at all" to "5. extremely." The inventory was devised specifically for the present study, although the selection of items was based on research by Ickes & Barns (1978). This inventory consisted of two parts: items 1-8 were concerned with the individuals themselves, while items 9-12 concerned their interactions. Each participant was videotaped individually, and the order of the participant's presentation on the videotapes was randomized. Even though participants were observed individually on videotape by judges, the judges were instructed to assess how each participant contributed to the conversation they were engaged in. Although the participant's partner could not be seen, the judges could hear any verbal responses.

#### The number of participants analyzed

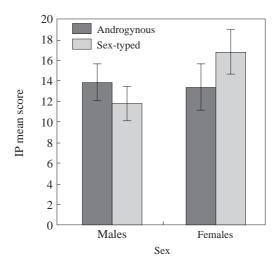
It became evident, before the encounter or from the recorded conversation, that in three instances the couple knew each other previously, and their data was therefore excluded from the analysis. This left 46 of the original 52 participants selected (23 males and 23 females). Participants were paired as follows: AA, seven "androgynous" males and seven "androgynous" females; AF, five "androgynous" males and five "feminine" females; MA, four "masculine" males and four "androgynous" females; MF, seven "masculine" males and seven "feminine" females. There were thus 23 "androgynous" and 23 stereotypically "sex-typed" individuals (11 masculine and 12 feminine individuals).

### Anxiety and unease

Scores on the STAI and IP before and after the encounter are shown in Table 7.4. Firstly, the results of pre-encounter period were the following: A two-factor, sex (females/males) by self gender type (stereotypically sex typed/androgynous), analysis of variance (ANOVA) was performed on the STAI and IP ratings pre-encounter. Before the encounter, the partner's gender type could not have had an effect on the participant's anxiety and unease, so the data was analyzed by two factors (sex, self gender type). The main effects of sex and self gender type on the STAI were not significant, and there was no significant interaction. On the IP, there was a significant

Table 7.4 Mean and SD of STAI and IP scores

	Sex	X	Self gender type	ler type	Partner's gender type	ender type
	Males	Females	Androgynous	Sex-typed	Androgynous	Sex-typed
STAI						
Pre-encounter 4	43.62 (8.30)	41.04 (6.13)	42.67 (6.66)	41.96 (8.14)	42.85 (7.32)	41.76 (7.48)
Post-encounter 3	37.58 (5.95)	39.31 (8.14)	38.48 (7.64)	38.40 (6.65)	37.11 (6.38)	39.88 (7.70)
Pre-post difference	2.70 (3.87)	2.96 (3.82)	2.93 (3.76)	2.72 (3.94)	5.74 (7.69)	1.88 (6.56)
IP						
Pre-encounter 1	12.88 (3.51) 14.78 (4.65)	14.78 (4.65)	13.49 (4.05)	14.20 (4.39)	14.03 (4.70) 13.61 (3.65)	13.61 (3.65)
Post-encounter 1	10.18 (4.37)	10.18 (4.37) 11.83 (4.61)	10.55 (4.76)	11.48 (4.30)	9.98 (4.27)	9.98 (4.27) 12.11 (4.61)
Pre-post difference	2.70 (3.87)	2.96 (3.82)	2.93 (3.76)	2.72 (3.94)	4.06 (3.91)	4.06 (3.91) 1.51 (3.28)



**Figure 7.3** The interaction between sex and self gender type and IP (uneasiness) scores pre-encounter

interaction between sex and self gender type, F(1, 48) = 6.48, p < .05 (see Figure 7.3). According to Duncan's multiple comparison test, there were significant differences between "sex-typed" males and "sex-typed" females (p < .01) and between "androgynous" females and "sex-typed" females (p < 0.5). That is, "sex-typed" males (mean score = 11.73) and "androgynous" females (13.07) felt more at ease than "sex-typed" females (16.49). There were no differences between "androgynous" males (13.87) and females.

Secondly, the results of post-encounter period were the following: A three-factor, sex by self gender type by partner's gender type (stereotypically sex-typed/androgynous), analysis of variance (ANOVA) was performed on the scores for anxiety and unease after the encounter. For the IP scores, there were tendencies toward significance for the main effect of the partner's gender type, F(1, 44) = 3.04, p < .10, and for the interaction between sex and the partner's gender type, F(1, 44) = 3.43, p < .10 (see Figure 7.4). That is, after the participants had a conversation with an "androgynous" partner (mean score = 9.98), they felt more relaxed than those who had a conversation with a "sex-typed" partner (12.11). While there was no difference between male participants ("androgynous" partner, mean = 10.28; "sex-typed" partner, mean = 10.07), female participants who had a conversation with an "androgynous" partner (mean = 9.69) felt more relaxed than

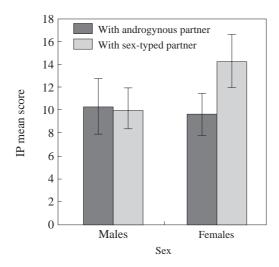


Figure 7.4 The interaction between sex and partner's gender type and IP (uneasiness) scores post-encounter

female participants who had a conversation with stereotypically "sex-typed" partner (mean = 14.32). Females may be affected by a partner more easily than males. There were no significant effects on the STAI.

Thirdly, differences between pre-and post-encounter ratings were the following: On the whole, both STAI and IP scores were higher before rather than after the encounters, reflecting a general decrease in anxiety and uneasiness. When these differences were analyzed in a  $2 \times 2 \times 2$  ANOVA, the main effect of the partner's gender type on IP score was significant, F(1, 44) = 6.31, p < .05, and STAI scores also showed a tendency toward significance, F(1, 44) = 3.61, p < .10. That is, participants who had a conversation with an "androgynous" partner (STAI mean difference = 5.74, IP mean difference = 4.06) reduced their states of anxiety and unease more than those who had a conversation with a "sex-typed" partner (STAI mean difference = 1.88, IP mean difference = 1.51).

### Selection of 11 items to examine interpersonal adjustment

To assess interpersonal adjustment, and therefore to select items of the index, the correlations between the ratings of the four judges (six pairings) on each item of the video assessment inventory were calculated. Significant intercorrelations between the four judges were attained for all items except item 1, "He/she started a conversation" (r=.23). It was therefore assumed that the ratings of this item were invalid, and so only ratings of items 2-12 (r=.49) were analyzed further. Factor analysis of these 11 items was performed, which showed that they all loaded on one factor, which is termed interpersonal adjustment. A  $2 \times 2 \times 2$  (sex, self gender type, partner's gender type) ANOVA was carried out on the sum of the 11 items to examine interpersonal adjustment. The main effect of self gender type showed a tendency toward significance, F(1, 41) = 3.27, p < .10. "Androgynous" participants (mean = 38.99) had higher rates of interpersonal adjustment than stereotypically "sex-typed" participants (mean = 35.12).

### The effect of sex, self gender type, and the partner's gender type

To examine the effect of sex, self gender type, and the partner's gender type on each item, a  $2 \times 2 \times 2$  ANOVA was again carried out. The main effects of sex on item 2, "He/she was nervous," F(1, 41) = 3.27, p < .10, and on item 8, "He/she seemed attractive," F(1, 41) = 3.81, p < .10, showed a tendency toward significance. That is, females seemed to be less nervous than males, and females were rated as more attractive. As the results in Table 7.5 indicate, the main effects of self gender type on item 2, F(1, 41) = 6.90, p <.05, and on item 11, "this couple's personal space seemed to be close," F (1, 41) = 6.16, p < .05, were significant. The main effect of self gender type on item 10, "There was abundant conversation," showed a tendency towards significance, F(1, 41) = 3.22, p < .10. In summary, "androgynous" participants seemed to be less nervous, seemed to be closer, and they seemed to have more abundant conversation than "sex-typed" participants. There was no significant main effect from the partner's gender type. There were no interactions, except for a tendency toward significance for results between sex and self gender type on item 4, "He/she led the conversation," F (1, 41) = 3.32, p < .10) (see Figure 7.5).

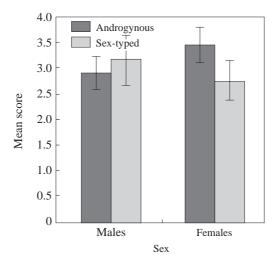
### The importance of the individual's self gender types

The present study examined interpersonal adjustment, based on the studies of Ickes & Barnes (1977; 1978), in order to compare the effects of sex, self gender type, and the partner's gender type on interpersonal adjustment within a brief first encounter. The hypothesis that "androgynous" individuals would have better interpersonal relationships was supported by two

Table 7.5 Mean and SD of video assessment scores by sex, self gender type, and the partner's gender type

- Itom	Sex	X	Self gender type	ler type	Partner's gender type	nder type
IICIII	Males	Females	Androgynous	Sex-typed	Androgynous	Sex-typed
2. Not nervous	2.95 (.59)	3.25 (.59)*	3.30 (.63)	2.87 (.48)*	3.18 (.58)	3.01 (.62)
3. Interested in partner	3.23 (.66)	3.36 (.70)	3.45 (.62)	3.12 (.70)	3.40 (.67)	3.20 (.68)
4. Led a conversation	3.01 (.81)	3.08 (.78)	3.14 (.71)	2.93 (.87)	2.97 (.62)	3.12 (.92)
5. Enjoying the interaction	3.20 (.89)	3.46 (1.06)	3.52 (.90)	3.11 (1.03)	3.40 (.94)	3.26 (1.03)
6. Giving own opinion	3.56 (.65)	3.56 (.68)	3.71 (.60)	3.40 (.69)	3.60 (.67)	3.52 (.66)
7. Nodding	3.68 (.57)	3.95 (.049)	3.85 (.55)	3.77 (.55)	3.81 (.50)	3.81 (.60)
8. Attractive	3.08 (.60)	3.41 (.57)*	3.31 (.65)	3.16 (.54)	3.24 (.62)	3.25 (.60)
9. Interesting conversation	3.28 (.96)	3.50 (1.05)	3.61 (.97)	3.14 (1.01)	3.52 (1.00)	3.26 (1.01)
10. Abundant conversation	3.30 (.94)	3.42 (.97)	3.61 (1.02)	3.07 (.80)	3.55 (1.02)	3.17 (.86)
11. Close personal space	3.14 (.92)	3.47 (.97)	3.61 (.81)	2.96 (1.00)*	3.42 (.93)	3.19 (.98)
12. Gazing	3.66 (.74)	3.84 (.81)	3.89 (.79)	3.59 (.72)	3.83 (.80)	3.67 (.74)

*Jote*: \* p < .05



**Figure 7.5** The interaction between sex and self gender type and ratings of "He/she led the conversation"

Note: Item 4 of the video assessment inventory

findings in particular. Firstly, "androgynous" individuals were less nervous, had more abundant conversation, and had a closer personal space than stereotypically "sex-typed" individuals. Secondly, "androgynous" individuals reduced their partner's uneasiness more than did stereotypically "sex-typed" individuals.

Since psychological androgyny involves an individual integrating or combining masculinity and femininity into his/her self-identity, the concept of a self-contained individuality, as proposed by Sampson (1977), may be relevant here. It has been argued in earlier studies that androgyny appears to be desirable. The present study supports the importance of androgyny, specifically in interpersonal encounters, although this may also depend on the partner's personality. Although it was presumed that interpersonal adjustment would be influenced by not only self gender type but also by the partner's gender type, the latter had only a small effect. That is, the most important factor influencing interactive communication seems to be the individual's self gender type.

#### Methodological limitations to the present study

There are some methodological limitations to the present study. Firstly, the couples did not appear on videotape together because the video-camera did not have a wide-angle lens. The four judges may therefore have focused only on an individual's gender type, and so the effect of the partner's gender type may not have been reflected in their assessments. Agreements between the four judges were computed, but high correlations were not obtained. Secondly, a sequential analysis of a couple's conversation would have elucidated the nature of the couple's symmetric or complementary relationship. Thirdly, a couple-level analysis might have been more suitable to clarify the effects of femininity/masculinity on the interpersonal encounter than an individual-level analysis. Finally, a study of undifferentiated and sex-gender incongruent participants would help to show exactly how femininity and masculinity affect an interpersonal encounter.

# Further examination of the effect of femininity and masculinity on a long-term relationship

The present study examined a brief first encounter between strangers. According to Murstein (1976), when an interpersonal relationship becomes long term, it may pass through three stages: stimulus, value, and role. That is, after a couple have met (stimulus), they may share the same values (a symmetric relationship), and recognize their different roles (a complementary relationship). The present study was limited to the initial encounter, therefore, the symmetric masculinity-femininity relationship was perhaps bound to appear. If long-term relationships were examined, such as a married couple, it may be found that the importance of the androgynous gender type is lower for complementary relationships. The effect of masculinityfemininity in interpersonal encounters on a long-term relationship needs to be examined. Many couple studies have been conducted, but the results have been equivocal. For example, Kalin & Lloyd (1985) argued that the self gender types of couples varied and could not be defined as either symmetric or complementary. According to Orlofsky (1982), while engaged masculine males preferred a feminine female, females chose an androgynous male, no matter which self gender type they belonged to. In the Green & Kenrick study (1994), among the three steps in a couples' relationship from first date to marriage, males and females, particularly females, preferred an androgynous partner.

#### Complementarity or symmetry in collectivist or individualist cultures

It is necessary to bear in mind that the results of the present study were influenced by Japanese culture. Studies of androgyny assume a self-contained individuality. Since Japanese culture is not particularly individualistic, at the couple level whether individuals have either femininity or masculinity, or both, may not be so important. In Japanese society, it is said that individuals depend strongly on each other, set good interpersonal relationships as a goal, and rely on being a member of a certain group for their identity. In such collectivist cultures, the preferred interpersonal relationship may be complementary rather than symmetric, compared with an individualistic (e.g., Western) society. Since complementary relationships are supposed to be more sought in collectivistic societies, it may not be important what kind of personality each individual has, as it is assumed that individuals will be able to adapt to different interpersonal roles as, for example, leaders or followers. On the contrary, in individualistic societies, having personality traits in common may facilitate conversation between a couple. Whether individuals have both masculine and feminine traits or androgynous traits may therefore be a definitive factor in interpersonal adjustment. It is presumably desirable for both partners in a couple to be androgynous in order to have both masculine and feminine relationships in a symmetric society. On the other hand, in a complementary society, an individual may not need to be androgynous.

# The need for androgynous traits in Japan as an individual-oriented society

Individualization has recently begun to penetrate Japanese society. For example, the numbers in a Japanese family are becoming smaller and smaller, and the nuclear family is becoming the main family style in the same way as the Western family. Japanese families do not live as three generations together anymore. Nevertheless, Japanese people stick to a collectivistic society, and do not want to change themselves into independent individuals. Ida (1995) has argued that at all levels—the family, the market, and the nation—Japanese society is very much oriented toward married couples, and so may not be able flexibly to adopt family multiformations, which would be required in a shift toward an individual-oriented society. Ida defined such a marriage-oriented society as a "couple-unit" society, which will be discussed as "family-unit" society next in Part III. Androgynous traits appear to facilitate good interpersonal relationships with any type of partner, and

may therefore help a person function successfully not only as a member of a family but also as an individual.

#### Study II: Interpersonal stress during first encounter

#### Blink rate as a psycho-physiological index

According to Tada et al. (1991), there are three types of blinks: voluntary, reflexive, and spontaneous. Spontaneous blinks are neither voluntary nor reflexive because no external reflexive stimulus can be specified. They are assumed to be associated with psychological states. For example, Tecce (1989) suggested a two-process model to explain the relationship between the spontaneous blink rate and psychological functions. The frequency of the blink rate increased in a situation involving an unpleasant state and internal attention, whereas it decreased in a situation involving a pleasant state and external attention. Tada (1986) discussed the association between one's blink rate and interest and curiosity: the blink rate decreased with high interest and curiosity, whereas it increased in low interest situations.

#### Preceding studies using blink rate in a conversation situation

Several preceding studies (Ickes & Barnes, 1977; 1978; Ickes et al., 1979; Lamke & Bell, 1982) assessed behavioral conversation and satisfaction by using self-reports. However, they did not consider the participants' physiological state.

Measuring the blink rate would be adequate to assess someone's mental state during a conversation situation, since it is possible to measure the blink rate by observation of a video without resorting to the use of an electrode. Especially in social situations such as a group discussion and a conversation among more than two persons, as in this experiment, the blink rate allows an experimenter to analyze one aspect of a person's mental state by counting blinks utilizing the video record. Hirokawa et al. (2000a) also assessed the blink rate during conversation situations, and suggested that the blink rate could be an index of one's physiological state. Regarding the relationship between stress and the blink rate, it may be expected that when an individual feels anxiety or tension, his/her blink rate will increase. Conversely, when an individual is involved in a conversation or attracted to his/her partner, it will decrease. Since an "androgynous" type was supposed to affect interpersonal stress, this study hypothesized that participants who

have a conversation with an "androgynous" partner should feel lower interpersonal stress, and thus their blink rate should be lower than that of those with a stereotypically "sex-typed" partner.

#### **Participants**

In the same way as for Study I, the experiment compared four different pair types about blink rate, which was observed in video camera, based on Ickes & Barnes (1978): MF, "masculine" male and "feminine" female; MA, "masculine" male and "androgynous" female; AF, "androgynous" male and "feminine" female; AA, "androgynous" male and female. Masculine males and feminine females were defined as stereotypically "sex-typed". Since some video data was impossible to analyze because the cameras were out of focus, the number of participants available to have their blink rate assessed is sometimes different, as indicated by the parentheses in Table 7.6.

The procedure of this experiment was the same for as the experiment in Study I.

#### Blink rate

The blink rate of each participant was counted at one-minute intervals (blink/min) by observing the video. A repeated-measures analysis of variance (ANOVA) showed no significant effect for either sex or for the time interval. In order to examine the effects of self gender type and partner's gender type, a  $2 \times 2$  repeated-measures ANOVA was performed. The result showed that a self gender type by time interval interaction was significant (F (4, 156) = 2.47, P < .05) (see Figure 7.6). According to Duncan's multiple comparison test, there were several significant differences. Comparing "androgynous" participants to "sex-typed" participants, "androgynous" participants had significantly higher blink rates than did "sex-typed" participants

Androgynous Stereotypically sex-typed

Males 14 (14) 12 (8)

Females

**Table 7.6** The number of participants in the experiment

*Note*: The number of participants available to have their blink-rate assessed is shown in parentheses.

13 (11)

13 (11)

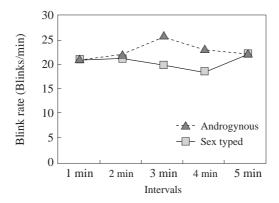


Figure 7.6 Blink rates at one-minute intervals in self gender types

at the third and fourth minute intervals (blink rate at 3 min: "androgynous" = 25.6 blinks/min, "sex-typed" = 19.8 blinks/min; at 4 min: "androgynous" = 23.2 blinks/min, "sex-typed" = 19.0 blinks/min) (p < .01). Regarding "androgynous" participants, there was a significant difference between the first and third minute intervals ("androgynous": 1 min = 21.1 blinks/min., 3 min = 25.6 blinks/min) (p < .05).

### Androgynous individuals' feeling of interpersonal stress

The present findings from blink rates suggested that "androgynous" individuals might feel more interpersonal stress than "sex-typed" individuals during a five-minute conversation (see Figure 7.6). The study by Hirokawa et al. (2000b) in Study I suggested that "androgynous" individuals might have better interpersonal adjustment than "sex-typed" individuals on assessing the videotapes, i.e., not being nervous, being interested in their partner, leading a conversation, and enjoying the interaction. Since "androgynous" individuals seemed to be able to perform better than "sex-typed" individuals, they might feel more stress to make abundant conversation and to lead the conversation at the third interval during a five-minute interaction. On the other hand, it is important to consider that the base blink rate, which should have been videotaped during the non-conversation period, was unfortunately-not measured. The comparison of the blink rates during conversation with that of non-conversation periods should be analyzed. Also, the present study did not include a large sample, and thus the generalization value of the results is reduced. Even though the blink rate results

were not clear, it may be believed that the implication of this study, which was to evaluate the differences between gender types in terms of effects on interpersonal stress, permits a positive anticipation of future gender studies related to blink rate assessments.

# Further examination of the relationships between Gender Personality and communication skills

Further examination of the relationship between gender type, interpersonal adjustment, and effective communication skills—which are associated with the reduction of interpersonal stress—should be conducted in a future study. According to a study carried out by Zuckerman et al. (1982), communication skill is related to masculinity-femininity rather than to biological sex differences. They proposed also that communication skill might be strongly associated with an androgynous personality trait, because this trait was supposed to be more flexible than sex-typed traits (Freidman et al., 1980; Wada, 1991). In the present study also, only "androgynous" and "sex-typed" traits were selected. However, as Norlander et al. (2000) examined differences of creative ability among five gender types, the effects of other gender types, such as those who are "undifferentiated" and cross gender typed (a feminine male and a masculine female), should be investigated in future studies. If the idea that the "androgynous" type has more effective communication skills is supported, then this personality trait will be seen as more socially desirable.

#### Better understanding of and conversation with the opposite sex

In their social lives, people are expected to behave in either a masculine or feminine fashion. It must be supposed that there are many people who have felt pressure to be a female or to be a male, and who have also felt that it was impossible to understand what the opposite sex was thinking. Tannen (1990) described how conversation between females and males was really like cross-cultural communication. However, for better communication and in order to understand each other better, interpersonal communication as related to femininity/masculinity should be investigated further.

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# Review of the effect of femininity/masculinity:

The necessity of measuring both positive and negative aspects

Part II describes some empirical research concerning the relationships between femininity/masculinity, mental health, and social adaptation. Firstly, a general discussion will be carried out about past research, and next the psychological influences of being androgynous in Japanese society will be discussed. This latter is related to Part III which follows.

## The effect of having both femininity and masculinity

The three pieces of research in Part II clarified how femininity/masculinity has several psychological influences. Research in Chapter 5 concretely showed that masculinity facilitates the Type A behavior pattern. Type A behavior may be beneficial for performance at work but, on the other hand, it may also increase the risk of coronary heart disease. So from this point of view, Type A behavior is not desirable for an individual's mental health. However, if individuals also have femininity in addition to masculinity, it is found that femininity can decrease one's Type A behavior pattern, which in turn is increased by masculinity. Moreover, in Chapter 6 it was suggested from correlational analyses that in the case of females the negative aspects of femininity increase dysphoria and decrease self-esteem. However, if the positive aspects of masculinity are added, this is found to decrease dysphoria and increase self-esteem. In short, in accordance with the author's determinant model of femininity and masculinity, it can be stated that the undesirable influences from negative femininity may be mitigated by the positive aspects of masculinity, and the undesirable influences from negative masculinity may be mitigated by the positive aspects of femininity.

Furthermore, in Study I of Chapter 7, in a communication situation on a first meeting between a male and a female, "androgynous" individuals were found to be able to communicate adaptably, and this was independent of the partner's gender type.

It should also be noted that the "androgynous" individuals had significantly higher blink rates than did "sex-typed" individuals. This suggests that though "androgynous" individuals manage good communicational performances, this is accompanied by feeling stress. The reason why "androgynous" individuals feel more stress is probably that the negative aspects of femininity/masculinity were not measured in the experiments discussed in Chapter 5. With reference to the author's determinant model of femininity and masculinity, "androgynous" individuals are definitely supposed to have low negative aspects of femininity and masculinity. This is a typical androgynous feature. Nevertheless, not all "androgynous" individuals have low negative aspects, and so "androgynous" individuals who have unmitigated masculinity or femininity possibly display some maladjustment, as shown in the blink rates.

#### Integration of femininity and masculinity

According to the determinant model of femininity and masculinity, a psychologically androgynous feature is necessary in order to decrease one's Gender Schemas and to attain one's Gender Identity. The following four strategies for becoming androgynous were proposed in: "What you can do from today" in Chapter 7 and "For being free from the spell of gender stereotypes" in the book Psychology of Gender by Dohi (2004).

The first suggestion is to have meta-cognition. Meta-cognition is recognizing one's own cognitive activities. If individuals recognize what they themselves are thinking, such as having gender stereotypes, sticking to masculine/feminine roles, and biasing one's cognition of other people through subjective prejudice, then the undesirable influences can be mitigated.

The second suggestion is to break out of one's shell by using psychological discipline, i.e., that an individuals' behavior can change their own attitudes and self-concepts. To be androgynous, it is necessary to behave as if one is already androgynous. For example, females should try new hobbies, sports or academic studies which are supposed to be only for males. In the same way, males should try to cook, use make-up or dress up, activities which are supposed to be only for females. Individuals should overcome the

limitations and social norms of sex-typing. Changing their behaviors will change their self-concepts, and make it possible to attain high femininity and masculinity.

The third suggestion is to try to accomplish Gender Identity, which is included in the determinant model of femininity and masculinity. To give full play to one's uniqueness, both of the main two factors of humanity, i.e. communion and agency, or intimacy and attainment, are needed. By having both of them, individuals can accordingly become androgynous. For example, if individuals want to help people warmly, a strong will or special knowledge which is achieved by hard work must be necessary. Likewise, if individuals want to achieve something and get fame, doing hard work only is not enough. They should seek cooperation and support from many people.

The fourth suggestion is to make ones' self-identity independent from group identity. There are two contrasting ideas involved: one is that "the world is one," and the other is that "the self is isolated." Both these ideas require not separating people in accordance with their sexes, i.e. not treating people of the same sex as in-group members, nor treating people of the opposite sex as out-group members. As a result, the self-stereotyping as discussed in Chapter 5 can be expected to diminish.

## The difficulty of accepting both femininity and masculinity in the case of males

It was hypothesized that it is more difficult for males than for females to have both femininity and masculinity. Also, in previous research (Dohi, 1998; Ito, 1997), sex-typed scores were used to measure Gender Schemas. These results showed that males got a higher sex-typed score, i.e., high Gender Schemas, than females. In other words, females can achieve an opposite sex-typed personality (masculinity) more easily than males. In contrast, males may have more difficulty in having an opposite sex-typed personality (femininity) than females.

So why are males more Gender Schematic than females? One reason may be that the stereotypes of masculine features are abundant and more strictly determined than feminine features (Hort et al., 1990), and also the contents of masculine traits have become the standards for humans of good manners and bad manners. Therefore, females will seldom be criticized about having masculinity in addition to femininity. In contrast, for males,

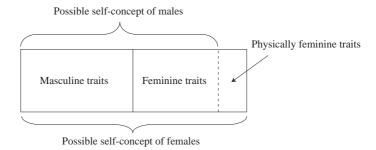


Figure II.1 Typical model of sex differences in accepting masculine/feminine traits in the self-concepts of males/females

feminine traits may be a kind of alien substance, so they will probably be restricted in accepting femininity as a part of their self-concept (McCreary, 1994; see Figure II.1).

Moreover, masculine traits are usually evaluated as more valuable than feminine traits in this male-centered society, which will expand this tendency. Generally speaking, in social psychology it is supposed that people in a lower class can be accepted when moving to higher classes, but people in a high class cannot identify so easily with people in a lower class.

Finally, feminine sex-typed traits sometimes contain physically related personality traits, so that biologically males are restricted in accepting feminine traits. As mentioned before in Chapter 5, femininity has included not only communion, i.e. internal and human-relational factors (for example, being "submissive," "devoted," and "polite in speech"), but also overt femininity (for example, being "sexy," "fashionable," and "lovely"). It would be much more difficult to include overt femininity among males than among females.

# The meaning of examining the negative aspects of femininity/ masculinity

The research mentioned in Chapter 5 had already been performed before the development of the CAS (Communion-Agency Scale), which can measure the aspects of negative (unmitigated) femininity/masculinity. Therefore, the negative aspects of masculinity could not be examined in relation to the Type A behavioral pattern. However, for the research in Chapter 6, as the

CAS had already been developed to measure the negative aspects of femininity and masculinity, so femininity and masculinity could be analyzed separately between the positive and negative aspects. In the results shown in Chapter 6 about femininity in both the cases of males and females, it was suggested that the positive aspects of femininity facilitated self-esteem but that, in contrast, the negative aspect of femininity reduced self-esteem. In the case of females, as with femininity, it was suggested that the positive aspects of masculinity facilitated self-esteem, and the negative aspects of masculinity reduced self-esteem. The results mean that it is risky to follow gender stereotypes and to accept masculinity for males or femininity for females along the lines of gender stereotypes. Individuals must distinguish the desirable parts of their femininity/masculinity from the undesirable parts by themselves. In short, individuals must control the amount of femininity and masculinity within them by using Gender Identity. Gender Identity is expected to exhibit an acceptance of the negative aspects of femininity/masculinity, even if they are consistent with social expectations for the sexes.

In addition, concerning the relationships between both aspects of femininity/masculinity and dysphoria, self-esteem, social support, and general distress in the case of males, the negative aspects have stronger relationships than the positive aspects. Thus it is clear that the negative aspects should be in consideration when thinking about negative psychological influences such as distress. In Japanese society, the negative aspects of masculinity should be given more special attention, because here in Japan overworking is sometimes approved of as a masculine behavioral pattern. According to the research carried out by Hofstede, the most masculine country in the world is Japan. The study by Hofstede (1991) focused on the workplace, and discussed not individuals but issues on a national level. So it cannot be directly inferred that Japanese individuals are the most masculine in the world. However, masculinity itself is by nature related to working, and Japanese people are eager to be influenced by their social norms. For example, the newly coined word 'karoshi' (death from overwork) is from the Japanese language, and it has become very famous because it is listed as an item in English dictionaries. Japanese workers sometimes work until death through fatigue. This is an extreme example, but it is a fact that Japanese workers work for a long time compared to other countries' workers. This hard work for long hours induces a couple's strict role divisions, inflexible role behavior, and a couple-unit society system (see Part III).

# The effects of femininity/masculinity at the level of interpersonal relationships

Chapters 5 and 6 clarify how an individual's psychological androgyny can influence desirable mental health from the viewpoint of the individual's femininity/masculinity. For some people, it may seem be doubtful that the results in an experimental situation can be applied to real society, because being excellent as a person is one thing, but being adaptable in society is another thing. However, according to the research discussed in Chapter 7, from the viewpoint of male-female interpersonal relationships, it is also important to consider what kinds of personality an individual has. Thus interpersonal relationships cannot depend on the partner's femininity/masculinity. That is, as mentioned in Chapter 7, the most important factor influencing interactive communication seems to be the individual's gender type.

Once that is understood, we are in a better position to evaluate Japanese values concerning human relationships. In Japan, various groups are supposed to be important, which means that individual points of view seem to be deficit. Even if individuals are members of a group, they should consider what kinds of traits they have and will develop. These issues are visible also in the education system in Japan. When I was a junior high school student, female students had classes in domestic science and male students had classes in technics (Note that the subject's name was "technics and domestic science," the same preface for both of males and females). Japanese educators probably had foreseen the future of their students involved getting married, so that each male (husband) and female (wife) could compensate for each other's deficit. However, in such a system, males cannot learn domestic science and females cannot learn technics. This makes little of individual possibility and the development of ability. This topic will be mentioned as "hidden curriculum" also in the conclusion of Part III. In addition, a more important point here is that students learn the gender system such as "in our society for female/male students, there are things females/ males do not have to learn, because the other sex people learn substitutely." It is one of the weak points of collectivism. Today, the system has already been improved in junior high schools, but not yet in senior high schools.

Furthermore, it might be predicted that the family group is estimated as more valuable than the individual and has priority over individuals, which issue will be examined in Chapter 9. In the research discussed in Chapter 9, it can be shown that Japanese parents expect masculinity from their sons

and femininity from their daughters. However, in the case of having an only son, parents expect both of masculinity and femininity from their sons, and in the same way, in the case of having an only daughter, then they expect both masculinity and femininity from their daughters. It should be recognized that children must be independent as an individual in the future.

# Japanese couples' poorness at conversation and Western society's companionship of wife and husband

In the research carried out in Chapter 7, females seemed to be less nervous than males, and females were rated as more attractive. The results that females are superior to males at managing a communication situation can be expected from some research about Japanese couples' communications. Among most Japanese couples, the wives take the lead in communications and husbands keep silent and seldom manage much communication with their wives. The reason why Japanese husbands have little intention to communicate may be that they feel satisfied with only working for the family, and that there is no need to try more as husbands or as fathers.

In addition, Japanese married couples are maintained through their roles as wives/husbands, as the proverb "A child cements a marriage" suggests. Thus because of their children few Japanese couples divorce, even if their relationships are not satisfying. This may be in contrast with Western couples, who value the couple's intimacy more than their parental roles. But from an opposite point of view, Japanese couples predict a low possibility of divorce for themselves, so they will see themselves not getting divorced in the future, which might facilitate them in relying on each other through their roles.

In the case of Western society, it seems there is a contrasting tendency to that of Japanese society. Western society is individualistic, and there if a male and a female fall in love they are supposed to get married, but if they dislike each other then they do not hesitate to divorce. That is why it is necessary to pay attention to each other's feelings and to go out together, even if they have firm roles such as earning money or child raising. Therefore, it is ironic that Western couples behave better together on the surface than Japanese couples do, but Japanese couples rely on each other to survive more than Western couples do.

# For a balance of inner and outer mental health: Consideration of multiple role involvements

The research mentioned in Chapter 5 suggested that masculinity increases one's Type A behavior pattern, which means masculinity can facilitate performance in the work place but at the same time also psychological stress and heart disease. In addition, the research in Chapter 7 suggested that psychological androgyny made communication better, but at the same time facilitated psychological distress as measured by blink rates. These results imply that individuals should manage ways to be healthy by creating a balance mentally and socially. One of the ways of achieving this may be involvement in multiple roles and having diverse activities to switch on and off. Thus individuals can control the balance of their inner and outer mental health.

The author's study (Dohi, 2009) can be shown as one example of research into multiple roles and mental health. The participants of the research were university students (70 males and 180 females). Their femininity/masculinity was measured by using the CAS (Communion-Agency Scale). In addition, they were asked whether they had experienced involvement in multiple roles as a leader, and were examined concerning the correlations of this with experience, the degree of interpersonal stressors (the amount required from others, having power of control, and support from others), distress (depression, anxiety, aggression, emotional response, withdrawal, and physical fatigue), and self-esteem. The experience of leadership was measured by the frequency of being a class representative, the president of a club, the chairperson of a committee, or a member of a student council.

The results indicate that in the case of females, 97 females have experienced being leaders, and 84 have not. In the case of males, 38 males have experienced being leaders, and 32 have not. There was no sex difference in the experience of being a leader ( $\chi^2(1) = .10$ , *n.s.*). However, for females it was found that the more they experienced being a leader, the more stress and distress they had. Concretely, as shown in Table II.1, females who have had the experience of leadership have higher self-esteem than females who have had no experience of leadership, but at the same time they feel less power of control, and higher depression, aggression, emotional response, and withdrawal. Matud (2004) carried out a study with 2,816 male and female adults, and found that females are likely to have stress from interpersonal events, such as the death or birth of a family member, the illness of

Table II.1 Mean and SD and t-value of stressors and distress in having experience as a leader or not (by sex)

			Females			Males	
		t-value	Having experience	Not having experience	t-value	Having experience	Not having experience
	Self-esteem	-2.09*	29.4 (7.9)	27.1 (6.8)	.72	29.5 (8.3)	30.7 (6.0)
	Request	-1.29	19.5 (3.3)	18.9 (3.2)	1.2	9.87 (4.6)	9.2 (3.9)
Stressor	Control	-3.23**	20.3 (4.4)	18.1 (4.5)	-1.29	4.9 (4.6)	4.3 (7.7)
	Support	97	33.6 (5.4)	32.9 (4.5)	.39	7.3 (1.2)	5.6 (1.0)
	Depression	2.06*	10.1 (4.2)	11.5 (4.3)	69	4.6 (.75)	3.9 (.70)
	Anxiety	.87	9.8 (3.6)	10.3 (4.1)	95	3.9 (.64)	3.9 (.63)
	Aggression	3.05**	9.0 (3.9)	10.9 (4.4)	.52	4.1 (.67)	4.3 (.76)
Distress	Emotional response	2.43*	8.8 (5.6)	10.2 (3.9)	88.	3.9 (.64)	4.2 (.74)
	Withdrawal	2.33*	8.4 (3.7)	9.7 (3.7)	.52	4.0 (.72)	3.5 (.62)
	Physical fatigue	1.01	10.7 (4.2)	11.3 (4.3)	89.–	4.4 (.72)	4.6 (.81)
	Increase in nervousness	1.19	7.2 (3.4)	7.8 (3.6)	39	7.5 (3.7)	7.2 (3.6)

*Note*: \* p < .05, \*\* p < .01

Source: Dohi, I. (2009). The influences of gender personality on psychological distress: Focusing on experiences of leaders as multiple roles. Kobe Shoin Women's University Bulletin, 50, 1-17. somebody close, etc., and they showed higher chromic distress and depression. Probably the results come from the expectation of "care" roles for females. Therefore, if females get more interpersonal relationships as leaders, they will receive more influence in comparison to males.

Next, Table II.2 shows the results of an analysis of variance (ANOVA) of two factors (sex × gender type). Firstly, the frequency of experience as a leader was varied by gender type. For both males and females, individuals of the "androgynous" type had the most leadership experience. In addition, stressors and distress were varied by gender type. "Androgynous" individuals received high stress from others' requests, but on the other hand also received support and control. In many previous studies "androgynous" individuals have been recognized to have high self-esteem, and this may come from this beneficial stress processing. Furthermore, "androgynous" individuals experienced less depression, emotional response, and withdrawal than any other gender types. Dohi et al. (1990) have researched with female university graduates about role involvements as a wife, mother, and worker, and found that individuals of an "androgynous" type and "masculine" type had the largest number of such roles, and gained high role attainment. The "undifferentiated" gender type, which stood in contrast to the "androgynous" gender type, felt a lack of control and experienced the highest stress. However, requests from others produced the same results as for "androgynous" individuals.

In summary, having both masculinity and femininity facilitated high performance such as an involvement in multiple roles, but at the same time it increased the stress response from several roles. This suggests that it is necessary to control the amount and variety of one's own social roles, to pay attention to preventing an increase in distress, and to gain the merits from these roles.

## Further study: Empirical research on the psychological effect of the negative aspects of Gender Personality

Unfortunately, with the studies in Part II it was impossible to measure the negative aspects of femininity/masculinity, as at that time the CAS (Communion-Agency Scale) had not yet been developed. The only possible approach was predicting the functions of femininity and masculinity according to the findings in the research regarding the determinant model of femininity/masculinity in Chapter 3. The future direction of this study

**Table II.2** The effects of gender type and sex on experience as a leader, stressors, and distress

		F-value (df)			Multiple comparison through Duncan about the effect of			
		Gender type	Sex	Interaction		ncan about ider type	the effect of	I
Numbers of experiences as a leader		F (3, 242) = 3.91**	n.s.	n.s.	A 2.67 a	M 1.49 b	F 1.05 b	U .97 b
Self-esteem		F (3, 242) = 19.83***	F(1, 242) = 5.25* males > females	n.s.	A 33.0 a	M 30.4 b	F 26.3 c	U 24.5 c
Stressor	Request	F (3, 242) = 3.80*	F(1, 242) = 3.74† females > males	n.s.	F 19.9 a	A 19.5 a	M 17.9 b	U 17.8 b
	Control	F (3, 242) = 27.3***	n.s.	n.s.	A 22.3 a	M 19.6 b	F 18.5 b	U 16.5 c
	support	F (3, 242) = 21.2***	F (1, 242) = 10.9** females > males	F (3, 242) = 3.68*	A 35.2 a	F 32.3 b	M 31.3 b	U 29.1 c
Distress	Depression	F (3, 242) = 3.07*	F (1, 242) = 5.11* females > males	n.s.	U 11.6 a	F 32.3 ab	M 31.3 ab	A 9.26 c
	Anxiety	n.s.	n.s.	n.s.	U 10.6	M 10.3	F 10.0	A 9.3
	Aggression	n.s.	F (1, 242) = 3.28† females > males	n.s.	U 10.4	M 9.9	F 9.6	A 8.9
	Emotional response	F (3, 242) = 5.62**	n.s.	F (3, 242) = 2.86*	U 10.6 a	F 9.7 a	M 9.5 a	A 7.8 b
	Withdrawal	F (3, 242) = 6.65***	F(1, 242) = 3.81† females > males	n.s.	U 10.7 a	F 9.6 a	M 8.9 a	A 7.2 b
	Physical fatigue	F (3, 64) = 4.51**	n.s.	n.s.	Typical U 12.9 a	Typical F 12.5 a	Typical M 10.5 ab	Typical A 8.7 b
	Rise in autonomic nervous system	F (3, 64) = 2.95*	n.s.	n.s.	Typical U 10.3 a	Typical F 7.8 ab	Typical M 7.6 ab	Typical A 6.3 b

Notes: The characters a, b, ab, and c mean there are significant differences between the different characters.

A means "Androgynous" type: M means "Masculine" type: F means "Feminine" type: U means "Undifferentiated" type.

Typical A, M, F, U means a typical gender type as follows:

- Typical A means high in the positive aspect of masculinity and femininity, low in the negative aspect of masculinity and femininity.
- Typical M means high in both aspects of masculinity, low in both aspects of femininity.
- Typical F means high in both aspects of femininity, low in both aspects of masculinity.
- Typical U means low in both aspects of masculinity and femininity.

 $\dagger p < .10, *p < .05, **p < .01, ***p < .001$ 

Source: Dohi, I. (2009). The influences of gender personality on psychological distress: Focusing on experiences of leaders as multiple roles. Kobe Shoin Women's University Bulletin, 50, 1-17.

will be one that uses the CAS and examines the physical and psychological influence of femininity/masculinity. In particular, the positive influence, such as well-being or self-actualization, should be studied further, because recently clinical psychological studies which are about disorder or maladjustment are becoming popular.

Finally, through overviewing the research in Part II, the presence of a specific Japanese meaning to femininity/masculinity and psychological influences is suggested. Therefore, in Part III that follows, some studies into the relationship between Japanese couples or families and femininity/masculinity will be presented along with comments about the changes in modern Japanese gender society.

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## Couple-unit orientation:

Collectivism and "Japanese-style" Gender Personality

Part III presents a total of five studies while having its focus on the distinctiveness of Japanese society in relation to the process by which Gender Personality is being established and how Gender Personality is mentally and physically influenced. Chapter 8 provides an overview of shadow work between lovers and between a wife and husband. The married couple is considered the minimum unit in Japanese society, and H. Ida has named this type of society "a couple-unit society." In a couple-unit society, marriage is a requirement, and the married couples are oriented to dividing their roles between work and home. Psychologically, the married couples are also led to the idea that a married couple should live as one and that each of them is not to be considered an adult individual unless they have a spouse and a family. Accordingly, people often believe that it is better for females to have femininity only and better for males to have masculinity only, rather than having psychological androgyny. They also believe that a wife and husband should live and act as a couple in a relationship in which femininity and masculinity act in a complementary way. This is shadow work. Shadow work maintains and strengthens the couple-unit society, which is a causal factor of Japanese-style gender.

Chapter 9 reveals the gender trainings which link generations and generations within a family and also reveals that these trainings are done based on consciousness about one's family and ancestors. These facts are based on a survey on how a wife and husband raise their children at nursery-school age and a survey on the memories of married couples as to how their own mothers took care of them when they were children. In Chapter 10, Japanese-style gender within the family will be discussed and the notion

of "family-unit orientation" will be advocated. Family-unit orientation is about the application of the psychology of a couple, which in other words is a couple-unit orientation, to family life. A study measuring orientation by using a scale indicated that family-unit orientation prevented a wife and husband from being independent from each other and strengthened their genders.

In Chapter 11, the gender aspect of modern Japan will be investigated based on interrelationships among young people. Japanese men have been traditionally expected to pay when they go out on a date, but today more couples share the expenses when they go out. Especially when they go out in a group, most of them share the costs. This change might be related to participation in social activities by more females. However, the gender role in which men become the provider of family is still practiced in Japan, and this suggests that these new and old concepts of value coexist.

In Chapter 12, the sleeping behaviors of people are compared between Japan and France in order to examine the individualistic relationships of people in Japan. Japanese have traditionally been thought of as collective individuals in comparison to the West. However, Japanese are sometimes uninterested in what others do in order to make a distinction between outside and inside. In the relationships between a wife and husband, it is also considered important for the wife and husband to play their roles, including affection, without making a fuss to each other. In other words, they are connected without interfering with each other. Unlike wives and husbands in the West, a Japanese wife and husband seldom engage in activities together, and they do not have as much communication as much a wife and husband in the West. This suggests that Japanese are surprisingly individualistic. The results obtained from the comparisons between individualism and collectivism, and from the comparisons between Japanese culture and Western culture, will probably differ depending on what kind of relationships are investigated. Discussion will be made on the differences.

## Couple-unit orientation and shadow work

#### Shadow work

What is shadow work for males and females?

This chapter presents the concept of shadow work for males and females. The concept derives from Illich's (1981) "shadow work," which is the term used for describing "unpaid labor" in modern industrial society. Such labor includes, for example, labor needed in the home, labor needed for transportation during the time outside work hours, labor required for having medical treatment in order to maintain health, and labor needed for studying something useful for work in the future. Shadow work includes types of labor requiring no payment and the types of "personal" labor in which each individual is involved at each household. Nevertheless, these types of labor are essential in enabling the paid labor which is socially recognized. For example, because of the labor of child-raising, some individuals can be recognized as workers in society. Meals on tables are also the results of labor. Earning money isn't necessarily a promise for meals to be on your table. You may need to go shopping to get some ingredients for the food, and you need to cook and clean afterward. All this requires labor. Moreover, unless your home is clean and tidy, you may not feel your body and mind are rested, and without having rest at home, you may not be able to concentrate on your job. The concept of shadow work put forward by Illich places importance on the parts of labor which are in the shadows.

Some essences of shadow work by Illich are taken into the concept of the "shadow work of males and females" in this chapter. This concept is about the shadow work which relates to the mind and human relationships of couples who are in an intimate relation (a couple of lovers, or a wife and husband, for example), and such shadow work is invisible in society. This concept makes it possible for us to pay attentions to those fields which are considered private and are treated as hidden areas in academic studies. Shadow work, which is related to mind and intimate relationships between a male and female, affects not only the people who are involved in such intimate relationships but also affects society. Psychological studies of issues related to the mind of couple in an intimate relationship often concentrate only on their love, but there are more issues which are unrelated to love. The shadow work of a couple can become a mental energy which helps social systems and norms in being maintained, and that energy can also have an influence over society at times.

#### The difference between being "individual" and being "personal"

In social psychology, individual behavior is predicted based on studies of individual attitude. It is believed in social psychology that individual attitude is linked to the actions conducted by the individual concerned. This is shown by the arrow "a" in Figure 8.1. In a study, for example, people are asked to answer questions such as: "Do you think that human beings should protect the environment more or do you think that they should alter the environment and use it more?" This question is actually asking about their attitude. Then, when the question is followed by a question such as: "Have you ever been involved with activities for nature conservation?," a certain consistency will be found between the attitude and behavior of the participant. This is because the attitude of persons who think that they should protect the environment is linked to behaviors which are involved in nature

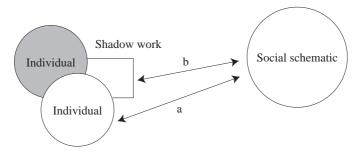


Figure 8.1 Shadow work as individual and "personal" relationships

conservation, such nature conservation movements. However, there are many behaviors which are impossible to predict from individual attitude. In reality, issues such as subjective norms based on the opinions of other people and the ability to take action are related to how people behave (e.g., people might want to be involved with nature conservation but they may not know how, or they may not have the ability to do anything).

Such an inconsistency between attitude and behavior is often caused by the fact that an attitude which may be focused on behavior, for example, may sometimes be measured only from the attitude of an individual. Generally, research into finding such facts uses a method by which an "individual" is expected to answer a question about the relationship of couples such as: "Do you agree with the idea of work for males and the home for females?", or: "Do you agree with legislation about permitting different family names between a married couple?" However, behavior at home, behavior related to love, and the role behaviors of a wife and husband are very different from the type of attitude which is shown individually.

The relation between an individual and another individual is linked to their behavior and shown by the arrow "b" in Figure 8.1. Even a person who is against the idea of "work for males and the home for females" may think in reality: "though I am against the idea, my husband is working so hard every day that I should put a lot of energy into the house work," or "I don't want to go back to a job outside the home, so I should not let my husband do any house work." People's love life and marriages are reflected not only by individual attitudes but are also based on the opinions established in personal relationships, including, for example, the relationship you have with your partner and what action your partner takes. Such attitudes and behaviors from your partner may correspond to the "subjective norms" which are the second factor that determines people's behaviors. However, these are different from general subjective norms qualitatively.

It is necessary to make a distinction between "my" "individual" opinion and the "personal" opinions of "us" (e.g., a wife and husband) in the daily lives of individuals. In social psychology, a great deal of research is conducted on group mind and group dynamics, and in response to such studies, research which may be called the "mind of couples" or "couple dynamics" should be developed. Shadow work should be included in such fields of study. These fields, however, will be difficult to investigate since they are among the private areas of people's lives. This may be the reason why these fields have not been popular research topics, though it is known that the

mind of couples and shadow work has an impact on people's attitudes and behaviors in relation to gender.

Shadow work is difficult to be identified by the parties involved and by social research

Do lovers, wives and husbands who practice shadow work actually realize that they are behaving in accordance with their "personal" attitudes? Or do they think that their actions are consistent with their "individual" attitudes? Let us take the case of females as an example. Females often criticize the attitudes and behavior of males with expressions such as: "they act as if they are happy to help doing domestic work, but the truth is, they have no intention of doing it and they do not share roles," "though males often say in public that now males and females are equal, they have not really changed at all," and "I am not a housemaid." Nevertheless, those females who criticize males in this way often take care of their husbands without any hesitation and do everything related to the domestic work, instead of making their husbands do their domestic-work duties. These females take too much care of their children instead of making their children do their domestic-work duties, and as a result the children grow up as adults who cannot do anything by themselves. In other words, these females live with a contradiction between the case of being an "individual" and the case of being in a "personal" relationship, and they behave by following the attitudes of a "personal" relationship.

Another example is how a wife and husband are treated in social surveys. Surveys on family budgets have been conducted for many years based on the statistics of every household. When a couple gets married, the wife and husband as a couple are treated equally in terms of economic status in a given society. Consequently, the economic status of females who marry to males with a high economic status will be accelerated automatically. However, the amounts of money which wives and husbands feel that they are earning as "individuals" are not coincident either subjectively nor materially. If the husbands are bullying and authoritative, their wives may feel that they are being disrespected, as if they are someone incapable and with no income. The wife of the president of a company is, needless to say, not the president of the company.

#### A couple-unit society

Why is one's attitude in "personal" relationships more important than the attitude of an "individual"? This is because there are social systems under which people have no other choice. One of these systems is the "couple-unit society" of Japan (Ida, 1995). In Japan, living as a wife and husband unit is an initial premise of society, and you may find that your life is more or less comfortable as long as you follow the system. Such an environment may trigger a cynical phenomenon described in the following. A married female applies for a full-time position in a company. One of the characteristics in a couple-unit society is the traditional role sharing between a wife and husband (work for males and the home for females), and thus it is very difficult for a married females to take up a position as a permanent employee. Even if a married females fails to be a permanent employee and become a part-time employee, her husband will probably earn the amount of money his wife would have earned if she were a full-time employee anyway, and therefore the wives are likely to have particular problems. This means that even when a wife is discriminated against as an "individual" in the working environment, a stable social life is still guaranteed to her.

The pay system is derived from the couple-unit society described above, of which the premise is a family with role sharing by sex. This system implies that the money given to employees as their salary is money given to the family as the salary for each member of the family. Companies in a couple-unit society want their employees, who are husbands with families, to work as much as company wants them to and to devote themselves to obeying company rules and providing long hours of labor, unpaid overtime work, and acceptance of company transfers. Such companies expect and manipulate the wives of their employees to be full-time housewives or a part-time workers whose priority is the home.

### Japanese-style collectivism

The second system which aspires to a "personal" relationship between a wife and husband is Japanese-style collectivism. Collectivism may be associated with an image of sacrificing oneself for the benefit of the group, but it is different from this. The "Japanese-style" in the sense used here is the kind of the society where importance is placed groups at first in order to protect the benefit of individuals. Japanese society has a strong tendency toward roles being played by sex. This may be caused by people's inclination

to live with a strong sense of dependence on their family, and at the same time they always make distinctions over relationships between people they are close to and people they are not. If a wife and husband have different ideas about being independent, they may feel distance from each other or they may even feel guilty.

#### The personal is political

This section focuses on the relation between social schematic and shadow work which is "personal" (see Figure 8.1). Hanisch (1971) once said, "The personal is political." This was her assertion that things which seem to be personal actually come under the influence of society, and we should know this (as shown in Figure 8.1, where the arrow (b) is directed from "social schematic" to "shadow work"). However, society must have a certain influence caused by something personal, too. Shadow work, which involves a personal relationship, receives social influences, and at the same time it has an influence over society. Such influences can be expressed by a play on the words of Hanisch: "The social is personal."

The proverb "one should not interfere in lovers' quarrels" means that there is no point and it is even silly for other people to be involved in quarrels between a couple. Thus "chemistry" is one of the words that describes personal relationships between two people of different sexes. Chemistry is not something analyzed easily in an objective way. If anything, chemistry is something that fortunetellers usually take into account. However, this becomes a major concern to us when a focus is placed on shadow work, because it can be predicted that the accumulation of shadow work, which is related to "one should not interfere" in the quarrels between a wife and husband, can become a power which moves society.

#### Shadow work by males and females in different forms

In this section, an overview is given of shadow work in a variety of fields. In addition, the shadow work between a couple of lovers or between a wife and husband will be described in more detail later in this chapter.

In one form, shadow work operates under the influence of Japanese consciousness about one's family and ancestors, named "Ie" in Japanese. This consciousness about family and ancestors is not something existing as a system by law. However, it still exists in people's minds, so that this consciousness has at least some psychological influence on Japanese people,

and it has a special influence when people marry. Though approximately 90 percent of Japanese people marry for love today, most females change their last name to their husband's last name, leave their family and marry into the family of their husbands. In a new family, the oldest son becomes the heir of the family. Moreover, more than half of Japanese couples conduct a traditional engagement ceremony, which is a symbol of the culture related to the consciousness of family and ancestors. Young couples get married in order to have their own world, but ironically, the consciousness of family and ancestors increases through marriage. It eventually creeps into the relationship between the couple.

Shadow work in a second form is the shadow work which operates in order to keep a balance (and a disproportionate balance) in role sharing between a wife and husband. Today, fewer people support the traditional ways of role sharing by sex. However, females are, in general, irritated by the slowness of change in the attitude of males, and wives often think that their relationship with their husband is not equal. This is corroborated by the phenomenon whereby the degree of satisfaction in a marriage decreases as people become older, and this phenomenon occurs mainly among wives. Though wives may feel that the losses they suffer are greater than the losses their husbands suffer, the wives have given up on the idea of having an equal relationship with their husband. As a result, they juggle this with seeking equity in their world outside the home.

Shadow work in a third form is the shadow work of self-searching—the search for ego identity—among housewives. Many magazines which target housewives have articles and topics related to a "breakthrough" which may change their lives as of now. Housewives feel worry over social situations, including low fertility, life-span extension, and taking care of children, with a sense of a heavy burden and of anxiety, or a "psychological personalization," within the family. Many housewives take up jobs again around the time when care for children becomes less time consuming, but even then, they limit themselves to thinking, "insofar as my husband allows it," or "insofar as my children do not find this an inconvenience." Consequently, at the workplace, they are not treated as full-fledged workers, and at home they still engage heavily in domestic work, care for children and other types of exhausting labor.

Shadow work in a fourth form is the shadow work used in having a typical Japanese-way of communication between wife and husband. Japanese wives and husbands place their first priority on strictness and somberness

when they play their own roles, and they place less importance on having communication which may be considered as interference. This notion traps each of them in a separate scope and results in indifference to each other.

Shadow work in a fifth form is something related to domestic violence (DV) which has been hidden in society and which is not easily focused as a social problem. DV is caused not only by the aggressiveness of husbands, but they are also caused by the differences in their economic potentials which derive from inequality by sex and some other causes which usually begin in society and then spread to the relationship of a wife and husband. Moreover, DV is caused by another psychological factor of "co-dependence" with which wives believe that bearing violence is their way of supporting their husbands.

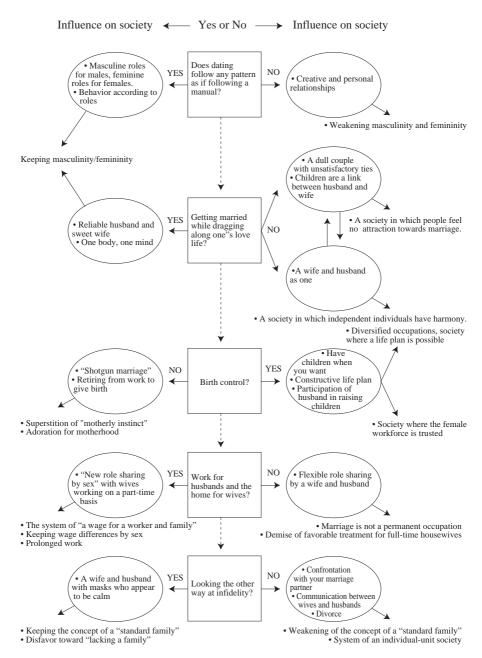
Shadow work in a six form is the shadow work related to the reconstruction of identity by a wife and husband in the later years of their lives as a way of resolving their poor relationship in which they find they have nothing in common anymore. This is often caused by the husbands, who have not thought about their families as their job has been the center of their lives, and by the wives, whose reason for living was only their children. A wife and husband can continue their lives together while they are raising their children, just as the proverb says: "Children are a link between husband and wife." However, when the children leave home and a couple are alone in the later years of their life, they have no choice but to search for a new relationship as a wife and husband. Such a period becomes longer especially in a society where people's longevity increases, and how meaningful the life they spend together in such a long period may be depends largely on whether they have a good relationship as a wife and husband.

Figure 8.2 shows shadow work and its influence on society. In the figure, the influences of shadow work are predicted as yes or no on each arrow.

#### The shift of shadow work from love life to married life

Should dating follow any pattern as if following a manual?

According to Dohi (1995), when people go on a date, males have a tendency to follow some pattern as to how they should behave as a male and females have a tendency to follow some pattern as to how they should behave as a female, as if they were following a manual. Another study shows that,



**Figure 8.2** Shadow work from one's love life to married life and the predictions of its influence on society

when they start thinking about marriage, males begin expecting more feminine behaviors from their girlfriend and females begin expecting more masculine behaviors from their boyfriend (Akazawa, 1998). Why do a couples of lovers follow some patterns as if they are following a manual? One of the possible reasons is that they do not know how they should behave in front of their partner, so they think that behaviors following general and popular expectations will be ideal. The second possibility derives from today's trend of having an innocuous relationship and avoiding heavy and serious relationships before marriage.

Such a style of relationships between a couple of lovers is a good example of what is expressed in the words, "the personal is political," as espoused by Hanisch. Couples of lovers behave innocuously under the influence of a social trend where being serious is something to be ashamed of. However, if couples continue to exhibit such behaviors as if following something like a manual, it becomes a self-evident truth that their shadow work becomes a power to maintain general notions of what the ideal images are of males and females, and of what an ideal family life is, and the notions that affect society. Manuals which are created by many people and the earthly normal morals of life are used when males and females take action, and this is why such manuals and morals do not become diminished.

Nevertheless, the shadow work of couples as performed by couples seems to have fewer boundaries by sex, and people have less expectation related to masculinity and femininity from their partners today. Males wear feminine clothes more often than ever (Dohi, 1998) and couples even share their clothes together. People used to talk about being nubile a lot and used to describe the ages for being nubile by saying that 24 years-old is for Christmas cake and 31 years-old is for New Year's Eve, but this is old-fashioned now. If couples are sensitive to such changes, they will be successful in developing unique and creative relationships with their partners. This kind of shadow work will weather the conventional and manual-like patterns which are used by lovers, and instead it may help in creating a society where people are less constrained by ideas of what is masculine and what is feminine.

## Getting married while dragging along one's love life?

Approximately 90 percent of Japanese people marry for love today. However, this is not necessarily a guarantee that their married life will be what

they dreamed of. One's love life requires a kind of relationship in which emotions are being framed temporarily, and it is an ideal for a couple of lovers to have a partner with whom they can have the emotion of love. A couples of lovers are constantly facing possibility of getting separated, and this can frame their emotions more. In contrast, married couples at the beginning have neither any plan of getting divorced nor for leaving their partner in the near future. This suggests that the goal of their relationship changes when they shift from their love life to married life. One's love life is thick and short like a sky rocket, and married life is thin and long like a light's illumination.

If so, how should people make a change from their love life to married life? One of the methods is for a couple to spend their married life knowing that their love life has ended and forgetting about the emotions they had when they were in love (see the second paragraph from the top in Figure 8.2). However, if you become this type of married couple, the type who "forget about their love life," there is a possibility that you may become a dull couple with unsatisfactory ties, and a couple who lack conversation and are interested only in their own role performances. You may forget the emotions you had in your love life even though those emotions were the reason for your marriage, and eventually you may find that there is no need to live together with your partner. Naturally, such a couple lives with the question: "why do I have to continue my married life with this person?"

However, most married couples eventually have children and live in accordance with the idea that "children are a link between husband and wife." They then put all of their emotions and their questions related to their partner aside and continue a life in which their interest is in what happens every day, though many young people nowadays have questions about the relationships of a wife and husband. If wives and husbands who have forgotten about their love life say aloud in public that marriage is the graveyard of life, and if they convey their complaints about their married life in public, then society will become an environment where people have no interest in marriage and where people have low orientation towards marriage. These if-situations may be related to today's tendency to marry late or not at all, which are found in Japan at present.

Among such wives and husbands who may have forgotten their love life, there are still wives and husbands who try to find a new relationship with their partner. Such couples are even trying to forget their emotions of love. For example, they try to have a relationship with their partner as if they are best friends, and they try to have individual and different goals while encouraging each other so that both can achieve the goals. Moreover, instead of having a relationship closed to outside the home, they expand relationships with other people through the friends whom their partners have. When the numbers of such wives and husbands increase, society will be a place where independent individuals cooperate with each other.

Unlike wives and husbands who have forgotten their love life but maintain the relationship like best friends, there are married couples who are forever dragging with them the emotions of love which they had before getting married. Such couples often live in the belief that they have to keep having the feelings they had when they were a couple of lovers, and they also believe that following their roles based on the idea of "work for males and the home for females" is one way of expressing affection to their partner. This may be a relationship in which a wife and husband depend on each other, or a relationship where both the wife and husband cannot, or do not want to, accept the roles they should play together.

#### How females chose their spouse will change males

Some people believe that married life and one's love life are different, and they get married to a person who was not their partner in their love life. Females who want to get married with the intention of becoming a newtype of full-time housewife (work, domestic affairs, and caring for children are for males, and domestic affairs and caring for children are for females) often want to marry a male for his high education, his height, and his high income (known as the "three highs" in Japan), and though these females want to depend on their husbands economically, they often desire that their husbands help then with domestic affairs and raising children. They often hope to have an easy and stable life.

However, recent changes in the industrial structure of Japan and economic recession have caused such males possessing the three highs to lose their attractiveness, because the chances of them losing their job or being demoted are increasing. With these changes, the motivation for working hard at one's job has increased among females. In order to keep their jobs, such females expect their husbands to provide the support which they as wives need to continue their occupational life. This expectation is now stronger than having a husband with the three highs. If both a wife and husband earn incomes, they can earn more money in total than a couple where only the husband is over-exerting himself to get a high salary while his wife

is working as either a full-time housewife or a part-time worker. When the tendency for females to work on a full-time basis becomes stronger, the criteria for males as a future husband changes. Ideal males will be the type who can provide understanding and support for females so that they can work outside the home, who can be independent with regard to their food, clothing, and living arrangements, and who have the ability and the intention of taking care of domestic affairs and caring for children. The conditions based on which females choose their spouse will shape what types of males are required.

#### Birth control

The divorce rate was low in Japan from a global viewpoint for a long time, and it used to be rare for females to be single mothers. This is partly because being divorced and being a single mother used to be accompanied by disadvantages, and this caused many females to get married as soon as they became pregnant. It was a kind of tradition for female full-time workers to leave their jobs when they were getting married (called celebratory retirement from a company), and it is still quite common for female fulltime workers to leave their jobs when they give a birth to a child. Some of the female workers who left their companies due to pregnancy might have thought that pregnancy and giving birth, which were considered as "beyond their control," had affected their life plan. Humans do not easily admit that their freedom has been put under restraint. This brings on a psychological reactance, and they begin thinking that they want to live their life under their own control. This sometime makes females, whose life plan can be affected by pregnancy, try to rationalize their situation by insisting on their opinions about connotations of motherhood. They may insist, "The most important things as a females is giving birth and raising children," and "Children should be raised by their mothers."

Today, it is not impossible to control pregnancy and giving birth. Dohi (2000) examined how changes in the reproductive environment are accompanied by reproductive revolution that affects females. Control over "not becoming pregnant" is left in the hands of females, and this is so more today than ever. Giving birth is now not so very restricted by a female's age, and females can become pregnant even in their late thirties if they wish. In such ever-changing reproductive conditions, if females make life plans and incorporate their pregnancy into the plan, their way of life can be a power that moves society. Such a plan, for example, can prevent female workers

from losing trust at the workplace because they do not need to leave their jobs because of a sudden pregnancy anymore. This plan also allows them to think about role sharing for a wife and husband in domestic affairs, caring for a child after giving birth and how best to use the available government services. If more females consider the period when they commit themselves to giving birth and caring for children as a period of recharging the energy in their occupational lives, and if more females consider the period as a time of preparation for their career progression, more companies will probably set up education and training sessions and show a more active approach to mid-carrier recruitment. This will shape companies where females can plan their occupational lives in their various aspects.

## Working on a full-time basis continuously or working on a part-time basis when an occupational life is resumed

For females in Japan the most common, and best supported way of working, is to concentrate on raising children after retiring from one's job at their birth and then to resume working as a part-time worker after the children have left one's care. This is basically the same as Japan's traditional role sharing by sex. Females work "insofar as not causing any inconvenience to matters related to domestic affairs and raising children," and they also work while keeping their salary low to a certain level, thus remaining dependent on their husbands. A wife and husband working such conditions are supporting the tradition of role sharing by sex regardless of their real intentions. They maintain, for example, the company system of "a wage and salary sufficient for a worker and family to subsist comfortably." This system is valuable for families in which wives work as part-time workers and husbands work as the breadwinner. The system is, however, accompanied by prolonged work hours for husbands, wage differences by sex, and other issues. In addition, when cases where a female worker makes her family first priority accumulate, this creates a statistical discrimination as females are then perceived as not reliable members of the work force for companies.

In contrast, there are cases of both a wife and husband working on a full-time basis. Nuclear families require, for example, putting the children in childcare facilities and a couple playing their roles flexibly. Nuclear families often reside near to the grandparents and receive help from them in household affairs and childcare. They also need to have human resources which provide them with support, and they need to use a variety of skills

available within the family. When the number of wives and husbands living in such circumstances increases, the system of wages and salaries described earlier will collapse. This also accelerates the need to review the allowances for spouses in the tax system.

#### How to deal with infidelity by a spouse

It is unusual for a wife and husband not to forgive infidelity in their spouse. This is clear by the fact that, though infidelity by a spouse is becoming "conventional," the divorce rate is still low in Japan. Such a wife and husband live with a feeling of distrust towards their spouse in their minds while pretending to be calm. They are a wife and husband as a matter of form. If such a couple is commonly found, society will remain a couple-unit society. On the other hand, there are cases where a wife and husband get divorced because they cannot forgive infidelity in their spouse, and if the divorce rate increases, then the couple-unit society will collapse. Ironically, there are cases where neglected communications between a wife and husband become active.

At all events, Japanese wives and husbands tend to underrate their relationship by thinking, "my wife will forgive my infidelity because she cannot make a living alone." When a wife and husband solidify and tighten their role sharing at work and the family too much, such a sense of depreciation will be expressed. It is the best not to produce situations resulting in divorce, but it is also ideal for a wife and husband to enjoy their married life as two independent individuals who have the economic potential to support their own lives, so that they can divorce if they want.

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# Gender-related socialization within the family:

Focusing on intergenerational relationships and sibling structures

#### Gender socialization at home

Home is a place of socialization, and it is a place where parents discipline children about various norms and values. Parents invest their hopes in their children and facilitate their social adaptability. Investing hope in boys that they might become masculine persons and in girls to become feminine persons is also a part of socialization (Leaper, 2002). In other words, the children's education is usually conducted by sex. The National Women's Education Center conducted a survey (2006) on 1,013 parents (575 mothers and 438 fathers) who were living together with a child aged 0-12. According to the survey, when children are at around 15 years old, 35.1 % of the parents expected strongly that their sons would become masculine and their daughters become feminine, while 41.2 % expected this a little, 19.9 % didn't expect this much, and 3.5 % didn't expect it at all.

Studies related to gender stereotypes have shown that, in general, expected personalities are perceived differently by sex in society. Williams & Best (1982) conducted a survey on university students from 25 different countries using a list of 300 adjectives. The results showed that in most countries males were expected to be active, independent, strong, and adventurous, and to take leadership, and females were expected to be obedient, good at expressing their affections, moved easily, kind, and cooperative with people. These results are consistent with the results from two empirical studies conducted by Ito (1986) and Hosoda & Stone (2000), and it has been generally thought that the personality type expected for males is agency and for females communion (McCreary, 1994; Dohi & Hirokawa,

2004).

Therefore, does home parenting in accordance with the sex of a child have a strong influence on how children accept personalities into their selfconcepts and how males develop their masculinity (communion) and females develop femininity (agency)? The results of the survey above by the National Women's Education Center indicated that the parents of boys had stronger expectations for their children to take leadership than the parents of girls. No significant difference was found by sex among such items as "state their own opinions clearly," "win in competitions against others," "cooperate with others," and "listen to what their parents say without protesting." However, the studies below found similarities in personalities between parents and children, and this suggests that parenting is conducted in accordance with the sex of the child at home. Sagara (2002) conducted a study on children (aged 10-12) and their parents, and the study found a tendency where the more traditional mothers are as to role sharing, the more traditional their children become regardless of their sex. Tenenbaum & Leaper (2002) also conducted a meta-analysis of 43 studies about what kinds of views of gender and personality were held by children in the period between their childhood and adulthood and by the parents of those children. The results indicated that if parents have a more traditional view of role sharing by sex in relation to gender stereotypes and in their attitude towards gender types, females in general, and the abilities of males and females, their children also have similar attitudes towards role sharing in such aspects as selfconcept, cognition of others, interests, and occupations.

# Hypothesis 1: Parenting by sex for communion and agency and the intergenerational relationships

As the first purpose of this study, an empirical examination is to be carried out as to whether gender socialization is conducted in relation to communion and agency through parenting by sex at home. This study will reveal whether mothers and fathers who are currently engaged in child-raising have received parenting by sex from their own mothers and fathers (that is, the grandparents of the child), which is an intentional training and guiding as one form of gender socialization. This study will also reveal whether mothers and fathers who are currently engaged in child-raising are conducting parenting of their children by sex. In addition, the study will examine whether a difference in the degree of communion and agency is found between mothers and fathers as a result of parenting by sex conducted by their

own parents (the generation of grandparents), and whether these connections can be found in parenting between the generation of mothers and fathers and the generation of grandparents. The hypotheses for the first part of this study are therefore as follows: 1) The study will find the tendencies of both generations of parents and the generation of grandparents with regard to expecting communion from boys and agency from girls. 2) The study will find that mothers have higher communion (femininity) than fathers and fathers have higher agency (masculinity) than mothers. Moreover, the whole concept of communion and agency is determined through the parenting by sex conducted by their own parents (the generation of grandparents).

3) Parenting by sex conducted by the generation of mothers and fathers is determined by the parenting by sex conducted by the generation of their own mothers and fathers.

# Hypothesis 2: The genders held by parents in relation of their view of child-raising

The second purpose of this study is to examine how gender is related to child-raising as found in the generation of mothers and fathers who are currently engaging in child-raising, and whether there is a difference between mothers and fathers in families in their view of child-raising. Attitudes towards child-raising, which is about how roles played by mothers and fathers as agents facilitate socialization, is thought to be included in the socialization of gender at home. Especially in Japan, mothers are considered more suitable than fathers for raising and nurturing children. Such an idea is thought of as relating to: the theory of maternal instinct (Ohhinata, 1988), which is based on the idea that mothers can raise children more affectionately because of their innate and instinctive abilities; the emphasis on maternity which was often seen in the 1970s (Miyasaka, 2000); a tendency found in Japan to lay extreme importance on parental care and nurturing by mothers, in comparison to the tendencies in Europe, the U.S.A. and other Asian countries (Suzuki, 1997); and a kind of myth that children should be raised by their mothers till they become three years old.

The survey conducted by the National Women's Education Center (2006) described earlier also indicates that child-raising today is conducted mainly by mothers, and fathers are expected to earn a living instead of being involved in child-raising. The balance of child-raising and the balance of earning a living are extremely disproportionate between mothers and fathers.

Accordingly, the study in this chapter will reveal that people in Japan still have the notion that child-raising is a job for mothers rather than for fathers. This study will also examine the prediction that this notion is stronger among fathers who are not involved much in child-raising than mothers in Japan, by using paired data of a mother-father of the same family.

### Hypothesis 3: Sibling structures and parenting by sex

The third purpose of this study is to analyze parenting by sex while considering the sibling structure in which each child is brought up. Many studies have been conducted on the socialization of genders from parents to their children and these studies have made comparisons between parents who have female children and parents who have male children (McHale et al., 2003). However, parenting by sex has various dimensions depending not only on the biological sex of children but also on the details of the siblings of the children.

One factor in this is the system of patriarchy. This system was rejected by the Civil Code in Japan after the war, but it is assumed that the system still exists today as a social norm for people's customs and for society. For example, the eldest son or the first child of a family is usually expected to be the heir of the family and to take care of his or her parents. Parents also tend to expect the child to continue a close relationship and cooperative ties with them for a long time, and this is communion in other words. Other factors include how many siblings are in the family, the birth order and other structures by sex. When a family has sons and daughters, differences by sex are obvious among the children, and parents may conduct parenting by sex in accordance with their intentions of agency for boys and communion for girls. In contrast, when a family has an only child or some children who are siblings of the same sex, parents have fewer opportunities to be conscious about the sex of each child. Thus, in such a family, parenting by sex may be conducted less.

The following predictions are made and discussed in relation to the third purpose of this study. In a family with a sibling structure of boys and girls mixed together, parents are likely to invest hope in their children for their maintaining close relationships with the parents, and this communion-related expectation by parents is stronger for sons than for daughters. In a family with an only child, the difference by sex is likely to be small. In a family with a sibling structure of either only boys or only girls, parents may invest such a hope more strongly in the first child than, for example, in the

second child. Furthermore, the tendency to expect communion from boys and agency from girls is stronger in families with a sibling structure of boys and girls mixed together than in families with a sibling structure of either only boys or only girls.

During the survey in this study, the participants (married couples) were asked to answer about their own mothers (the grandmothers of the participants' children). This is because mothers are traditionally the center of child-raising in Japan as explained earlier, and thus, possibly, mothers are the ones who conduct parenting by sex in each family.

### Method

The participants of this survey were mothers and fathers (119 mothers aged on average at 33.2 years old; 79 fathers aged on average at 36.1 years old) whose children attended either private nurseries or home nurseries in prefectures S and H in Japan. Among these participants, 69 married couples answered the questionnaire and unpaired 50 mothers and 10 fathers answered the questionnaire.

The participants whose children were attending private nurseries were asked by the nurseries to answer to the questionnaires anonymously, and the questionnaires were collected later. The questionnaires answered by each married couple were put in envelopes separately and sealed separately, and then the two envelopes were put in a bigger envelop together before being submitted. The participants whose children attended home nurseries were asked to answer a questionnaire which was given to each participant by hand

## The contents of the questionnaires

The contents of the questionnaires are as follows: Firstly, the participants were asked about their age, their working arrangements, after-hours work, and the age and sex of all of their children.

Secondly, fourteen questions were formulated in order to ask the participants about what kind of parenting by sex they received from their own mothers (the grandmothers of the children). A Likert-type scale was adapted to this survey, and each item on the scale had four-level responses (see Table 9.1).

Thirdly, the same questionnaires were used as the questionnaires of

Table 9.1 The results of principal component analysis of discipline from grandmother to parents to children (Varimax rotated)

Av.S	Contact		Loadings	
Sub-scale	Scale Hems	П	П	Ш
	1. My mother taught me to be a person who is liked by others.	.78	.14	.10
	2. My mother taught me to be kind to others.	92:	60:	80.
Communion-expectation	3. My mother taught me to be a good mother.	.73	.40	.03
	4. My mother taught me to think a great deal of family and that it is acceptable that I don't have a high education.	89.	03	03
	5. My mother taught me to be a person whom my family will depend on in the future.	29.	.50	.04
	6. My mother taught me to study hard and find an occupation which is recognized in society.	02	89.	.16
	7. My mother taught me to be a child on whom parents can depend in the future.	.35	.64	.17
Agency-expectation	8. My mother taught me to care about my job more than domestic affairs in the future, in order to support my future family well.	22	.63	.14
	9. My mother told me to graduate from a four-year university.	.03	.61	07
	10. My mother taught me not to cry and make a fuss.	.32	.58	.05
	11. My mother expected me to live with or near my parents after I got married.	.16	60.	.84
Expectation for parent-child	12. My mother was thinking that I would spend some time together with her.	.59	02	09.
relational continuation	13. My mother invested the hope in me that I would inherit from my family.	21	.37	.58
	14. My mother was thinking that I would come to her for advice even after I grew up.	.63	00.	.51
(Rejected)	15.My mother taught me to help her with cleaning and cooking	.42	12	.03
	Factor contribution after rotation	3.91	2.57	1.77
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Note: The item of No. 3 was "My mother taught me to be a good father." for father participants.

Table 9.1, and the participants were also asked whether they were conducting parenting by sex of their children. The participants (who are the mothers and fathers of the children at nurseries) were asked to answer about each of their children. For example, the scale item is about parenting by sex conducted by the mothers (who are the grandmothers of the children who were at nurseries) of the participants. The question said, "I was told by my mother that she wanted me to graduate from a four-year university," and the scale item corresponding to this is, "I am hoping ( ) will graduate from a four-year university." Each participant was asked to write an alphabetical letter in the brackets by selecting one from: the eldest son A, the second eldest son B, the third eldest son C, the eldest daughter D, the second eldest daughter E, and the third eldest daughter F. If the participants conducted parenting by sex of each of their children, they scored 1 point; if no parenting by sex was conducted, the participants scored 0 points.

Fourthly, fifteen items asking the participants' views of child-raising were formulated by making reference to Fukumaru (2003) and Meguro & Yazawa (2000) (see Table 9.2). A higher score suggests a strong tendency towards thinking that child-raising is a role only for mothers. A lower score suggests strong tendency towards thinking that child-raising must involve both mothers and fathers.

Fifthly, twenty-four items of the CAS (Communion-Agency Scale; Dohi & Hirokawa, 2004) were used in order to measure the communion and agency of the participants. The CAS is a Likert-type scale with four-level responses where each level consists of 6 items, and the scores obtained from four sub-scale items were calculated. The results suggest that the higher the score is, the stronger the traits (positive-agency, positive-communion, negative-agency, and negative-communion) are.

### Results

Working hours of mothers and fathers and items for discipline by sex

Table 9.3 shows the details of the working schedules for mothers and fathers and whether they do after-hours work or not, and Table 9.4 shows the average work-hour/a day.

A principal component analysis was conducted on 15 items related to discipline by sex conducted by the grandmothers of children at nurseries towards the mothers and fathers of the children. Based on a scree plot, three

### Table 9.2 Scale items of views of child-raising

- 1. The mother is the best person for raising children.
- 2. The person who understands the children is the mother.
- Child-raising is important, and thus mothers had better concentrate on raising their children.
- 4. It is acceptable that mothers receive help from other people for child-raising (reversed item).
- 5. The role of fathers is to earn money for the education of their children.
- 6. Fathers have to support their family financially, and thus mothers will end up raising the children.
- 7. The person who is more suited to taking care of children when they get ill is the mother, rather than the father.
- 8. Females who prioritize themselves over their children should not be mothers.
- 9. Not only husbands but also wives should work to support the family budget (reversed item).
- 10. It is the father's role to bathe his children.
- 11. When children are small, mothers had better take care of them.
- 12. Fathers should be involved with their children when the children grow up a little and become active.
- 13. The father's role in child-raising is to support the child's mother (reversed item).
- 14. There are suitable ways to bring up boys and there are suitable ways to bring up girls.
- 15. There is no need for mothers to work outside the home while receiving help from other people in taking care of their children.

**Table 9.3** The details of working schedules for mothers and fathers with and without after-hours work

		W	orking schedu	ıle		With and after-hour	l without s work
	Full time	Temporary	Dispatched	Part-time	Free-time*	With	Without
Mother	40 (37.4 %)	0	6 (5.6 %)	53 (49.5 %)	8 (7.5 %)	39 (37.9 %)	64 (62.1 %)
Father	68 (88.3 %)	2 (2.6 %)	1 (1.3 %)	0	6 (7.8 %)	56 (76.7 %)	17 (23.3 %)

Notes: The figures in ( ) show a percentage when each mother and father is considered as 100 %.

\* Including self-employed business, work paid per job, and freelance work.

Table 9.4 Mean and SD of scale scores for mothers and fathers

	Middle aciat of the color	Mother	ıer	Father	er	*	
	Middle point of the scale	Mean	SD	Mean	SD	enre^-	ย
Work hours per day (absence from house)		9.62	1.70	13.1	2.52	9.72	* * *
Communion-expectation from grandmother (4)	10.0	10.48	3.16	9.62	3.09	-1.85	-;
Agency-expectation from grandmother (6)	15.0	11.29	3.17	12.56	4.28	2.19	*
Expectation for continuing the relations between parents and children from grandmother(4)	10.0	8.20	2.70	7.71	2.91	-1.21	n.s.
Views of child-raising	37.5	37.87	6.40	39.32	06.90	1.46	n.s.
Positive-communion (6)	15.0	19.59	2.74	18.99	3.13	-1.42	n.s.
Positive-agency (6)	15.0	16.12	3.23	18.21	5.40	3.38	* *
Negative-communion (6)	15.0	15.75	3.04	14.04	3.44	-3.63	* * *
Negative-agency (6)	15.0	10.99	2.67	12.08	4.02	2.10	*
Communion-expectation on all male children (4)	2.0	3.33	.71	3.26	.81	49	n.s.
Agency-expectation on all male children (6)	3.0	3.41	1.46	3.21	1.57	78	n.s.
Expectation for continuing the relations between parents and children on all male children (4)	2.0	1.28	1.04	1.34	1.23	.29	n.s.
Communion-expectation on all female children (4)	2.0	3.43	.94	3.27	1.07	87	n.s.
Communion-expectation on all female children (6)	3.0	2.62	1.25	2.29	1.35	-1.29	n.s.
Expectation for continuing the relations between parents and children on all female children (4)	2.0	1.74	.95	1.27	66:	-2.55	*

Notes: The figures in ( ) are the number of scale items.  $\dagger p < .10, *p < .05, **p < .01, ***p < .001$ 

principle components were selected. The number of components was limited to three, and the component loading resulting by varimax rotation is as shown in Table 9.1. The items for the first principle component included being liked by other people, thinking a great deal of one's family, and being a sweet and friendly child. Thus, it was named "communion-expectation." The second principle component consisted of many items related to being recognized in society, being a capable worker and being able to support one's family economically, and this was named "agency-expectation." The third principle component consisted of many items related to closeness and communion commonly found in relationships with parents, and thus this component was called "expectation for parent-child relational continuation." The items which rated highly over one of the three principle components and did not rate highly over other multiple principle components were selected as scale items, and the scale values were calculated by a simple addition in order to determine sub-scale scores. The "communion-expectation" scale consists of 4 items and  $\alpha = .804$ , the "agency-expectation" scale consists of 6 items and  $\alpha = .717$ , and the "expectation for parent-child relational continuation" scale consists of 4 scales and  $\alpha = .705$ . All of the sub-scales were identified as sufficiently reliable. Table 9.4 shows the simple statistics of the scale scores.

# Discipline by sex conducted by mothers, fathers, and grandmothers

The levels of discipline by sex conducted by grandmothers were compared with mothers and fathers by using a t-test for every sub-scale. It was found that grandmothers have a tendency to have a higher "communion-expectation" for their daughters (mothers) than for their sons (fathers) (t (188) = -1.85, p < .10). On the other hand, they have a tendency to have a higher "agency-expectation" for their sons (fathers) than for their daughters (mothers), and the difference was significant (t (121.7) = 2.19, p < .05). No significant difference was found in the "expectation for parent-child relational continuation" (t (191) = -1.21, n.s.) (see Table 9.4).

Among the sub-scales ("communion-expectation," "agency-expectation," and "expectation for parent-child relational continuation") which were also used as the sub-scales for the category of grandmother's parenting by sex, the items which correspond to the discipline by sex conducted by mothers and fathers were scored as their (mothers and fathers) discipline by sex of their children. The results indicated that both mothers and fathers had a high "communion-expectation" for their children with no difference

by sex, but that "agency-expectation" by mothers and fathers was high for their male children and not high for their female children. "Expectation for parent-child relational continuation" by mothers and fathers was not very high for their children regardless of sex, and especially fathers had a significantly lower "expectation for parent-child relational continuation" for their daughters in comparison to the expectation held by mothers (t (113) = -2.55, p < .05) (see Table 9.4).

In addition, in order to investigate whether mothers and fathers conduct discipline by sex differently among their eldest son, their eldest daughter, their second eldest son, and their second eldest daughter, a paired t-test was used with the mother and father of each family as its pair. The results showed that only "expectation for parent-child relational continuation" for the eldest daughters was significantly higher among mothers than fathers (t (114) = -2.29, p < .05).

# The intergenerational relationships of discipline by sex and the connection between communion and agency

First, an unpaired t-test was conducted in order to examine if there was a difference between communion and agency, and the result indicated that fathers had a significantly higher positive-agency than mothers (t (192) = 3.38, p < .001). Similarly, fathers had a significantly higher negative-agency than mothers (t (121.7) = 2.10, p < .05). No significant difference was found in positive-communion between mothers and fathers (t (194) = -1.42, t n.s.). Mothers had significantly higher negative-communion than fathers (t (193) = -3.63, t < .001) (see Table 9.4).

Second, multiple regression analyses were conducted on each mother and father in order to examine if communion and agency in both negative and positive aspects were determined by the discipline by sex conducted by grandmothers. Table 9.5 shows a valid model in accordance with the results. The model shows that the positive-communion of both mothers and fathers were heightened by the communion-expectation from grandmothers. Differences are, however, found in other determinant factors between mothers and fathers. The positive-communion of mothers was heightened as grandmothers had had a low agency-expectation for them, and the positive-communion of fathers was heightened as grandmothers had had a low "expectation for parent-child relational continuation" for them. Positive-agency was heightened only among mothers as grandmothers had had a "communion-expectation" for them.

**Table 9.5** The determining factors of communion and agency of mothers and fathers (standard partial regression coefficient  $\beta$  of multi-regression analysis)

				Dependent variable	ole	
		Mother's Positive-communion	Mother's Positive-agency	Mother's Negative-agency	Father's Positive-communion	Father's Negative-communion
	Communion-expectation from grandmother	.432***	.366***	259*	.496***	.339*
Independent '	Agency-expectation from grandmother	280**	154	.285**	.175	393*
	Expectation from grand- mother for continuing relations	.003	061	132	298*	.333**
F-value		7.101***	4.587**	3.478*	8.783***	6.863***
Adjusted $R^2$		.139	.087	.062	.247	.201

Note: \*p < .05, \*\*p < .01, \*\*\*p < .001

Grandmothers' "communion-expectation" and "expectation for parentchild relational continuation" had raised fathers' negative-communion, and grandmothers' "agency-expectation" had weakened fathers' negative-communion. Grandmothers' "agency-expectation" had raised mothers' negativeagency, and grandmothers' "communion-expectation" had weakened mothers' negative-agency.

Third, multiple regression analyses were conducted in order to examine whether discipline by sex conducted by mothers and fathers was determined by the discipline by sex conducted by grandmothers. Table 9.6 shows a valid model in accordance with the results. Grandmothers' "expectation for parent-child relational continuation" determines the "expectation for parent-child relational continuation" held by mothers for their sons, and this suggests that parenting by sex is passed on from parents to their children. Mothers' "communion-expectation" for their daughters is heightened not by the "communion-expectation" held by grandmothers but by the fact that "agency-expectation" is high. The determinant factor for "expectation for parent-child relational continuation" for female children is similar between mothers and fathers, and when the expectation was held high by grandmothers, then mothers and fathers also had a high "expectation for parent-child relational continuation."

## Views held by mothers and fathers on child-raising

A principal component analysis was conducted on all of the 15 items related to views on child-raising. Based on the results of a scree plot, it was judged reasonable to compile the components into one, and thus the scores of the 15 items were summed up and this was used as a scale score for how child-raising was viewed. The Cronbach's alpha was .711. As shown in Table 9.4, the score for mothers was not different from the middle point of the scale (37.5) (t (108) = .611, n.s.), the score for fathers was significantly higher than the middle point, and it was found that there is a tendency for child-raising to be seen as a job for mothers (t (75) = 2.30, p < .05). No significant difference was found between mothers and fathers (t (183) = 1.46, n.s.) as to how child-raising was viewed. However, when a paired t-test was conducted using a mother and father of each family as its pair, it was found that fathers (M = 34.32, SD = 6.45) have a stronger tendency than mothers (M = 32.12, SD = 5.36) to think that child-raising is a job for mothers (t (61) = -2.30, p < .05).

**Table 9.6** The determining factors of parenting by sex on male and female children by mothers and fathers (standard partial regression coefficient  $\beta$  of multi-regression analysis)

				Depen	Dependent variable		
		From mother On male children Expectation for parent-child rela- tional continua-	From mother On female children Expectation for parent-child rela- tional continuation	From mother On female children Communion- expectation	From father On male children Expectation for parent-child relational continua-	From father On female children Expectation for parent-child rela- tional continuation	From father On female children Agency-expecta- tion
	Communion- expectation from grandmother	.134	.005	.279	.289†	.257	.119
Independent variable	Agency- expectation from grandmother	085	188	349**	.206	017	.374*
	Expectation from grnadmother for continuing the relations	.329**	.437**	.145	.064	.348*	890:
F-value		4.497**	4.959**	4.278**	4.737**	4.887**	3.933*
Adjusted R <sup>2</sup>		.113	.157	.131	.180	.213	.177

Note: † p < .10, \*p < .05, \*\*p < .01

### Sibling structure and discipline by sex

The ratios of the sibling structures of all 129 families were: families with only a son 21.4 %, families with only a daughter 15.5 %, families with both a son and a daughter 17.5 %, families with an eldest son and second eldest son 17.5 %, families with an eldest daughter and second eldest daughter 10.7 %, and families with 3 or more siblings 13.6 %. Calculations were made as follows: for the score of the expectation invested in a child when the family has only son; for the average score of the expectation invested in both sons when the family has two sons; and for the average score of the expectation invested in three sons when the family has three sons. These scores were used as the scores of discipline by sex for all male children. The scores of discipline by sex for all female children were also calculated in the same way.

As seen in Table 9.7, first, a paired t-test was carried out for the differences of means in the scores of discipline by sex conducted for all the male children and all the female children in families that had male and female siblings mixed together. The results showed that "agency-expectation" was significantly higher for all the male children than for all the female children (t (61) = 6.46, p < .001) and that "communion-expectation" was significantly higher for all the female children than for all the male children (t (67) = -3.34, p < .01). However, no significant difference was found for "expectation for parent-child relational continuation" between all of the male children and all of the female children (t (66) = .48, n.s.).

Second, an investigation was conducted into whether the difference which was found for the sibling structure of a son and a daughter mixed together, as shown above, becomes smaller for the sibling structures with either an only son or only daughter. According to the scale score, "communion-expectation" is higher for the sons of families with an only child than for the sons of families with male and female siblings mixed together. In contrast, the tendency to invest "communion-expectation" in the daughter of families with an only child was lower than for the daughters of families with male and female siblings mixed together. Accordingly, an unpaired t-test was conducted on the sons and daughters of families with an only child, and no significant difference was found for "communion-expectation" (t (66) = .754, n.s.). This was the same as the case of a sibling structure where male and female children are mixed together in that more agency is expected from sons than daughters by mothers and fathers (t (66) = -3.01, t0) and in that no difference was found in the "expectation for parent-child

Table 9.7 The scores of discipline by sex according to sibling structures and the results of t-test

	Com	Communion-expectation	ectation	Ą	Agency-expectation	tation	Expectat	ation for parent-chi	Expectation for parent-child relational continuation
	Mean	QS	t-value	Mean	SD	t-value	Mean	SD	t-value
-Comparison of male and female children with a mixed male and female sibling structure. (Paired 1-test)	ale and fema	le sibling si	tructure.> (Paire	d t-test)					
For all male children	3.15	08.	-3.34**	3.39	1.60	6.46***	1.45	1.22	.48
For all female children	3.46	.87	(df = 67)	2.52	4.1	(df = 61)	1.40	96:	(99 = fp)
-Comparison of male and female children in families with an only child> (unpaired t-test)	an only chile	d> (unpaire	d t-test)						
For male children	3.45	99.	.754	3.50	1.50	3.01**	1.36	1.10	-1.24
For female children	3.29	1.12	(99 = fp)	2.46	1.06	(99 = fp)	1.71	1.08	(99 = fp)
<comparison children="" families="" in="" male="" of="" only="" siblings="" with=""> (Paired t-test)</comparison>	ly> (Paired t-	-test)							
For the eldest son	3.46	.73	1.63	3.32	1.34	1.81(*)	1.16	1.05	2.62*
For the second eldest son	3.24	1.08	(df = 49)	2.98	.47	(df = 46)	96.	1.00	(df = 48)
<comparisons children="" families="" female="" in="" of="" only="" siblings="" with=""> (Paired t-test)</comparisons>	only> (Paire	d t-test)							
For the eldest daughter	3.19	1.19	.73	2.58	1.27	1.39	1.64	1.02	.83
For the second eldest daughter	3.11	1.19	(df = 35)	2.36	1.29	(df=35)	1.56	1.05	(df = 35)
<comparisons and="" between="" children="" families="" female="" male="" mixed="" of="" only="" siblings="" the="" together="" v.s.="" with=""> (unpaired t-test)</comparisons>	hildren only	v.s. male s	iblings of famili	es with mal	e and femal	e children mixe	d together>	(unpaired t-1	test)
For siblings of families with male children only	3.43	69:	***************************************	3.27	1.43	5	1.17	1.01	1.50
For male siblings of families with male and female children mixed	3.15	08.	(df = 143)	3.39	1.60	(df = 133)	1.45	1.22	(df = 142)
<comparisons and="" between="" children="" families="" female="" male="" mixed="" of="" only="" siblings="" the="" together="" v.s.="" with=""> (unpaired t-test)</comparisons>	e children on	ly v.s. fema	tle siblings of fa	milies with	male and fe	male children n	nixed togeth	er> (unpaire	d t-test)
For siblings of families with female children only	3.24	1.14	116	2.45	1.13	30	1.74	1.02	1 01
For female siblings of families with male and female children mixed	3.46	.87	(df = 114)	2.51	1.41	(df = 109)	1.40	96:	(df = 113)

Note: † p < .10, \*p < .05, \*\*p < .01, \*\*\*p < .001

relational continuation" between male and female children (t (66) = -1.24, n.s.).

As a third analysis, a paired t-test was conducted on the difference of gender expectations between the eldest child and the second eldest child of each family that has siblings of the same sex. The results showed that a significant difference (t (48) = 2.65, p < .05) was found in the "expectation for parent-child relational continuation" between the sons of families with siblings of the same sex, and that this difference in tendency (t (46) = 1.81, p < .10) was also found in "communion-expectation." In both cases, expectation was invested more in the eldest sons than in the second eldest sons.

Fourth, a *t*-test was conducted concerning the prediction that sons of families with siblings of mixed sexes receive stricter discipline by sex than the sons of families with male siblings only. The results showed that "communion-expectation" for all of the male children was higher in the case of families with male children only than in the case of families with siblings where males and females were mixed together (t (143) = -2.22, p < .05). Similarly, a *t*-test was conducted on the daughters of families with daughters only and on the daughters of families where the both sexes were mixed, and the score for "expectation for parent-child relational continuation" on daughters was higher for the daughters of families with daughters only (M = 1.74, SD = 1.02) than for the daughters of families where siblings of both sexes were mixed (M = 1.40, SD = 96) (t (113) = -1.8, p < .10).

### Discussion

Gender socialization in the form of discipline by sex that is still found today

The first purpose of this study was to identify whether discipline by sex at home has been passed on from the generation of grandmothers to the generation of their children (mothers and fathers in this study), and whether discipline by sex so passed on causes differences between communion and agency in mothers and fathers.

A tendency in discipline to expect more agency from males than females and more communion from females than males was found in both the generation of grandmothers and the generation of mothers and fathers. No difference by sex was found in "expectation for parent-child relational continuation." Mothers and fathers had communion and agency socially

in accordance with existing gender stereotypes. This means that agency of both positive and negative aspects is higher among fathers than mothers, and communion of negative aspects is higher among mothers than fathers. These results indicate that gender socialization at home has continued since the time when grandmothers were raising children in the form of discipline by sex.

This study was conducted into mothers and fathers who were over 30 years old in 2008, and many participants can be estimated as having been born around 1975. In terms of the changes in family structure in Japan, the ratio of wives becoming full-time housewives was at its highest in 1975, and thus many of the grandmothers in this study were full-time housewives when they were raising their children. However, the mothers and fathers who are the participants of this study were working while their children were in nurseries. This indicates that the lifestyles between the generation of mothers and fathers in this study and the generation of their own mothers (the grandmothers of the children) are different in various aspects, at least in this study, though similar forms of discipline by sex were identified in both generations. This in turn suggests that though the number of dual-income families is increasing today, wives are working while still prioritizing role sharing between a wife and husband. Moreover, the wives of the dualincome families are working in the belief that they can maintain roles by sex. Therefore, discipline by sex today is still the same as it was formerly.

The influence of discipline by sex by grandmothers (mothers of the participants in this study) on the Gender Personality of mothers and fathers

Among the mothers and fathers of this study, their difference by sex made no difference to the level of "expectation for parent-child relational continuation" held by the mothers. This suggests that there is a declining tendency for people in Japan today to follow the system of patriarchy and to expect the eldest son of family to be the family's heir. The scale items made for this study covered the types of expectations which were held by parents for their children to be the people who take care of them, as well as an expectation of them being the heir of the family. It was predicted that parents probably expect their male children to be the heirs of the family and their female children to be the people who take care of them. The scale should be improved so that it will clarify exactly what kind of parent-child relation-

ship should be measured by the scale.

Table 9.5 indicates the connection between parenting by sex by grandmothers and the communion and agency of their own children (mothers and fathers) in each family, and it shows that "communion-expectation" by grandmothers is a factor which increases the positive-communion of both mothers and fathers. However, "agency-expectation" by grandmothers does not increase the positive-agency of mothers. Whether the positive agency of fathers is increased through "agency-expectation" by grandmothers is not clear, since the model's multiple regression analysis was not valid concerning the positive-agency of fathers. Since the model was not valid, however, "agency-expectation" by grandmothers is probably not a valid determinant factor. This suggests that the tendency for children to be socialized by gender expectation from their parents is stronger for "communion-expectation" than "agency-expectation." This may be because schools and places outside the home provide more opportunities for children to recognize the importance and values of agency, while expectation for—and the values of communion are socialized more at home.

The study identified that "agency-expectation" from grandmothers directed at their daughters (the mothers in families) increases the negative-agency of the daughters (the mothers in families) and suppresses their positive-communion. The grandmothers' "communion-expectation" as well as their "expectation for parent-child relational continuation," when invested in their sons (the fathers in families), increases the negative-communion of the sons (the fathers in families). These results suggest that discipline by sex conducted by grandmothers does not necessarily increase positive personality traits and suppress negative personality traits. Gender stereotypes in society make it difficult for children to have characteristics which are not in accordance with the social expectations formed by their sex. In other words, even if parents expect agency for their daughters and communion for their sons, such communion and agency do not easily develop in their children. This result makes us realize that even socialization at home is related to gender stereotypes in society.

## Gender roles for child-raising which are still seen at home today

The second purpose of this study was to examine how gender is related to child-raising as found in the generation of mothers and fathers who are currently engaging in child-raising, and whether there is a difference between mothers and fathers in families in their view of child-raising. Based on the scale scores for the group of mothers and the group of fathers, it was found that only fathers hold an attitude that child-raising is the role of mothers. When a comparison was made between mothers and fathers in the same family, it was found that fathers have a stronger tendency to think that childraising is a role of mothers. This suggests that, as family life is sustained, role sharing becomes fixed and this prevents a wife and husband from cooperating each other in child-raising. Today, terms such as an "gender-equal society" and "gender free" have come to be widely used, and this shows that people tend to look for gender equality in society as a whole. The number of the individuals with androgynous personalities has also increased in the last 20 years (Yukawa & Hirooka, 2003). Expectations by gender, such as listing names by sex, placing a disproportionate emphasis on boys for the role of leader and placing the same emphasis on girls for adjunct roles, are diminishing in the field of education today. However, interpersonal relationships among family members are a private area in society and are not easily observed (Dohi, 2000). This is partly why relationships among family members are only slowly affected by social changes, and role sharing and other gender-related roles still exist in the home.

# The relationship between the structure of siblings and discipline by sex

The third purpose of this study was to analyze discipline by sex while considering the sibling structure in which each child is brought up. As described earlier, discipline conducted by mothers and fathers varies in accordance with gender stereotypes, but the differences are also affected by the sibling structure of each family. For example, in the case of a family with an only child, "communion-expectation" is high if the child is boy, and "communion-expectation" is higher in a family with boys only than in a family with male and female siblings mixed together. Though parents think communion is important for a male child, they feel it is less important for a male child to have communion if the child has other siblings, especially female siblings. In families with male and female siblings mixed together, the personality of each sibling is buried in the whole and parents may feel that communion and agency are balanced well when they think of their children as a whole. However, both agency and communion are important for each child for his/her independence, regardless of sibling structures. It was also found that "agency-expectation" and the "expectation for parentchild relational continuation" are placed more heavily on the eldest son than

on the second eldest son in a family that has sons only. The results indicate that child-raising is still conducted under a slight conscious of the system of patriarchy. However, the number of children born in families has been decreasing. This makes it difficult to invest hope in children in accordance with their biological sex. Relationships between parents and children will be affected by the individual circumstances of each family and the expectations placed on children will diversify in the future. In addition, the motherfather generations examined in this study did not show a tendency to hope to live with their son and to maintain their connections based on the system of patriarchy. This suggests that the idea of family and ancestors, such as inheriting through the family and taking care of the tombs of one's ancestors, has already been diminished. Therefore, the socialization of genders in relation to family inheritances is likely to be weakened further.

The survey in this study was conducted only on the mother-father generation, and responses about parenting by sex carried out by their own mothers (the grandmother-generation) were not collected from surveys conducted on their own mothers. It would be better to collect responses directly from the grandmother and grandfather generation, and this is a point which should be improved in the future.

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# The relationships between family-unit orientation, Gender Personality, and cooperative relationships for the independence of family members

This chapter advocates the notion of "family-unit orientation." "Family-unit orientation" is a notion developed by applying the concept of "couple-unit orientation" to the relationship of a wife and husband, the relationships between children and parents and also the family relations that include a consciousness of family and ancestors. "Family-unit orientation" is about the unique sense of unity held by family members. The study in this chapter investigates, using a developed scale-item, whether "family-unit orientation" is a psychological factor which determines cooperative relationships among family members, whether the orientation strengthens the gender roles of a wife and husband, and how it relates to the Gender Personalities of the wife and husband in each married couple. This chapter includes three studies: a survey using interviews of married couples in order to develop a measurement scale for "family-unit orientation"; a survey using questionnaires in order to determine the scale items for "family-unit orientation"; and a survey of the relationships within "family-unit orientation," personalities, and sharing housework between a wife and husband.

# What is "family-unit orientation"?

The psychological associations between an individual and a group have been presented as a sense of unity, a sense of belonging, and the identification of group members (Karasawa, 1991) as well as taking into account group self-concepts (Kakimoto, 1995) in general. However, family members as groups have an aspect which is different from other groups and is unique to families. Part of the uniqueness of family groups is a sense of uni-

ty which is extremely strong among the members of a family and a sense of a bond within the whole family, between a wife and husband, and between parents and children. These relationships last for a very long time. The sense of unity which is unique to family groups is "family-unit orientation." The concept of "family-unit orientation" is developed here by applying "couple-unit orientation," in which a wife and husband form the minimum unit of social life as described in Chapter 8, to family relations.

The following factors are also related to the sense of unity among family members and their sense of belonging. The first factor is a consciousness of family and ancestors based on the system of patriarchy which had existed and spread widely among ordinary Japanese people by the Meiji era (1868-1912). According to Naoi (2000), the consciousness of family and ancestors materialized through the teachings of civil law and Shushin, which is a kind of moral teaching about proper conduct, and this consciousness is based on the moral codes of family and ancestors which lasted till the end of World War II. Naoi also pointed out that the consciousness of family and ancestors still remains in Japanese society because of widespread belief that children should live with their parents, wives should bear children, and wives should follow the customs of their husband's family. According to Takahashi (1987), family continuation, a shared household and alimentation are family norms which exist even today, and inequity among family members is a family norm which has changed. The second factor related to a sense of unity among family members and their sense of belonging is cocooning. Cocooning is based on the family image that has existed in Japan since the Taisho era (1912-1926). This factor, moreover, includes what Ochiai (1997) called the "post-war family system" and "egalitarian reproduction." The "post-war family system" is a belief that wives are expected to be full-time homemakers and "egalitarian reproduction" is belief that every female has to marry and have a family with two or three children. These kinds of beliefs are likely to be kept to generation after generation, and they are held to in families today.

# Needs of cooperation among family members

This study identifies how "family-unit orientation" relates to Gender Personality and investigates how its orientation relates to the cooperative structure among family members. A family has reproductive, economic, protective, social, and recreational functions. A family is based on interper-

sonal relationships of emotional integration, intimacy, and interdependence among its members. A family also has characteristics which are found in a work group that achieves a variety of tasks, in addition to characteristics as a psychological group which provide a profound and wide range of emotional satisfactions (Morioka, 1997). A family also has uniqueness in that long-lasting cooperative ties are formed easily beyond generations. Such cooperative ties are very important for keeping individuals in the group as well as promoting the independence of each family member.

The term "independence" means here that each member is conscious of him-/herself and can make decisions by him-/herself, and that each member can consider, judge, and select how he/she should behave and take action based on this (Giddens, 1992). The independence of family member includes the actions taken by children in order to be independent mentally and physically from their parents, to be adults who can live up to their social responsibilities, and living while receiving support from the social services so that one can avoid a situation where elderly members of the family have to depend thoroughly on their family.

The transition has been made from "work for males and the home for females" to "work and family for males and females," and social attention is now focused highly on how a wife and husband become independent economically, mentally, and physically from each other. This is happening because of: 1) a stronger tendency in society to aiming for male-female coexistence and gender equality, of which the doctrine is respect for the individual; 2) the limits to Japanese-style welfare which relies on a cooperative relationship among family members, since the society faces issues of low fertility and life-span extension; 3) changes to the implicit social contract between companies and workers after the war. The social contract implies that for males, as long as they devote themselves to their companies and share the company's fate, their employment is guaranteed, and for females, as long as they concentrate on their household affairs as wives who support their husbands, they are set for life (Osawa, 1998); 4) the possibility of making females "socially vulnerable" persons at home due to the difference in economic potentials between a wife and husband (Dohi, 2001a); 5) a significant increase in the rate of suicide committed by middle-aged and older males, caused by financial reasons since only they bear this responsibility in the home (Dohi, 2003); and 6) the possibility that a social life which places disproportional balance on either work or the home causes illness related to the personality and Type A behavior (Dohi, 2001b), and so on.

Accordingly, a survey in Study I was conducted in order to collect data for the scale items of "family-unit orientation" in Study II. The survey was conducted using interviews of double-income (wife and husband) extended families by asking them questions related to cooperation among their family members and about their "family-unit orientation."

# Study I: Survey interview of wives and husbands of doubleincome extended families

The contents and method of the interview, and the main attributes of the participants

Interviews were conducted of six couples consisting of wives and husbands of double-income extended families (including self-employed people). The wives and husbands were living together with over two generations of family members in S city, H prefecture, in Western Japan. These participants

Table 10.1 The contents of interviews of wives and husbands of double-income extended families

General feedback	<ul> <li>State of the implementation of interviews</li> <li>Impression from the conversation of marriage couples</li> <li>Topics for heated conversation</li> <li>Others</li> </ul>
Cooperation within marriage and role sharing	<ul> <li>Details of role sharing</li> <li>Senses of satisfaction and fairness of cooperative relations</li> <li>Resolving a sense of dissatisfaction</li> <li>Responsibility for family budget</li> </ul>
Cooperation with grandparents-generation	<ul> <li>Details of cooperation</li> <li>Sense of psychological burden and indebtedness</li> <li>Ways of resolving the sense of burden</li> <li>Guessing how parents (grandparent-generation) feel</li> <li>Keeping balance with parents (grandparent-generation) who are not living with their children</li> <li>Keeping balance with other siblings</li> </ul>
Family-unit orientation	<ul> <li>Family identity</li> <li>Personal (occupational) identity</li> <li>Family-unit and economic independence by females</li> <li>Sense of unity of marriage couples</li> <li>Interpersonal relations with people outside the family</li> <li>Agreed cooperative relations among family members</li> </ul>

Table 10.2 The main attributes of the interviewed couple

Interviewed couple	1. Couple Y	2. Couple H	3. Couple U	4. Couple O	5. Couple S	6. Couplet K
Day on which the interview was conducted	August 1	August 7	August 11	August 23	August 25	September 1
Age of the married couple	Husband 53 Wife 50	Husband 62 Wife 56	Husband 39 Wife 37	Husband 47 Wife 44	Husband 40 Wife 38	Husband 33 Wife 32
Ages of children	Oldest daughter 25 Oldest son 22 Second oldest son 18	Oldest daughter 32 Oldest son 30 Second oldest daughter 28	Oldest daughter 9 Second oldest daughter 4	Oldest daughter 17 Second oldest daughter 15 Oldest son 14	Oldest son 7 Oldest daughter 4 (in nursery)	Oldest daughter 3 Second oldest daughter 0
Age of parents living with inter- viewed couple	Husband's father 80 Husband's mother 79	Husband's mother 95	Husband's mother 65	Husband's mother 74	Husband's father 76 Husband's mother 70	Husband's father 69 Husband's mother 61
Time when the family started living together	After marriage	After marriage	When oldest child became 1 and wife suggested it	After marriage, on the second floor of a house where the first floor is an office	After maternal leave for the first child	At the end of maternal leave
Occupations of husband and wife	Both civil servants	Running a dairy farm (the wife is the first female farmer in S City)	Husband works for a company (technician) and wife has a computer-related job	Running a stationery shop (the wife was a Japanese language teacher at a private high school before marriage)	Working for a foreign company	Both civil servants
Occupations of the grandparents	Farmer growing rice	Used to run a dairy fam	Fulltime housewife	Almost no job except helping a little with the shop	Father an ex-civil servant, mother an ex-primary school teacher	Father a self-employed car- penter, mother a housewife who helps out occasionally
Arranged marriage or love match	Love match	Arranged marriage	Love match	Arranged marriage	Love match	Love match
Age and occupation of grandparents not living with the family	Father died 3 years ago, mother 78 years old	Farmer		Farmer with a side job	Self-employed running a shop	Father a fammer with a side job, mother running a cram school
Places where grandparents live who are not living with the fam- ily	The same city as the participant	Not the same city as the participant	Not the same city as the participant	The same city as the participant	Not the same city as the participant	Not the same city as the participant
Job hours of the married couple			Husband leaves home at 6:30 in the morning and comes home after 20:30, wife leaves home at 6:30 and comes home at 19:15	Husband works until after 19:00 in the evening, wife from 8:30 to 17:00	Completely flexible time, but husband leaves home earlier, wife comes home at 19:00	Husband works from 7:30 in the morning until 18:00 in the evening, wife works from 7:50 in the morning until 19:00 or 20:00 o:clock
Holidays of the wife and husband			Saturdays and Sundays for both	Sundays and holidays and every second Saturday	Saturdays and Sundays	
Child-raising and maternal leave	Before and after having a baby	(Family business)	There is no system but holidays are obtained after negotiating with company	(Family business)	One and a half years of maternal leave	Just over a year of maternal leave
Age of the siblings of husband	One younger brother	One older brother and three sisters	One older sister (family business with 3 children)	One older sister	Only child	
Age and occupation of wife's siblings	Older brother (living with mother and taking care of her)	One brother	Younger brother living with parents, 34 years old, younger brother's wife has a fulltime job and they have 3 children		Older brother inheriting parents' shop	Older brother

were found by the Human-Rights Promotion Department of the city. The interviews were conducted between 1 August and 1 September in 2001. The contents of the interviews are shown in Table 10.1. Each interview took one and half hours to two hours. Five couples had their interviews in a public place owned by the city and one couple in their own home. The attributes of the interviewed couples are shown in Table 10.2. Each interview was audio recorded first, and then a record on paper was made from the audio records.

# Double-income couples and cooperative relations among different generations

Each couple was asked at first about how they had decided to continue with their jobs after marriage and why they had decided to live with their parents. The purpose of the questions was to find determinant factors for cooperative relations between the parent-generation and child-generation, as well as the sense of unity of the family. The results of the interviews suggested that these decisions were largely influenced by the occupations of the participants and their parents and their housing conditions. The self-employed couple had decided to work and live as an extended family in order to inherit the family business, and the couples who worked outside the home lived with the grandparent-generation because of their intention of receiving the support from the grandparent-generation. For example, the parents of both couple H and the couple O were running family businesses and they decided to live as extended families at the beginning of their marriages. Both couples live in the homes of their parents, and both houses were big enough for an extended family. In the case of couple S and couple U, both couples worked outside their homes. They needed to have support from their parents in order to continue with their jobs and earn double incomes, and thus each couple bought a house big enough for an extended family in the city and invited their parents to live together with them. Couple Y and couple K worked outside while helping with business at home. Couple Y was a double-income couple but also they helped with the farm owned by their parents. Couple K was also a double-income couple, and one parent worked as a master builder and owned a big house with many relatives living nearby. The family of K was deeply involved with their relatives and in community activities. The following is a summary of what kinds of familyunit orientations are possible depending on the occupations of wives and husbands.

Family-unit orientation among families who run their own businesses

was as follows. Compared to the couples who are salaried employees, the self-employed couples receive more influence from their family and parents. Couple H work on a dairy farm owned by their parents. The husband of the couple was the youngest son of a family with five siblings. His parents, who lived together with him, did not treat him as a full-fledged worker but treated him like their employee, and this situation continued even after he got married. Couple H was not happy with the situation, and thus they worked hard together in order to find a way out of this unsatisfactory situation. This, according to the couple, promoted their bonding. The bond among generations does not necessarily become close by living together. Instead, their home may become a place where confrontations and competition occur between generations, or between a wife and husband. There was no sense of any feeling that their workplace was provided by their parents. Couple Y, part-time farmers, were a couple of civil servants. The husband is the oldest son of a family which owns a farm, and thus he had to work on the farm whenever he was not working at his job outside the family. The situations where the oldest son is expected to work for the family business and the youngest son is not treated as a full-fledged worker are traces of a kind of consciousness of the family and ancestors from the patriarchal system.

Nevertheless, different generations living under one roof affects not only the generation of wife and husband but also the generation of their parents. The mother of couple K used to attend a cooking school, go to a hot spring, grow vegetables, and had other hobbies before she started living with her child. However, she had to give up all of these things in order to take care of her grandchild. The mother has conflicted feelings as she would feel sorry for her grandchild if she had to put the child in a nursery in order for her to enjoy her hobbies.

In a case of a family business, living together with the generation of grandparents is not a promise of being giving support, and there are many cases where relations between generations are established against the will and intention of individuals. Meanwhile, there are cases that work as a way to establish wives' identity. The family of couple H had made an arrangement where the wife of the couple receives a salary for herself, though the amount is small. When she received the salary from the business owned by her family for the first time as an individual, she was happy to realize as this was the meaning of work. The wife of couple O used to be a Japanese language teacher at a high school. However, the school was a private school

of which the education philosophy was a dutiful wife and devoted mother, and this has caused female teachers there to give up their teaching jobs after a certain number of years. She was introduced to a male at a marriage meeting who was looking for a wife who could help in his shop after marriage. She decided to marry the self-employed male and take up this position as a replacement for her teaching job, though she was working with high pride in being an employee who received a salary in her own name. These cases show that families which provide a workplace for family members can help them establish their identity.

Family-unit orientation among a wife and husband who are employees was as follows. Wives and husbands who work for companies outside the family often rely on their parents for help with their domestic affairs. The wife of couple U often has to be on extended business trips and depends on her mother-in-law for all of the household chores. She describes herself as like a parasite. She said that she was thinking before marriage that her husband was capable of doing household chores and that her mother-in-law would understand about her daughter-in-law working outside the home. The wife of couple S married a male who is an only child in his family, and she was supposed to take care of his parents when they got older. Thus, she decided to be taken care of herself by his parents while they could do so, so that she would be happy to take care of them when they got older. The parents support the couple over doing household chores and the parents seem to be sure that their son and daughter-in-law will take care of them in the future.

In contrast, wives and husbands employed by businesses outside the home cannot think that the support which they received when their parents were young is the kind of support which they can promise in the future. The wives of couple S and couple Y have to prepare themselves to leave their jobs outside when they become busy taking care of their parents. They are also showing an attitude of respecting the lives of the parents and asking for their support at the minimum limit of they can offer. For example, couple U put their child in a nursery in accordance with the mother's schedule for doing her hobbies. This arrangement is made with an idea that the mother of the couple can do whatever she wants to do whenever she can, and she offers help to the couple by taking care of their child. Couple S also believe that living together under one roof doesn't meant that they can receive help from their parents in caring for the children, and it is wrong to expect the help automatically. In order to draw a clear line, they put extra effort into

cooking meals separately from their parents, which may appear a waste to some people, and they believe that this is a key to providing healthy cooperation among the three different generations.

This study shows that these couples do not feel much appreciation towards their parents who live together with them, at least over these points, and they are not planning to repay the kindness they receive from their parents already. The couples do not have much sense of working for an inheritance and the prosperity of their family, and they are working at jobs which are completely different from those their parents were engaged in before. In spite of this, they accept help from their parents. This is because they believe they are asking for help from parents within the realms of possibility, and also because this is based on reciprocity, namely that they will repay this kindness even though they are not repaying it properly at this point.

# Dual-careers with role sharing by sex and dual-careers that make individual independence possible

The participants of this study are all double-income couples. Looking at these couples from the viewpoint of the independent consciousness of individuals and family relationships, two types can be identified: one is a type of dual-career with role sharing by sex, and the other is a type of dual-career with an intention of individual independence. Gender consciousness at the workplace seems to determine these types.

Dual-career in accordance with role sharing by sex was as follows. When wives and husbands work for a business outside the family and receive their salaries separately and individually, it is often understood as a guarantee of their economic independence and individual independence. However, like the case with couple Y described in the following, even if the wife is a salaried worker, and even if she works in the same company as her husband, she is treated as the junior staff of her husband. Couple Y both work for the same city office. Both of them have no consciousness of role sharing by sex, but the wife has been treated as if she is the umbrella of her husband at the workplace. The wife said that she felt sorry for herself sometimes as she was not a full-fledged worker without her husband. When she was going to take a promotion test, she was told by her boss to consult with her husband first because her action could prevent her husband from being promoted. The wife of couple Y has a high sense of professionalism as a civil servant and she believes that it is natural for her to earn the money to pay for the expenses in her life. However, she also feels sometimes that she

gains nothing from her husband in comparison to wives in society. When their children were small, she had to bottle up her feelings and intentions and put her efforts into keeping both positions as a worker and mother, though it was what she had chosen. Even in such a period of her life, her husband came home late because of his work, and she was the only one who was making efforts to keep the two positions. Couple S work for a foreign-affiliated company but none of male workers take child-raising leave. Partly because the husband of couple S earns more money than his wife, she feels that marrying a co-worker has prevented her from acting more freely. The couple is basically taking the stance that money is earned by the husband and household chores are done by the wife.

When couples are employees of a family business, they both work while following role sharing by sex more rigidly. The wife of couple H has a very high sense of professionalism and a sense of independence, and she thinks of the difficulty in connecting a double-income and independence as a problem. She has pointed out that the independence of wives does not matter as long as the relations between wives and husbands are good and happy, but if the husband dies before the wife and she has to live with their children, for example, she has to live with a sense of inferiority because she has no money and she is not financially independent. She feels that the economic independence of wives is necessary in case of an emergency.

Dual-career with an intention of individual independence was as follows. Then, in the case where couples work for a family business, do the wives have no independence as individuals even if the wives also work for the business? Couple O, for example, are self-employed, and the business they own has a system in which the wife and husband can be independent. They run a stationery shop, and the husband is the owner and the wife is an employee in the shop, and her salary is paid separately. Therefore, the wife has social insurance as an individual employee. This causes them to pay more in nursery fees for their children, and thus it would have been easier if the wife was a dependent family member. If she were a dependent family member of a family owning business she would not be able to put her children in a nursery because of the municipal rules. But she is happier working as an employee while keeping her children in a nursery than working as the wife of a self-employed husband without putting her children in a nursery.

The relationship between a family and their community

Couple Y described their lives as involving various people outside the fam-

ily and having a lot of support from these people. They said that a teacher who was hired for a community hall from the private sector was like "a teacher of their lives," and he encouraged them when the wife took a promotion examination. Their sons were members of a local soccer team and the senior members of the team were very nice to their sons. Their oldest daughter still had contact with a teacher who was very nice to her when she was at kindergarten and primary school. The teacher helped their daughter regain her confidence about school life after a period of refusing to attend classes. Couple H believes that their "teacher of cattle herding" taught them every aspect of the business and that they owe their success to the teacher. The teacher also gave them advice when they took their driving license tests. Couple O sometimes goes on trips with other families whom they met when they had their children in the same nursery. Couple O played roles as members of school committees and as PTA vice-president. The wife of couple O said that because she was not a full-time housewife, she had opportunities to receive support and help from many people, including her mother-in-law, co-workers, and teachers from the nursery and schools. She disagrees with the social view that the life of full-time housewives is easy because they only do household chores and child-raising.

These are examples of having connections with a community as a family or as a member of a family. However, if couples are working as employees outside the family business and if they are seldom at home, they tend to have a weak connection with their community and they must depend on their parents living under the same roof for such things as child-raising. Couple U, for example, have a small child, but the wife is not at home so she has no association with people whom she would normally meet through child-raising. The husband of couple S thinks that because people in general believe that participation in the PTA and sports clubs for children are jobs for wives, working wives like his wife suffer more. The wife of couple S thinks that they should be careful so that their children will not be bullied or left out because she is working.

# Study II: Developing a scale of "family-unit orientation" of a wife and husband, family, and generations

Firstly, the items for a preliminary survey were created by making reference to the results from the interview survey in Study I and to literature studies. At length 42 items were determined by selecting the contents related to

"family-unit orientation" as shown in Table 10.3.

Secondly, a questionnaire survey was conducted on the 42 items produced as items for a preliminary survey, and scale items of "family-unit orientation" were determined after an analysis of the items. The details of the method are as follows.

Questionnaires were handed out to people who attended a forum held by the Gender Equality Center in N prefecture, Japan, in January 2002. The questionnaires were put in a collection box at the end of the forum. Table 10.3 shows the contents of the 42 items, and people were asked to respond on how much they agree with each statement by choosing one from the four-level responses to each item. The responses were: "4. agree," "3. generally agree," "2. generally not agree," and "1. not agree." Out of 550 responses, 374 responses were valid as data, and an item-analysis was conducted by using the data.

Thirdly, a factor analysis (a principal factor method) was conducted on each group of preliminary items, including generations, nuclear family, and wife-husband unit orientation, which were expected to be included as subconcepts. Based on the results of a scree plot, one factor was selected from each sub-concept item-group. Then, using the same groups of items, the number of factors was limited to one and a principal component analysis was conducted. In every principal component analysis of a sub-concept item-group, the items which were predicted to be describing sub-concepts showed high loadings. The item with high principal component loading in the item-group "wife-husband-unit orientation" were ones indicating an emphasis on a persistence in having no contract and rules between a wife and husband, solving problems by being patient, and be involved in the same activities together. The items with high principal component loading in the item-group "nuclear family-unit orientation" were ones indicating a tendency to find differences between family and relationships with people other than family members, and emphasized marriage and the persistence of staying in a nuclear family. The items with high principal component loading in the item-group "generation-unit orientation" were ones indicating an emphasis on the passing on of tombs, property, and the family line, the importance of the oldest son of the family and his wife, and the value of parent-child relations by blood ties.

Sub-scale items were determined in an exploratory way by taking the level of principal component loading, the level of alpha coefficients on the whole, and the number of items, and a sub-scale was developed with eight

# **Table 10.3** Items for preliminary survey of the scale of "family-unit orientation"

- (1) I wish to avoid the situation where relationships with friends before marriage change after marriage. (W)
- (2) I favor the dual-surname system. (W)
- (3) It is better for family members to discuss who they vote for before elections. (W)
- (4) I think that switching roles of working outside and working at home between a wife and husband will cause their relationship to be unstable. (W)
- (5) I am against a married couple having separate possessions. (W)
- (6) It is better for a married couple to spend their holidays together. (W)
- (7) It is better for children to sleep in a separate room from their parents from very young age. (W)
- (8) It is better to pay money to individuals in accordance with the amount of work the individuals do, even in families with own business or farm. (W)
- (9) It seems to be distancing if a double-income couple make rules about role sharing for the family budget and housework. (W)
- (10) A wife and husband should not quarrel over problems between them, but rather they should settle it by being patient. (W)
- (11) People who never marry are strange persons. (N)
- (12) All families should have a wife and husband and their children. (N)
- (13) After all, those who you can rely on in the end are blood relatives. (N)
- (14) When having problems within the family, I don't want to rely on people outside the family. (N)
- (15) Even very close friends cannot replace family members. (N)
- (16) If you have time to spend on some kind of volunteer work, you had better spend the time on your family. (N)
- (17) If it's possible, I don't want to rely on public organizations for taking care of elderly parents. (N)
- (18) Problems inside the family should be solved inside the family. (N)
- (19) It is better to avoid putting your children in places such as a nursery even if both husband and wife are working. (N)
- (20) I feel sorry for children whose parents have gotten divorced and one of their parents is taking care of them. (N)
- (21) I am against naming one's own children by using the same Chinese characters as a parent's name.
- (22) It is ideal to take care of the tombs of one's ancestors for generation after generation. (generation)
- (23) If it's possible, I want to spend time with my family in new year. (generation)
- (24) I am hesitating about being taken care by my children when I get old, even if I cannot make living by myself. (G)
- (25) It is natural to commemorate the parents of someone who conducted a good deed. (G)
- (26) If grandparents are living under the same roof and they are well, you don't need to put your children in a nursery even if both you and your spouse are working. (G)
- (27) I can not understand why the succession of property within a family should be taxed. (G)
- (28) It is wonderful to pass on property and business for generation after generation. (G)
- (29) When you live with your children, it is better for you to put first priority on your oldest son. (G)
- (30) Grandparents should not make a distinction between the grandchildren of their sons and their daughters. (G)
- (31) It is ideal for the wife of the oldest son of the family to take care of her parents-in-law even if they are not living under the same roof. (G)
- (32) Even if it is between parents and their children, appreciation should be expressed in some kind of form. (G)
- (33) Parents do not need to pay a childcare fee to grandparents because, after all, they are taking care of their grandchildren. (G)
- (34) A contract should be signed for lending and borrowing money between parents and their children who are over 20. (G)
- (35) When elderly parents have a difficulty making living, their children should support them financially (G)
- (36) I don't want to vote for candidates who are "a second generation councilor." (G)
- (37) When family members give support among themselves, then we can call them a family. (G)
- (38) It is like a shackle if you invest those dreams which you couldn't achieve in your children. (G)
- (39) It is better for married daughters not to visit her parents often. (G)
- (40) It is better not leave your community for work or school. (G)
- (41) It is better to put a priority on what individuals want rather than inheriting the family business. (G)
- (42) Parents do not need to pay off a debt which is made by their children who are over 20 years old. (G)

*Note*: (W) indicates "wife-husband-unit orientation," (N) indicates "nuclear-unit orientation," and (G) indicates "generation-unit orientation" among the items for preliminary survey.

items of "wife-husband-unit orientation," six items from "nuclear family-unit orientation," and six items from "generation-unit orientation" (see Table 10.4). The alpha coefficients of "generation-unit orientation", "nuclear family-unit orientation," and "wife-husband-unit orientation" were .601, .753 and .700, respectively. All of the 20 items were added to calculate the scale of the broader concept: "family-unit orientation." The alpha coefficient of the scale was .854. This shows that "family-unit orientation" consists of relatively independent sub-concepts.

# Study III: Revision of the "family-unit orientation" scale and the relations among factors, including personality and housework sharing by a wife and husband

In this study, an investigation will be conducted to find out whether the factor structure of the scale developed based on the questionnaire-survey making the scale of "family-unit orientation" can be applied to other samples. Correlation analyses will also be conducted to discover what kinds of personalities relate to "family-unit orientation." Data concerning the wife-husband category, which is made by integrating the responses of each wife-husband to one observation, will be used in order to find the connection between a wife and husband in terms of "family-unit orientation."

## Method for a survey using questionnaires

A monitor pool of a private research company (210,000 families, 760,000 persons were registered) was used to select a research sample for a mail survey in May, 2002. From the monitors, married couples with at least one child under six and with at least one family member older than sixty in March of 2001 were selected as research participants. The data from 648 participants (424 females and 224 males, including 213 paired) was collected.

The contents of questionnaires are as follows: Firstly, concerning the basic attribution: the participant's sex, age, the school the participant graduated from most recently, the structure of the family the participant is living in, the sex of the family members, the participant's occupation, having a job or not, the reasons for not working, the main form of work after the first child was born, about the person the wife and husband ask to take care of their children, and the means of transportation between their home and their

**Table 10.4** Items of the scale for "family-unit orientation" of wifehusband, nuclear family, and generations, and the results of principle component analyses

<scale-item "wife-husband-unit="" of="" orientation"=""></scale-item>	Loading
1. A wife and husband should not quarrel over problems between them, but rather they should settle it by being patient.	.620
2. I favor the dual-surname system. (reversed items)	.575
3. I am against a married couple having separate possessions.	.573
4. I think that switching roles of working outside and working at home between a wife and husband will cause their relationship to be unstable.	.489
5. It seems to be distancing if a double-income couple make rules about role sharing for the family budget and housework.	.482
6. It is better for a married couple to spend their holidays together.	.473
7. People who never marry are strange persons.	.423
8. I wish to avoid the situation where relationships with friends before marriage change after marriage. (reversed items)	.405
<scale-item "nuclear="" family-unit="" of="" orientation"=""></scale-item>	Loading
1. Problems inside the family should be solved inside the family.	.709
2. When having problems within the family, I don't want to rely on people outside the family.	.686
3. I feel sorry for children whose parents have gotten divorced and one of their parents is taking care of them.	.677
4. All families should have a wife and husband and their children.	.642
5. Even very close friends cannot replace family members.	.605
6. If you have time to spend on some kind of volunteer work, you had better spend the time on your family.	.498
<scale-item "generation-unit="" of="" orientation"=""></scale-item>	Loading
1. It is wonderful to pass on property and business for generation after generation.	.637
2. When you live with your children, it is better for you to put first priority on your oldest son.	.617
3. It is ideal for the wife of the oldest son of the family to take care of her parents-in-law even if they are not living under the same roof.	.616
4. After all, those who you can rely on in the end are blood relatives.	.588
5. It is ideal to take care of the tombs of one's ancestors for generation after generation.	.526
6. If it's possible, I don't want to rely on public organizations for taking care of elderly parents.	.513

parents' home.

Secondly, concerning the index of cooperation among family members, participants were asked to choose one from five levels of responses for a total of 10 items: 1) Role sharing between the wife and husband. The responses are from "5. much more for wife" to "1. much more for husband"; 2) The degree of satisfaction about role sharing between the wife and husband, especially about what they want to do concerning role sharing currently conducted. The responses are from "5. husband should bear more burden" to "1. wife should bear more burden"; 3) Role sharing between the generation of the wife and husband and their parents. The participants were asked to respond to 10 items about household chores. The responses are between "5. much more for the wife and husband" and "1. much more for the parents of the wife and husband"; 4) The degree of satisfaction between the generation of the wife and husband and their parents, especially about what they want to do concerning role sharing currently conducted. The responses are from "5. the wife and husband should bear more of the burden" to "1. the parents of the wife and husband should bear more of the burden."

Thirdly, concerning the index of "family-unit orientation", 20 items of "the scale for family-unit orientation" which was developed in Study II. The sub-scale consists of: 6 "generation-unit orientation," 6 "nuclear-family-unit orientation," and 8 "wife-husband-unit orientation." The responses are between "4. agree" and "1. not agree," and the higher the score is, the higher the unit orientation is.

Fourthly, concerning Gender Personality, 1) femininity and masculinity: the 24 items of the CAS (Dohi & Hirokawa, 2004), including 6 items for each of "positive-masculinity (communion)," "positive-femininity (agency)," "negative-masculinity," and "negative-femininity." Each participant chose one from "4. very true" to "1. rarely true." 2) Gender Schemas: the 8 items selected from The Scale of Gender Conception made by Ito (1997). The items include: "after all, it is the mother who notices even a little change in her children," and the scale measures the tendency to recognize the differences in adequateness in social life which are caused by sex differences. The participants chose one from "4. very true" to "1. rarely true." It shows that the higher the score is, the stronger the Gender Schema is. 3) Trust in general: measuring the tendency of individuals to trust people outside of their families. This contains 6 items and the participants chose one from "4. very true" to "1. rarely true," and the higher the score is, the stronger the participant's trust in general is.

### Revision of sub-scales of the "family-unit orientation" scale

Coefficients of the reliability of each sub-scale and the scale for "family-unit orientation" were calculated by using the data from all the participants. The result was  $\alpha = .794$  for the 20 scale-items of the entire "family-unit orientation," and this was identified as sufficiently reliable. However, the coefficient of reliability of the sub-scale was not high enough that is, "wife-husband-unit orientation" were .548, "nuclear-family-unit orientation" were .616, and "generation-unit orientation" were .672. Thus, it was judged that, for the participants of this study, the sub-concept which was predicted by Dohi (2002) was not valid at least for this study data.

Accordingly, a principal component analysis was conducted in order to search component structures which suit the data. In accordance with a scree plot and a component-loading pattern with an eigenvalue 1.0 or more, a principle component analysis was conducted after three principle components were selected and the number of components was limited to three. Table 10.5 shows the three components and the component-loading pattern after promax-rotation. The first component was determined as "fixation of roles between wife and husband," the second component was as "consciousness of family and ancestors," and the third was "closed nature of the family relationship." To determine scale items, the following two items were deleted, "I wish to avoid the situation where relationships with friends before marriage change after marriage" and "A wife and husband should not quarrel over problems between them, but rather they should settle it by bearing them," because these two items did not have high component loading. In addition, as the priority is to have components with a high loading, the items with a high loading of multi components were switched in an exploratory way so that the alpha coefficient of the sub-scale increases. A revised-version of "family-unit orientation" with 18 items in three sub-scales was developed as a result. Table 10.6 shows the items of the sub-scale. The coefficient of reliability of the whole and for the sub-scale is shown in Table 10.7.

# Comparison of the sub-scale scores from the revised "family-unit orientation" among the participants

Table 10.8 shows the means for the 18 scale-items for "family-unit orientation," their sub-scales for "fixation of roles between wife and husband," "closed nature of the family relationship," and "consciousness of family and

Table 10.5 Component-loading patterns of the scale for "family-unit orientation" after the sub-concepts have been revised

Fixation of roles of family and and husband ancestors of family and and husband ancestors cases of family and and husband ancestors cases				Loadings	
It ink that switching roles of working outside and working at home between a wife and husband will cause their relation-  1 think that switching roles of working outside and working at home between a wife and husband will cause their relation-  1 think that switching roles of working outside and working at home between a wife and husband will cause their relation-  1 think that switching roles of working outside and working at home between a wife and husband shill cause their roles and working outside and working outside and working outside work in the shill consider the dual-summan eyestem. The special possessions.  1 the special of twant to rely on public organizations for taking care of elderly parents.  1 the vorte the dual-summan eyestem, (reversed items)  1 am against a nuaried couple having separate possessions.  1 this wonderful to pass on property and business for generation after generation.  1 wish to avoid the situation where relationships with friends before marriage change after marriage.  2 this is deal to take care of the tombs of one's ancestors for generation after generation.  2 this ideal to take care of the tombs of one's ancestors for generation after generation.  3 this is deal to take care of the tombs of one's ancestors for generation after generation.  4 this ideal to take wife of the oldest son of the family to take care of their parents is taking care of them.  4 the slower of the tombs of one's ancestors for generation after generation.  5 After all, those who you can rely on in the end are blood relatives.  5 After all, those who you can rely on in the end are blood relatives.  6 Thou have time to spend on some kind of olutareter work, you had better spend the time on your family.  7 Problems mixed the family should be solved inside the family.  8 Problems mixed the family should be solved inside the family.  8 Problems mixed to send or replace family members.  9 The shall be a family and the solved inside the family.  9 The shall be a family and the solved inside the family.  9 Th			Fixation of roles between wife and husband	Consciousness of family and ancestors	Closed nature of family relationship
I think that switching roles of working at home between a wife and husband will cause their relationship.  Ship to be unstable.  When you live with your children, it is better for you to put first priority on your oldest son.  People who never marry are strange persons.  If it's possible, I don't want to rely on public organizations for taking care of elderty parents.  A24  139  147  139  -174  148  149  140  140  1419  -115  140  1419  -115  140  1419  -115  -115		It seems to be distancing if a double-income couple make rules about role sharing for the family budget and housework.	777.	220	020
When you live with your children, it is better for you to put first priority on your oldest son.  People who never marry are strange persons.  If it's possible, I don't want to rely on public organizations for taking care of elderly parents.  If short the dual-sumane system, (reversed items)  I am against a married couple having separate possessions.  I wish to avoid the situation where relationships with friends before marriage change after marriage.  It is wonderful to pass on property and business for generation.  It is ideal to take care of the tombs of one's ancestors for generation after generation.  It is ideal to take care of the tombs of one's ancestors for generation after generation.  It is ideal to take care of the tombs of one's ancestors for generation after generation.  It is ideal to take care of the tombs of one's ancestors for generation after generation.  It is ideal to take care of the tombs of one's ancestors for generation after generation.  It is ideal to take care of the tombs of one's ancestors for generation after generation after generation after generation after generation.  It is ideal for the wife of the oldest son of the family to take care of her parents: in a wone function of the oldest son of the family to take care of her parents is taking care of them.  It is ideal for the wife of the oldest son of the family to take care of her parents is taking care of them.  It is ideal to take care of the tombs of one should end one of their parents is taking care of them.  It is ideal to take care of the tamily, I don't want to rely on people outside the family.  Problems inside the family should be solved inside the family.  I when having problems within the family, I don't want to rely on people outside the family.  A wife and husband should not quarrel over problems between them, but rather they should settle it by being patient.  A wife and husband should on quarrel over problems between them, but rather they should settle it by being patient.  A wife and husband should and quarrel o	5.	I think that switching roles of working outside and working at home between a wife and husband will cause their relationship to be unstable.	689.	018	.058
People who never marry are strange persons.  If it's possible, I don't want to rely on public organizations for taking care of elderly parents.  If invor the dual-sumanne system. (reversed items)  If invor the dual-sumanne system. (reversed items)  I am against a married couple having separate possessions.  I wish to avoid the situation where relationships with friends before marriage change after marriage.  It is wonderful to pass on property and business for generation after generation.  It is ideal to take care of the tombs of one's ancestors for generation after generation.  It is ideal for the wife of the oldest son of the family to take care of her parents in-law even if they are not living under the case of the oldest son of the family to take care of their parents is taking care of them.  It is ideal for the wife of the oldest son of the family to take care of their parents is taking care of them.  It is ideal for the wife of the oldest son of the family to take care of their parents is taking care of them.  It is ideal for the wife of the oldest work, you had better spend the time on your family.  It is better for a married couple to spend their holidays together.  If the better for a married couple to spend their holidays together.  Problems inside the family should be solved inside the family.  Even very close friends cannot replace family members.  When having problems within the family, I don't want to rely on people outside the family.  All families should have a wife and husband and their children.  A wife and husband should not quarrel over problems between them, but rather they should settle it by being patient.  183  163  174  174  174  174  175  176  177  179  179  179  179  179  179	3.	When you live with your children, it is better for you to put first priority on your oldest son.	.483	.303	690
If it's possible, I don't want to rely on public organizations for taking care of elderly parents.  If avor the dual-sumane system. (reversed items)  I am against a married couple having separate possessions.  I am against a married couple having separate possessions.  I wish to avoid the situation where relationships with friends before marriage change after marriage.  It is wonderful to pass on property and business for generation after generation.  It is ideal to take care of the tombs of one's ancestors for generation after generation.  It is ideal to take eare of the tombs of one's ancestors for generation after generation.  It is ideal to take eare of the tombs of one's ancestors for generation after generation.  It is ideal to take eare of the tombs of one's ancestors for generation after generation.  It is ideal to take eare of the tombs of one's ancestors for generation after generation.  It is ideal to take eare of the tombs of one's ancestors for generation after generation.  It is ideal to take eare of the tombs of one's ancestors for generation after generation.  It is ideal to take eare of the tombs of one's ancestors for generation after generation.  It is ideal to take eare of the tombs of one's ancestors for generation after generation.  I feel sorty for children whose parents have gotten divocated and one of their parents is taking care of them.  After all, those who you can rely on in the end are blood relatives.  I feel sorty for children whose parents have generate form arried couple to solved inside the family.  It is better for a married couple to solved inside the family.  Problems inside the family should be solved inside the family.  When having problems within the family, I don't want to rely on people outside the family.  A white and husband should have a wife and husband and their children.  A wrife and husband should not quarrel over problems between them, but rather they should be being patient.  A write and husband should not quarrel over problems between them, but rather they bo	4.	People who never marry are strange persons.	.448	.159	073
I favor the dual-sumanne system. (reversed items)  I am against a married couple having separate possessions.  I man against a married couple having separate possessions.  I wish to avoid the situation where relationships with friends before marriage change after marriage.  It is wonderful to pass on property and business for generation after generation.  It is ideal to take care of the tombs of one's ancestors for generation after generation.  It is ideal to take care of the tombs of one's ancestors for generation after generation.  It is ideal to take wife of the oldest son of the family to take care of her parents-in-law even if they are not living under the care of the tombs of one's ancestors for generation after generation.  I feel sorry for children whose parents have gotten divorced and one of their parents is taking care of them.  I feel sorry for children whose parents have gotten divorced and one of their parents is taking care of them.  I feel sorry for children whose parents have gotten divorced and one of their parents is taking care of them.  I feel sorry for children whose parents have gotten divorced and one of their parents is taking care of them.  I feel sorry for children whose parents have gotten divorced and one of their parents is taking care of them.  I feel sorry for children whose parents have gotten divorced and one of their parents is taking care of them.  I feel sorry for children whose parents have tind of volunteer work, you had better spend the time on your family.  I for have time to spend on some kind of volunteer work, you had better spend the family.  I feel sorry for children a wife and husband and their children.  I feel sorry for children with under they should settle it by being patient.  I feel sorry for children whose a wife and husband should not quarrel over problems between them, but rather they should settle it by being patient.  I feel sorry for the durant or problems between them, but rather they should settle it by being patient.  I feel sorry feel sorry feel and	ς.	If it's possible, I don't want to rely on public organizations for taking care of elderly parents.	.434	.288	056
I am against a married couple having separate possessions.       .420       .119         I wish to avoid the situation where relationships with friends before marriage change after marriage.       .310       .135         It is wonderful to pass on property and business for generation after generation.       .063       .637         It is ideal to take care of the tombs of one's ancestors for generation after generation.       .063       .456         It is ideal for the wife of the oldest son of the family to take care of her parents-in-law even if they are not living under the same roof.       .063       .456         It is ideal for the wife of the oldest son of the family to take care of the parents have gotten divorced and one of their parents is taking care of them.       .063       .456         After all, those who you can rely on in the end are blood relatives.       .179       .352         If you have time to spend on some kind of volunteer work, you had better spend the time on your family.       .103       .103         It is better for a married couple to spend their holidays together.       .165       .179       .265         Problems inside the family should be solved inside the family.       .104       .094         When having problems within the family. I don't want to rely on people outside the family.       .265       .015         All families should have a wife and husband and their children.       .004       .007         A wrife and husband	9.	I favor the dual-sumame system. (reversed items)	.427	.174	.013
I wish to avoid the situation where relationships with friends before marriage change after marriage.  1 this wonderful to pass on property and business for generation after generation.  1 It is ideal to take care of the tombs of one's ancestors for generation after generation.  1 It is ideal to take care of the tombs of one's ancestors for generation after generation.  2 It is ideal to take care of the tombs of one's ancestors for generation after generation.  3 It is ideal to take care of the tombs of one's ancestors for generation after generation.  3 It is ideal for the wife of the oldest son of the family to take care of her parents is taking care of them.  3 After all, those who you can rely on in the end are blood relatives.  4 After all, those who you can rely on in the end are blood relatives.  4 After all, those who you can rely on in the end are blood relatives.  5 After all, those who you can rely on in the end are blood relatives.  5 After all, those who you can rely on in the end are blood relatives.  6 After all, those who you can rely on in the end are blood relatives.  7 After all, those who you can rely on the end are blood relatives.  8 After all, those who you can rely on the end are blood relatives.  9 After all, those who you can rely on the end are blood relatives.  1 If you have time to spend on some kind of volunteer work, you had better spend the time on your family.  1 It is better for a married couple to spend their holidays together.  1 Problems inside the family should be solved inside the family.  2 After all, those who you can rely and better proper problems within the family. I don't want to rely on people outside the family.  3 Awhen having problems within the family.  3 Awife and husband should not quarrel over problems between them, but rather they should better it by being patient.  3 Awife and husband should not quarrel over problems between them, but rather they should better it by being patient.  3 Awife and husband.	7.	I am against a married couple having separate possessions.	.420	911.	036
It is wonderful to pass on property and business for generation after generation.  It is ideal to take care of the tombs of one's ancestors for generation after generation.  It is ideal to take care of the tombs of one's ancestors for generation after generation.  It is ideal to take care of the tombs of one's ancestors for generation after generation.  It is ideal to take care of the tombs of one's ancestors for generation after generation.  It is ideal to the wife of the oldest son of the family to take care of her parents is taking care of them.  One of the oldest son of the family to take care of her parents is taking care of them.  One of the oldest son of the family to take care of her parents is taking care of them.  One of the oldest son of the family to take care of her parents is taking care of them.  One of the oldest son of the family to take care of their parents is taking care of them.  One of the oldest son of the family to take care of their parents is taking care of them.  One of the oldest son of the family to take care of their parents is taking care of them.  One of the oldest son of the family to take care of their parents is taking care of them.  One of the oldest son of the family to take care of their parents in the family.  One of the oldest son of the family to take care of their parents in the family.  One of the oldest son of the family to take care of the family.  One of the oldest son of the family to take care of the family.  One of the oldest son of the family to take care of the family.  One of the oldest son of the family to take care of the family.  One of the oldest son of the family to take care of the family.  One of the oldest son of the family to take care of the family.  One of the oldest son of the family to take care of the family.  One of the oldest son of the family to take care of the family.  One of the oldest son of the family to take care of the family.  One of the oldest son of the family to take care of the family.  One of the oldest son of the family to take c	∞.	I wish to avoid the situation where relationships with friends before marriage change after marriage.	.310	135	222
It is ideal to take care of the tombs of one's ancestors for generation after generation.  It is ideal for the wife of the oldest son of the family to take care of her parents-in-law even if they are not living under the care of the oldest son of the family to take care of her parents-in-law even if they are not living under the care of the oldest son of the family to take care of her parents is taking care of them.  It is ideal for the wife of the oldest son of the family to take care of them.  Order all, those who you can rely on in the end are blood relatives.  If you have time to spend on some kind of volunteer work, you had better spend the time on your family.  Order all, those who you can rely on in the end are blood relatives.  It is better for a married couple to spend their holidays together.  Problems inside the family should be solved inside the family.  Even very close friends cannot replace family members.  When having problems within the family, I don't want to rely on people outside the family.  All families should have a wife and husband and their children.  A wife and husband should not quarrel over problems between them, but rather they should settle it by being patient.  Order of the care of	9.	It is wonderful to pass on property and business for generation after generation.	019	.754	105
It is ideal for the wife of the oldest son of the family to take care of her parents-in-law even if they are not living under the	10		.063	.637	013
I feel sorry for children whose parents have gotten divorced and one of their parents is taking care of them	11.		.285	.518	027
After all, those who you can rely on in the end are blood relatives.  If you have time to spend on some kind of volunteer work, you had better spend the time on your family.  If you have time to spend on some kind of volunteer work, you had better spend the time on your family.  It is better for a married couple to spend their holidays together.  Problems inside the family should be solved inside the family.  Problems inside the family should be solved inside the family.  Even very close friends cannot replace family members.  When having problems within the family, I don't want to rely on people outside the family.  All families should have a wife and husband and their children.  A wife and husband should not quarrel over problems between them, but rather they should settle it by being patient.  183  163  163  179  179  179  179  178  178  179  178	12.	. I feel sorry for children whose parents have gotten divorced and one of their parents is taking care of them.	.063	.456	.244
If you have time to spend on some kind of volunteer work, you had better spend the time on your family.  179  175  175  177  175  175  175  175	13.	. After all, those who you can rely on in the end are blood relatives.	163	.395	.336
It is better for a married couple to spend their holidays together.  Problems inside the family should be solved inside the family.  Even very close friends cannot replace family members.  When having problems within the family, I don't want to rely on people outside the family.  All families should have a wife and husband and their children.  Awife and husband should not quarrel over problems between them, but rather they should settle it by being patient.  183  165  167  187  168  168  168  168  168  168	14	. If you have time to spend on some kind of volunteer work, you had better spend the time on your family.	.179	352	.633
Problems inside the family should be solved inside the family.  Even very close friends cannot replace family members.  When having problems within the family, I don't want to rely on people outside the family.  All families should have a wife and husband and their children.  A wife and husband should not quarrel over problems between them, but rather they should settle it by being patient.  183 . 163	15.	. It is better for a married couple to spend their holidays together.	105	.015	.574
Even very close friends cannot replace family members.  When having problems within the family, I don't want to rely on people outside the family.  All families should have a wife and husband and their children.  A wife and husband should not quarrel over problems between them, but rather they should settle it by being patient.  183  163  164  165  167  168  168  169	16.	. Problems inside the family should be solved inside the family.	153	080.	.572
When having problems within the family, I don't want to rely on people outside the family.  All families should have a wife and husband and their children.  A wife and husband should not quarrel over problems between them, but rather they should settle it by being patient.  183 163 163 163	17.		014	.094	.529
All families should have a wife and husband and their children. 080 .325  A wife and husband should not quarrel over problems between them, but rather they should settle it by being patient183 .163	18.		.265	072	.522
. 163	19.		080	.325	.453
	20.	. A wife and husband should not quarrel over problems between them, but rather they should settle it by being patient.	.183	.163	.207

Note: Items with boldface of loading were used for each sub-scale.

**Table 10.6** Items of the scale for the revised "family-unit orientation" (18 items)

<Sub-scale items of "fixation of roles between wife and husband">

- 1. It seems to be distancing if a double-income couple make rules about role sharing for the family budget and housework.
- 2. I think that switching roles of working outside and working at home between a wife and husband will cause their relationship to be unstable.
- 3. People who never marry are strange persons.
- 4. If it's possible, I don't want to rely on public organizations for taking care of elderly parents.
- 5. I favor the dual-surname system. (reversed items)
- 6. I am against a married couple having separate possessions.

<Sub-scale items of "consciousness of family and ancestors">

- It is wonderful to pass on property and business for generation after generation.
- 2. It is ideal to take care of the tombs of one's ancestors for generation after generation.
- 3. It is ideal for the wife of the oldest son of the family to take care of her parents-in-law even if they are not living under the same roof.
- 4. I feel sorry for children whose parents have gotten divorced and one of their parents is taking care of them.
- 5. After all, those who you can rely on in the end are blood relatives.
- 6. When you live with your children, it is better for you to put first priority on your oldest son.

<Sub-scale items for "closed nature of family relationship">

- 1. If you have time to spend on some kind of volunteer work, you had better spend the time on your family.
- 2. It is better for a married couple to spend their holidays together.
- 3. Problems inside the family should be solved inside the family.
- 4. Even very close friends cannot replace family members.
- 5. When having problems within the family, I don't want to rely on people outside the family.
- 6. All families should have a wife and husband and their children.

	Alpha coefficient
Scale for "family-unit orientation" (18 items)	.800
Sub-scale for "fixation of roles between wife and husband" (6 items)	.673
Sub-scale for "consciousness of family and ancestors" (6 items)	.603
Sub-scale for "closed nature of family relationship" (6 items)	.635

**Table 10.7** Alpha coefficients of the scale for "family-unit orientation" after the sub-concepts have been revised

**Table 10.8** Mean and *SD* of "family-unit orientation" for all and by sex and the results of the *t*-test

	A	.11	Fen	nales	Ma	ales	
	Mean	SD	Mean	SD	Mean	SD	t-value $(df)$ *
Scale for "family-unit orientation" (18 items)	42.62	(7.67)	40.64	(6.91)	46.5	(7.62)	9.61 (614.0)
Fixation of roles between wife and husband	12.11	(3.31)	11.26	(2.92)	13.73	(3.42)	9.09 (384.8)
Consciousness of family and ancestors	12.55	(3.04)	11.99	(2.84)	13.61	(3.14)	6.59 (634.0)
Closed nature of the family relationship	17.92	(3.19)	17.33	(3.13)	19.04	(3.01)	6.59 (633.0)

*Note*: \* t-values are all p < .001

ancestors," and the descriptive statistics by sex.

The results of a *t*-test showed that males obtained higher scores than females in all items. This indicates that males have stronger opinions about the roles of wives and husbands as they should be fixed, that the family relationship should be closed to people outside, and that they should be conscious of the family ancestors as family members.

A paired *t*-test was conducted by using paired data from the wife-husband to find out if significant differences could be identified between wives and husbands about the level of family-unit orientation (see Table 10.9). Significant differences were found in the total score of the 18 items for "family-unit orientation" and in all of the sub-scale scores. This indicates that husbands have a higher "family-unit orientation" than their wives.

-6.23

	W	ïife	Hus	band	betwee	rence en wife asband	
	Mean	SD	Mean	SD	Mean	SD	t-value *
Scale for "family-unit orientation" (18 items)	43.25	(7.16)	49.28	(8.07)	-6.03	(8.58)	-9.66
Fixation of roles between wife and husband	11.18	(2.91)	13.75	(3.41)	-2.57	(3.61)	-10.15
Closed nature of the family relationship	17.42	(2.99)	19.00	(3.00)	-1.58	(3.67)	-6.11
Consciousness of family and	14.65	(3.40)	16.43	(3.78)	1 78	(4.06)	6.23

**Table 10.9** The results of a paired *t*-test on the level of "family-unit orientation" of married couples

*Note*: \* t-values are all p < .001

ancestors

**Table 10.10** Mean and SD of "family-unit orientation" in accordance with the occupations of wives and the results of the t-test

14.65 (3.49) 16.43 (3.78) -1.78 (4.06)

	Full-	time	Housewi timer • S ployed •	Self-em-	
	Mean	SD	Mean	SD	t-value (df)*
Scale for "family-unit orientation" (18 items)	40.50	(6.80)	41.08	(7.09)	n.s.
Fixation of roles between wife and husband	11.06	(2.79)	11.65	(2.99)	1.98 (386)*
Closed nature of the family relationship	17.42	(3.07)	17.19	(3.26)	n.s.
Consciousness of family and ancestors	11.96	(2.82)	12.16	(2.85)	n.s.

*Note*: \* p < .05

The data on wives who are living with their parents was used for making comparisons between wives with a full-time job and with other types of jobs (see Table 10.10). A significant difference was found in the "fixation of roles between wife and husband" t (386) = 1.98, p < .05), and it was also found that females with a full-time job have a tendency to think that the roles of wives and husbands are not fixed, in comparison to the females with other types of jobs.

# The relations between Gender Personality and "family-unit orientation"

The correlations between the family-unit scale-scores and Gender Schemas (gender-conception scores), trust in general, positive-agency, positive-communion, negative-agency, and negative-communion were calculated for males and females. A positive correlation was found between the family-unit scale (for both the total scores and all sub-scale scores) and the scores for Gender Schemas (gender-conception) for both males and females (r = .271 to .362 for males, r = .239 to .384 for females). No relation was found between the trust and the family-unit scales for both males and females. In the case of females, weak positive correlations were found between positive-communion (femininity) and the total score for "family-unit orientation" (r = .124, p < .05), and between positive-communion (femininity) and the consciousness of family and ancestors (r = .107, p < .05). For males, there was a weak positive correlation between the total score for "family-unit orientation" and negative-communion (r = .167, p < .05).

The relations between housework sharing among wives and husbands and "family-unit orientation," in accordance with differences in jobs among females

How wives and husbands share housework is highly likely to be affected by whether wives have a full-time job and whether they are living with their parents under the same roof. Based on this prediction, the data obtained from females who are members of extended families was divided into two categories: wives with a full-time job and wives with jobs which are not full time. Then correlations were calculated between the degree of housework sharing and the degree to which the wife and husband were unsatisfied about it, and between the degree of housework sharing and "family-unit orientation."

The results indicate that in the case of the wives with a full-time job, the higher the total scores are for "family-unit orientation" (r = .158, p < .05) and "fixation of roles between wife and husband" (r = .175, p < .01), the higher the tendency is for husbands to take more of a share of the housework related to meals. For the level of satisfaction over housework sharing, the higher the sense of "fixation of roles between wife and husband" (r = -.154, p < .05) and "consciousness of family and ancestors" (r = -.147, p < .05) are, the lower the level of dissatisfaction is towards husbands in rela-

tion to housework sharing over meals. It was also found that the higher the sense of "consciousness of family and ancestors" is, the stronger the tendency to expect husbands to play a role in earning living expenses for the family is (r = -.138, p < .05).

In the case of wives with jobs other than a full-time job, the higher the sense of "consciousness of family and ancestors" (r=-.255, p<.01) and "family-unit orientation" (r=-.212, p<.01) are, the stronger the tendency to expecting husbands to play a role in earning living expenses for the family is. Nevertheless, it was also found that the higher "family-unit orientation" is, the greater is the share of the husband in housework related to meals (r=-.164, p<.05). For the level of satisfaction over housework sharing, the higher the sense of "consciousness of family and ancestors" is, the lower is the level of dissatisfaction towards husbands over their share related to meals (r=-.197, p<.05) and over their share related to housework outside of the home (r=-.160, p<.05).

The relations between housework sharing by wives and husband and "family-unit orientation" in accordance with the paired data of wives and husbands

Correlations were calculated in order to find how the "family-unit orientation" of husbands relates to the role sharing of wives and husbands from the viewpoint of wives. It was found that when husbands have a strong "fixation of the roles between wife and husband," wives are more likely to take roles of housework on the family property (r = .203, p < .01) and of child-raising (r = .180, p < .05).

The relation between the "family-unit orientation" of husbands and the sense of satisfaction among wives over housework sharing was also investigated. The results show that when husbands have a high "family-unit orientation," their wives tend to think that their husbands should be burdened with more of a share related to the housework on the family property (r = .175, p < .05), and when husbands have a high "fixation of roles between wife and husband," their wives tend to think that their husbands should be burdened with more of a share related to work on the family property (r = .205, p < .01) and child-raising (r = .149, p < .05). The results also show that when husbands have a high "consciousness of family and ancestors," their wives tend to think that their husbands should increase their share related to housework on the family property (r = .140, p < .05).

As to the relation between the "family-unit orientation" of wives and the housework sharing by husbands, when their wives have a high "fixation of roles between wife and husband," the wives' share related to meals (r=.146, p<.05) and housework on the family property (r=.148, p<.05) becomes high, according to husbands, while the husbands' role in terms of bringing money in for family expenses is more emphasized (r=-.197, p<.01).

#### General discussion

More cohesiveness as a nuclear family than consciousness of family and ancestors: Based on a survey using interviews

The concept of "family-unit orientation" was advocated in this chapter by laying a focus on the relations of family members as a cooperative relation for the independence those members as individuals. An interview-survey was conducted for the purposes of collecting scale items for "family-unit orientation" and to identify the cooperative relations between wife and husband, and so on. The following discussion is based on the results obtained in the survey. First, a consciousness of family and ancestors appears to have little impact on the reasons for wives and husbands to live as an extended family. Certainly, the grandparents-generation in extended families which own a family business still has some consciousness of family and ancestors in relation to the system of patriarchy, as we have already seen in the case of making the oldest son help on his family farm even though he had a full-time job outside the family business, and in the case of treating the youngest son and his wife as having less importance than the families of the other siblings. However, even such a consciousness of family and ancestors related to the system of patriarchy has little impact on the generation of mothers and fathers. This can be identified, for example, by the fact that the generation of mothers and fathers has no concept of returning favors to their parents (the generation of grandparents) and the fact that the generation of mothers and fathers do not find favors from their parents (the generation of grandparents) to be a heavy burden. In contrast to the generation of grandparents, what is found significant was the cohesiveness of the nuclear family. Wives and husbands who work for companies outside the family usually chose to live with their parents to continue their jobs outside and for other reasons of convenience. Thus they seem to be conscious of not giving

too much of the burden caused by housework and child-raising to their parents. It also appears that they have a sense of rejection towards their parents getting involved with child-raising. Wives and husbands who work at the same workplace had no choice but being conscious about "couple-unit orientation," since they are often treated as if they are one full-fledged worker. However, when each partner of such couples receives a salary which is a separate payment, each individual has a certain discretion of freedom as to how he/she uses the salary and how much of the money should be used as part of the home budget. In this sense, they should be observed as a couple maintaining an individual-unit rather than as a one couple-unit. There was also a case where the salary was paid to wife and husband separately as a pair of individuals, even though they are self-employed.

### Low sense of "unit-orientation" as a wife and husband caused by centering their lives on their children

A scale for "family-unit orientation" was developed based on the data from the questionnaire survey conducted in N prefecture in January, 2002. The scale consists of "generation-unit orientation," "nuclear-family-unit orientation," and "wife-husband-unit orientation." The alpha coefficients were high enough across the scale-item, but the alpha coefficients of each sub-scale for "wife-husband-unit orientation" were low, while the alpha coefficients of the other two sub-scales were still high enough. This is probably caused by a confusion of the cohesiveness of a wife and husband and the cohesiveness of the nuclear family. In other words, it is difficult to draw a clear line between a consciousness of the cohesiveness of a nuclear family and a consciousness of the cohesiveness of a wife and husband. The case of children becoming the center of the family is more common in Japan compared to families in Europe and the U.S.A. In many cases, the newly-married period without children is too short for married couples to actualize their own lifestyles and values. Their cohesiveness as a wife and husband may not necessarily be taken into account as it is considered a part of "nuclear-family-unit orientation." This point should be investigated in the future. Moreover, the constructive concept of the sub-scale with an especially low alpha coefficient should be re-examined as the first step towards collecting items which are more representative of the constructive concept.

#### "Family-unit orientation" corresponding to shadow work

The factor structure of the 20 items in "family-unit orientation" was reexamined in a mail survey conducted in May, 2002, on double-income wives and husbands who belong to an extended family. In the study, three components of "fixation of roles between wife and husband," "closed nature of the family relationship," and "consciousness of family and ancestors" were selected in accordance with the various natures of the modern family. This was different from the previous structure of sub-concepts. The level of the alpha coefficients was not improved in this sub-scale, too, but this corresponded well with "shadow work," which was specified by Dohi (2000) in relation to the personal relationships of intimate couples, such as married couples and couples of lovers. "Shadow work" is "personal" because it is performed within the relationships of families and married couples, which are in turn a kind of relationship cut off from society. The "closed nature of the family relationship," which is the third component of this study, indicates the "personal" relationship of "shadow work" as being cut off from society. Furthermore, though what happens in the relationships within a family or between a wife and husband is often talked of as something "personal," this does not mean that family members are considered as a collection of independent individuals. A wife and husband are considered as one and a family is, in an extreme sense, to be thought of as a unbroken line, and thus this personal quality is not respected when each individual member decides how he/she will live his/her life. Not the individual but the wifehusband or the family is considered the minimum structural unit of society. The first component, "fixation of roles between wife and husband," and the second component, "consciousness of family and ancestors," in this study indicate that family relationships which do not consider the independence of each individual are important. The scale for "family-unit orientation" is possible for using as a means to support "shadow work" empirically in the future.

#### The structural validity of "family-unit orientation" and future study

The structural validity of "family-unit orientation" will be discussed in the following. The scale scores for "family-unit orientation" were investigated again through the mail survey conducted in May, 2002, and males showed higher scores in all the sub-scales than females, and husbands showed higher scores than wives in the pair-data for husband-wife. In addition, females

without a full-time job showed higher scores in the sub-scale of "fixation of roles between wife and husband." Males traditionally have a higher perception of role sharing by sex (work for males and the home for females) than females do. They traditionally expect females to perform the roles related to the home and this general expectation makes it possible for them to engage in their occupational life comfortably. The basic situation has not changed for females, and even females with a full-time job still do things around the house alone and receive no cooperation from their husbands. Therefore, it is understandable that in such an environment males have come to have a high "family-unit orientation" and to support role sharing by sex inside the family, and the females with a full-time job have come not to consider the roles between wife and husband as something fixed. The study also found that gender-conception scores, which show the strength of Gender Schema, were correlated with sub-scale scores across "family-unit orientation" for both males and females. In this way, "family-unit orientation," which includes the "fixation of roles between wife and husband" and the consciousness of family and ancestors as sub-concepts, may strengthen gender, and this supports the validity of this scale. Moreover, according to an overview which was made on the connection between housework sharing by wives and husbands and "family-unit orientation," when both wife and husband have high "family-unit orientation," wives are more likely to play roles related to housework and husbands are more likely to play the role of earning living expenses. These factors have strengthened wife-husband relationships based on gender and have suppressed the possibility of females having economic independence.

The study suggests that, though "family-unit orientation" is a part of the sense of unity held by each family member, it is highly possible that this orientation can prevent each individual from being independent because a family is a group in which shadow work called "family" is performed. "Family-unit orientation," however, has another aspect in that each family today can open the door to each individual to be independent. In the future, investigation should be conducted on the causality analyses of factors which mediate the relation between "family-unit orientation" and cooperation among families leading to independence for females.

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# Gender stereotypes of payment at drinking parties

# Gender stereotypes by sex which are seen when people pay at drinking parties

Imagine you go out to a drinking party with five other (male and female) colleagues from your company or with sports or culture club members who are around your age. After the party, how do you share the payment for drinks and food? You may divide the sum equally by six people, or people who drank more may offer to pay more than others. Or, you may divide the sum of payment according to sex and decide on the amount of money each male should pay and each female should pay.

If you decide that males should pay more than females regardless of the amount of drink each person had, then this may be reflecting gender stereotypes such as, for example, "it is shameful if males let females pay money," or "females should depend on males and should leave males to pay." Gender stereotypes are "a shared belief which is structured about males and females" (Lippa, 1990). According to the social role theory advanced by Eagly (1987), gender stereotypes are formed as people play social roles which differ according to sex. The general social roles by sex in Japan are, traditionally, "work for males and the home for females," meaning that males are obliged to earn money for the family while females are obliged to take care of the family at home. Characteristics which are stereotyped in accordance with such a tradition are agency for males, which consists such traits as high intelligence and activeness, and communion for females, which consists such traits as sensitiveness, kindness, and affectionate (Bakan, 1966; Williams & Best, 1982). The decision in making males pay more than

females in the situation described earlier may reflect the gender stereotypes above.

### More participation in social activities by females and changes in gender stereotypes

Today, we see changes in the situation related to female vocations. Fewer females leave their jobs because they get married or pregnant, more females stay in the same jobs for a longer time, and more females take up jobs again after marriage and giving birth. In addition, more females engage in comprehensive work because more females have received higher education, and more females are now enthusiastic about taking administrative positions and specialist jobs. As a result, it is not so rare today that females have equal economic potential to, or more economic potential than, their spouses or intimate partner. Gender stereotypes have also changed along with the changes in social role and in the status of females. For instance, Yukawa & Hirooka (2003) investigated how the contents of gender stereotypes changed between the 1970s and the 1990s. The study used 50 lists of words, and each word described traits (including active, confident, cute, and dependent) which are related to gender. The study identified that there was a change in the tendency of people to connect masculinity and femininity with stereotyped traits. The tendency to consider traits as non-stereotyped became stronger in the 1990s than in the 1970s. Larsen & Seidman (1986) also conducted factor analyses called the Bem Sex Role Inventory (BSRI; Bem, 1974), a self-rating test for masculinity and femininity, and the results found that more people today are psychologically androgynous. This suggests that a change is occurring in people's recognition towards gender stereotypes.

However, as Lewin & Tragos (1987) pointed out, gender stereotypes, as well as sex role attitudes of adolescence, are not something easily changed in the last quarter century, even if many countries have been influenced by feminism. For example, Hosoda & Stone (2000) conducted a study in which participants must identify adjectives from a check list of 300 (Gough & Helbrun, 1965) describing masculinity and femininity. The results of the test indicated that there has been no significant change in the contents related to gender stereotypes. Similarly, a study conducted by Dohi (1995a) showed that the contents of gender stereotypes included on the scale items of Masculinity-Humanity-Femininity Scale (MHF scale; Ito, 1978) are still

effective even 20 years after the scale was developed. In our modern daily life and work, few muscular labors are needed, so we do not have to share our roles according to sex. But there are small exceptions which have some restrictions by sex, such as males' activities in an emergency, and females' giving birth and breast feeding. In only these limited physically related areas, people are becoming sensitive to gender (Ito, 2001). So, what extent do the physical conditions influence toward gender stereotypes?

#### Should males pay?

The study in this chapter investigates how people arrange payment when they go out drinking. Three males and three females were prepared for this study, and situations were set up so that each situation had from 0 to 3 males or females who drink heavily. Then the amount of payment was decided in each situation in order to investigate how often we see the idea of "males should pay" as the first purpose of this study. If the payment is always decided on as male members paying more than female members regardless of the proportion between who drinks more and who drinks less, this decision reflects gender stereotypes. In contrast, if payment is decided according to the proportion between who drinks more and who drinks less (and thus, when male members drink more, males should pay more and if female members drink more, females should pay more) then this decision does not reflect gender stereotypes. This study also investigates how the decision of how much each member pays is affected by the sex of the members, by how much alcohol they can drink, and by how much money they can afford to pay.

### Does Gender Personality affect the decision made concerning the amount of payment?

The second purpose of this study is to investigate the influence of Gender Personality on deciding how much money should be paid. For this purpose, this study focuses on gender types which are determined by the degree of femininity and masculinity. According to gender types, people with high femininity but low masculinity are identified as of the "feminine" gender type, people who have only high masculinity are identified as of the "masculine" gender type, people with high femininity and masculinity are identified.

fied as of the "androgynous" gender type, and people with low femininity and masculinity are identified as of the "undifferentiated" gender type. This study investigates the differences in the amount of money paid in accordance with these four gender types.

If the decision for payment is made differently in accordance with gender types, then the difference is made according to differences of degrees of Gender Schemas (Bem, 1981) and Gender Identity (Dohi, 1996). Gender Schemas are the cognitive frame held by individuals in order to have information processing based on gender, and Gender Schemas orientate people's cognitive activities as to what kind of information they focus on, what and how they memorize the information, and whether they can re-use the information. Stereotypes are concepts similar to schemas, but stereotypes have more elements as social norms in terms of being something related to specific social categories (such as sex differences, races and occupations). Stereotypes are shared by many people. However, there are big differences in people's cognitive levels relating to: how differently people estimate the differences among the categories, how the knowledge and experiences related to these categories are systematized, and how subjectively people judge social norms. These are schemas. Meanwhile, Gender Identity is about how you establish your own way of life with acceptance of your biological sex (one's sex) and your social sex (one's gender) and, once you establish this, you will consider that though agency and communion are stereotyped socially, both are important for you.

According to Bem (1981), females who have strong Gender Schemas belong to the "feminine" gender type. This is because such females have a strong sense of being feminine and have a strong persistence towards female traits (Dohi, 1994). The females with such a tendency can be predicted as standing for the sense of "work for males and the home for females" in role sharing by sex, and they can also be predicted to have a tendency to judge that males should pay more in drinking parties held by a group with both sexes. Females with the "masculine" gender type have strong Gender Schemas but have a weak tendency to accept female roles. Therefore, it can be predicted that such females have will resistance to the idea of females making males pay. In addition, according to the determinant model of femininity/masculinity advanced by Dohi (1999), it can be predicted that people of the "androgynous" gender type have no Gender Schemas, but they have strong Gender Identities. Such people are expected to have a stronger tendency to judge that people who drink more have to pay more, regardless of

sex differences.

#### Method

#### Procedure of the experiment and the CAS scale

This study is based on the data collected from experiments conducted in 2004 (experiment 1) and in 2005 (experiment 2). There are a few differences between the two experiments in the contents of their questionnaires and in the method of response related to the amount of payment.

#### Experiment 1

The participants were 356 university students (281 females and 75 males). The experiment was conducted as a part of classes during lectures in social

Table 11.1 The number of males and females who can drink or can't drink alcohol

	Fer	nales	M	ales
Case number	Who can drink alcohol	Who cannot drink alcohol	Who can drink alcohol	Who cannot drink alcohol
No. 1	0	3	3	0
No. 2	0	3	2	1
No. 3	0	3	1	2
No. 4	0	3	0	3
No. 5	1	2	3	0
No. 6	1	2	2	1
No. 7	1	2	1	2
No. 8	1	2	0	3
No. 9	2	1	3	0
No. 10	2	1	2	1
No. 11	2	1	1	2
No. 12	2	1	0	3
No. 13	3	0	3	0
No. 14	3	0	2	1
No. 15	3	0	1	2
No. 16	3	0	0	3

psychology and psychology.

The following instruction was given for the experiment. Each participant was asked to simulate a situation where three male and three female classmates held a drinking party and the party cost 12,000 yen for drinks in total. Each participant was also asked to imagine that she/he was the organizer of the party. Then, each participant was asked to determine how much money each male and female should pay in the 16 cases presented in this experiment (see Table 11.1). The participants were asked to decide the pay-

Table 11.2 Patterns of payment for males and females which were written on the questionnaires

	Payment by 3 females	Payment by 3 males
Pattern 1)	4,000 yen	0 yen
Pattern 2)	3,500 yen	500 yen
Pattern 3)	3,000 yen	1,000 yen
Pattern 4)	2,500 yen	1,500 yen
Pattern 5)	2,000 yen	2,000 yen
Pattern 6)	1,500 yen	2,500 yen
Pattern 7)	1,000 yen	3,000 yen
Pattern 8)	500 yen	3,500 yen
Pattern 9)	0 yen	4,000 yen

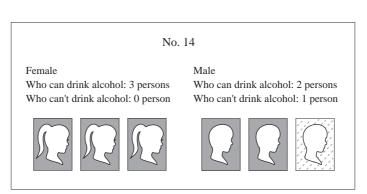


Figure 11.1 An example of the slides (Case No. 14)

ment under the conditions where they have to decide how much each person pays and if the amount of money that should be paid must be equal among the persons of the same sex. In order to make the calculation needed for determining the payment easier, 9 patterns of payment were written down on questionnaires with ranges from 4000 yen for a female and 0 yen for a male to 0 yen for a female and 4000 yen for a male (see Table 11.2). After the instructions were given, each participant was shown 16 different slides made for each situation (see Figure 11.1) and asked to write down "how much females should pay" and "how much males should pay" for each slide. Each participant was also asked to answer about herself/himself, about which year of school they were in, how much money in total they have as a result of their allowance from their parents and money received from something such as a part-time job every month, and whether he/she is a strong drinker (they were asked to choose one from the choices of "strong" or "weak").

#### Experiment 2

The participants were 60 female university students and the experiment was conducted in classes. In the same way as experiment 1, the participants were asked to decide the amount of payment to be made. In experiment 1, most participants were referring to the payment patterns written in Table 11.2, and thus the participants in experiment 2 were asked to choose responses from the pattern shown in Table 11.2. Furthermore, the 24 items of the Communion-Agency Scale (CAS; Dohi & Hirokawa, 2004) were also used in order to identify the gender types of the participants. A Likert-type scale was adapted for this experiment, and each participant was asked to choose the most suitable answer from four-level responses for measuring femininity and masculinity, including "4. very true" to "1. rarely true." The CAS usually includes both positive and negative aspects of femininity and masculinity, but the only positive aspects were used for analysis in this experiment.

#### Results

#### The pattern of paying only for what you drank

Table 11.3 shows a summary of which pattern the participants chose out of 9 patterns for the 16 cases shown on slides, after the data of experiment 1 in 2004 and the experiment 2 in 2005 were combined. As shown in Table 11.3,

Table 11.3 The ratios for choosing a payment-pattern for each case

		Case number	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8	No. 9	No. 10	No. 11	No. 12	No. 13	No. 14	No. 15	No. 16
		Female drinkers	0	0	0	0	-	-	-	_	2	2	2	2	3	3	3	3
		Male Drinkers	3	2	_	0	3	2	_	0	3	2		0	3	2	_	0
	Payment of male	Payment of female	Ratios (%)	(%)														
Pattern 1)	0 yen	4,000 yen	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.2	0.0	0.0	0.0	2.3	0.0	0.0	0.3	7.7
Pattern 2)	500 yen	3,500 yen	0.0	0.0	0.0	0.0	0.3	0.3	0.0	1.7	0.0	0.0	0.0	2.8	0.0	0.0	8.0	10.4
Pattern 3)	1,000 yen	3,000 yen	0.5	0.0	0.8	0.0	0.0	0.0	0.0	5.0	0.0	0.0	2.5	18.5	0.0	0.5	13.3	17.7
Pattern 4)	1,500 yen	2,500 yen	0.0	0.3	0.3	0.2	0.0	0.3	0.2	9.4	0.5	0.0	21.9	20.0	0.3	7.8	24.0	18.4
Pattern 5)		2,000 yen	7.3	12.9	47.2	88.9	18.2	32.8	78.4	78.2	49.1	79.4	68.3	51.4	83.8	81.1	56.3	43.0
Pattern 6)	2,500 yen	1,500 yen	12.2	26.8	26.4	5.6	29.9	40.5	14.1	2.0	29.9	15.1	8.4	3.3	11.0	5.8	2.8	1.0
Pattern 7)	3,000 yen	1,000 yen	36.7	34.8	13.8	1.9	37.6	19.8	5.2	1.2	16.1	3.3	1.0	0.5	2.8	2.5	8.0	0.5
Pattern 8)	3,500 yen	500 yen	15.4	12.9	5.3	0.7	8.2	3.8	0.5	0.2	1.3	0.8	0.3	0.0	0.3	8.0	0.3	0.0
Pattern 9)	Pattern 9) 4,000 yen	0 yen	27.9	12.4	6.3	2.7	5.9	2.3	1.5	2.0	3.1	1.5	1.3	1.3	2.0	1.5	1.5	1.2

the number of females who can drink alcohol increased from 0 (case No. 1-No. 4), 1 (case No. 5-No. 8), 2 (case No. 9-No. 12), and 3 (case No. 13-No. 16), while the number of males who can drink alcohol decreased from 3 to 0, within each group consisting of 4 cases. Comparing every four-cases in each group, it was found that as the number of males who can drink decreases, the amount of money each female pays increases, and this tendency was significant. The tendency was especially apparent in the groups No. 1-No. 4. In the case of No. 1 (only 3 males can drink alcohol), the ratio of the participants thinking that 3 males should pay for all 6 (3 males and 3 females) was as high as 27.9 %, but in case No. 4 (neither females nor males can drink alcohol) of the group, the ratio was as small as 2.7 %. However, in case No. 1 (no females drink alcohol), only 7.3 % chose the response that both males and females should pay the same amount, but as high as 88.9 % chose the response that both males and females should pay the same amount in case No. 4 (all females can drink alcohol). These results indicate that it is generally thought that, as the number of females who can drink increases, females should pay more, and as the number of males who can drink decreases, males should pay less.

#### The pattern that males should pay more than females

Nevertheless, the results also indicate that it is generally thought that even when males and females can drink an equal amount of alcohol, males should pay more than females. When the number of the participants who can drink alcohol was the same between males and females (cases No. 4, 7, 10, and 13), as high as 78.4 %-88.9 % of the participants judged that all 6 people (3 males and 3 females) should pay 2,000 yen each. However, the participants who did not think that males and females should pay an equal amount of money in the cases above were all in favor of males paying more than females. This reflects gender stereotypes that male should pay more than females even if both sexes drink the same amount of alcohol. Comparing case No. 1 (all of the three males can drink alcohol and no females can drink) and case No. 16 (no males can drink and all of the three females can drink), the amount of payment expected from females when all females can drink alcohol was not as high as the amount of payment expected from males when all males can drink alcohol. Comparing the cases where the number of females who can drink alcohol is larger than that of males (cases No. 8, 11, 12, 14, 15, and 16) and the cases where the number of males who can drink alcohol is larger than that of females (cases No. 1, 2, 3, 5, 6, and 9), the amount of payment by males and females was not symmetric. In the case where the number of males who can drink alcohol was larger than that of females, there was a significant tendency for people to think that males should pay more than females. However, in the case where the number of females who can drink alcohol was larger than that of males, the tendency for people to think that females should pay more was weak.

#### Relationships between gender types and the patterns of payment

Gender types were identified based only on the data from Experiment 2. So, the following result was about only female participants. A frequency distribution table of positive-communion and positive-agency was made, and based on the score distribution and median of the table, each positive-communion and positive-agency was divided into two groups of a high-score group and a low-score group. Those with points of 18 and more of positive-communion belong to a high-group and those with points of 17 and less of positive-communion belong to a low-group, while those with points of 15 and more of positive-agency belong to a high-group and those with points of 14 and less of positive-agency belong to a low-group. Next, the participants were identified in accordance with the scores of the high and low groups. The results are as follows. The participants with both positive communion and agency belong to the high group identified as the "androgynous" gender type (23 participants), the participants with positive-agency belonging to the high group and positive-communion belonging to the low group

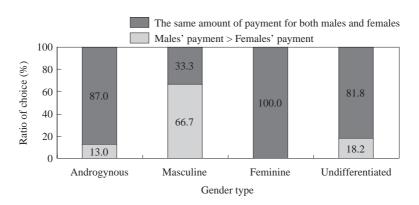


Figure 11.2 The ratio of choice by gender type for case No. 13

were identified as the "masculine" gender type (9 participants), the participants with positive-communion belonging to the high group and positiveagency belonging to the low group were identified as the "feminine" gender group (16 participants), and the participants with both positive communion and agency belonging to the low group were identified as the "undifferentiated" gender group (11 participants). Then the 9 patterns of responses from which the participants chose their responses were divided into three response-types of: both males and females pay the same amount, males pay more than females, and females pay more than males. Cross tabulation and a chi-square test were conducted on the connection between the responsetypes and gender types. As a result, significant connections were found in the four cases of case No. 11 ( $\chi^2$  (3) = 13.68, p < .05), case No. 12 ( $\chi^2$  (3) = 16.58, p < .05), case No. 13 ( $\chi^2$  (3) = 17.83, p < .001) and case No. 16 ( $\chi^2$ (3) = 13.79, p < .05). The results of case No. 13 are shown in Figure 11.2 as an example. The participants with the "masculine" gender type exhibited the gender stereotype of believing that males should pay more than females, and this gender stereotype was the strongest among those participants with the "masculine" gender type in all four cases. There were no participants who chose a response-type: females pay more than males in all four cases.

#### Relationships between sex differences and the patterns of payment

An analysis was conducted into the connection between sex differences and the patterns of payment by using the data from experiments 1 and 2. As a result, significant connections were found in three cases, that of case No. 1 ( $\chi^2$  (2) = 10.52, p < .01), case No. 5 ( $\chi^2$  (2) = 12.42, p < .01), and the case No.

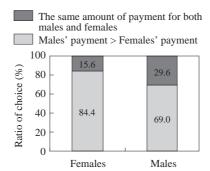


Figure 11.3 Comparisons of payment by sex in case No. 5

 $6 (\chi^2 (2) = 10.66, p < .01)$ . The results for case No. 5 are shown in Figure 11.3 as an example. It was found in all the three cases that males think more strongly than females that males and females should pay the same amount. In contrast, females think more strongly than males that males should pay more than females. There was no difference by sex found in the other 13 cases.

# Relationships among whether hard drinker or not, the amount of money spent, and the patterns of payment

Analyses were conducted for males and females separately into whether the participants can drink alcohol or not, and the patterns of payment, using the data from Experiments 1 and 2. As a result,  $\chi^2$ -values were significant only among male participants in case No. 4 ( $\chi^2$  (2) = 8.76, p < .05), case No. 11 ( $\chi^2$  (2) = 9.16, p < .05), and case No. 12 ( $\chi^2$  (2) = 6.78, p < .05). In all three cases, it was found that males who can drink alcohol think more often that males should pay more than females, compared to the males who cannot drink alcohol.

The relationships between the amount of money spent and the patterns of payment was investigated for males and females separately by using the data from experiments 1 and 2. For this purpose, the participants were divided into three groups: where the amount of money spent is 60,000 yen and more (a high spending-money group), where the amount of money spent is more than 40,000 yen and less than 60,000 yen (a medium spending-money group), and where the amount of money spent is less than 40,000 yen (a low spending-money group). As a result, all of the significant  $\chi^2$ -values were found among females participants in case No. 8 ( $\chi^2$  (4) = 11.59, p < .05), case No.11 ( $\chi^2$  (4) = 19.01, p < .01), case No. 12 ( $\chi^2$  (4) = 16.46, p < .01), case No. 13 ( $\chi^2$  (4) = 25.18, p < .001), and case No. 15 ( $\chi^2$  (4) = 19.92, p < .01), and this shows that females of the high spending-money group have a strong tendency to judge that males should pay more.

#### Discussion

#### Coexistence of two judgements of payment patterns

The first purpose of this study was to examine whether gender stereotypes were found when groups of males and females decide how much money they should pay for alcohol they have drunk and for alcohol they have not

drunk. The results of analyses show that there are two types of judgments: one judgment is that those who can drink alcohol should pay more regardless of sex difference, and another judgment is that males should pay more than females regardless of the amount of alcohol they may drink.

The idea that males should pay more than females was found equally for both males and females in the most of the cases, and the idea was more significantly found among females than males in three cases. In the other three cases, males who can drink alcohol judge that males should pay more than females, and this tendency was stronger than for males who cannot drink alcohol. In contrast, there was no difference between the females who can drink and the females who cannot drink alcohol in terms of judging the amount of payment.

### Accepting gender stereotypes which are "benevolent" to females

The results above suggest that females use gender stereotypes more than males according to time and circumstances. In Japanese society today, females are inclined to be prejudiced against and discriminated, and consequently females are less inclined to accept current society than males in general. For example, the tendency to feel against the concept of "work for males and home for the females" is identified more among females than males in most of related studies. However, the tendency to accept a gender stereotype which appears to be "benevolent" to females was found in the study earlier, and this suggests that females support the social structure of gender discrimination. A study by Jost & Kay (2005) pointed out that female participants judge that the today's society is fair and justified when stereotypes "benevolent" to females are activated. The result implies that making a stereotype which is "benevolent" to females as a compensation to females who face forced inequalities will provide a sense of satisfaction and understanding towards a social system which is not ideal for females. This leads to the conservation of the gendered society of today. In particular, the participants in this study were university students who can accept the social trend of valuing "young females," and they also are in a phase of psycho-social moratorium and have no sense of obligation to pursue their roles at work and in the home. In other words, they are in a condition of accepting "benevolent" stereotypes as much as possible. If this is actually making it difficult for them to notice the inequality of the sexes caused by gender in modern society, then this is an alarming issue for females who are still young and have a future. The tendency to try to make males pay was

stronger among females who have a lot of spending money, and this is also an issue which should be paid attention to. It is possible to predict from the attitude of females that in receiving money from parents and having a lot of money they can spend freely, they have come to think that there it is nothing wrong in females depending on males (fathers) financially. This suggests that, at least in the case of female university students, they will not direct their own intention towards reforming gender stereotypes which perpetuate female economic dependence on males, even if they have money to spare. Nevertheless, the money each participant had came from their parents as pocket money and the wages they earned from their part-time jobs. Each participant probably had a different way of spending money and a different sense of the money they had, even if they were able to spend the money freely. The money each participant had should have been categorized by where the money came from originally.

#### Exceptions who suppress judgment following stereotypes

The results of this study showed a coexistence of the judgment that people should pay in accordance with how much they can drink and of the judgment which follows the gender stereotype that males should pay more than females. Then what switched the two judgments over? Two kinds of factors can be thought as the reasons for this switch. One is a type of circumstantial factor in which making gender stereotype-related judgments is easy, and another factor is related to personality, as judgments related to gender stereotypes are made only by people with a certain type of personality. The personality factor will be discussed in the section on gender types later, and the circumstantial factor will be discussed in the following. As shown in Table 11.3, the case in which all males can drink alcohol and none of the females can drink alcohol (case No. 1) is a case in accordance with gender stereotypes, and thus the percentage in this case demanding that males pay the cost of alcohol is very high. As high a percentage as 27.9 % of the participants chose the pattern that each male should pay 4,000 yen and each female pay 0 yen. This rate is reduced to as low as 12.4 % when even one of the three males cannot drink alcohol, as shown in case No. 2. This suggests that when people try to apply a gender stereotype, for example, in a certain circumstance, even if they find one person who is not suited to the gender stereotype they try to apply it anyway, but this tendency to apply a given gender stereotype is reduced rapidly. This is consistent with the principle of the active minority (Moscovici et al., 1969) which is a concept whereby if even one person does not fit the opinion of the majority then this can weaken that opinion.

Moreover, according to what was overheard after the experiments, it was found that many participants basically supported the idea of equal payment between males and females, but they thought that if males drink even a little more than females, then males should pay the money, and that if only a small number of females drink alcohol, males and females should pay an equal amount of money. This indicates that in a situation which fits certain stereotypes, the given stereotypes are easily applied. Moreover, this does not mean that the given stereotypes are not applied in a situation which does not fit the stereotypes. Further studies are required in order to identify in what kinds of situations gender stereotypes are easily applied.

# Does a situation with a male and a female only strengthen the tendency for people to judge in accordance with stereotypes?

Gender stereotypes become significant when an individual is put in situations with only a male and a female (Dohi, 2004). This is because expectations for a male or female are placed more heavily on the individual than when he/she is one member of a group. The study in this chapter revealed gender stereotypes in groups of 3 males and 3 females of the same generation, though more significant gender stereotypes may be revealed in situations where a male and a female play their roles by sex as used in the study made by Dohi (1995b). The tendency of people to behave according to roles is possibly strengthened in the interrelationships of such groups as married couples and families, which last for a long period of time. This also requires further study.

### Reasons why the influence of gender types was not consistent with the hypothesis

The second purpose of this study was to reveal how gender types influence the decisions over amounts of payment. Only 4 out of 16 cases showed the influence of gender types, and this did not support the hypothesis. "Feminine" gender types, which are predicted as having strong Gender Schemas, did not show a higher tendency to make males pay in comparison to other gender types. Moreover, the "masculine" gender type was predicted as having strong Gender Schemas in the form of resisting gender, and masculine individuals were expected to increase the amount of money paid by females the

most. However, the result was contrary to this prediction, and males were expected to pay, and the amount of money they were expected to pay was the highest among the participants of the study. The "androgynous" gender type is predicted to have a high Gender Identity, and it was hypothesized that these participants would have a stronger tendency to think that people should pay for what they drink. However, the tendency was not found in the study.

The results indicate that the determinant model for psychological androgyny should be examined further. Especially, it seems necessary to examine the possibility that there are differences between the Gender Identity of the "feminine" gender group and the Gender Identity of the "masculine" gender type. In this study, females who tried to make males pay more were not the females of the "feminine" gender type but the females of the "masculine" gender type. This seems to be suggesting that females of the "feminine" gender type accept being females more than do females of the "masculine" gender type and that they have a higher Gender Identity than do the females of the "masculine" gender type. Females of the "feminine" gender type seem to be similar to individuals of the androgynous gender type. Such a pride may have prevented them from depending on males easily. If this is true, there is a possibility that the Gender Identity of males of the "masculine" gender type is more established than for males of the "feminine" gender type. Comparative investigations should be conducted among gender types by measuring Gender Identity. In addition, it was predicted that females of the "androgynous" gender type have less Gender Schemas than females of the feminine gender type, but this also requires further examination.

The communion of the "feminine" gender type should be taken into an account as the second reason why females of the "feminine" gender type chose to pay more than the females of the other gender types. The characteristics of communion include consideration for others, sensitivity, and harmony. Females of a "feminine" gender type with high communion might have felt sorry about making only males pay after they have had fun together. This intention may have been stronger than their gender stereotype, and thus the tendency that females should also pay might have been strengthened. Another possibility is that females of the "feminine" gender type also have a high negative-communion, and thus they might have thought it in accordance with gender stereotypes that males should pay a lot. However, it requires courage to insist on such an opinion and perhaps they decided not to insist on it. A third possibility is that females of the "feminine" gen-

der type may use being a female. Females of the "feminine" gender type internalize gender stereotypes strongly, and thus they probably expect their future husbands to earn an income. They need to be females who can attract at least the males whom their future husbands are likely to be, in order to realize their hopes. Therefore, they might have made a gesture in paying more as part of such a calculation. In other words, they might have tried to catch a big fish which will feed them for the rest of their lives by using the little fish of paying an equal amount of money.

#### Measuring Gender Schemas which are found in daily life

In addition to the reasons stated above, there is possibly another reason why the hypothesis which is related to gender types was not supported. That reason is that the analysis related to gender types was conducted only on 59 participants in this experiment. Moreover, there seems to be a big difference between the self-concepts of masculinity and femininity and the ideas acting against role behavior by sex in everyday life. Gender Schemas define the direction of every area of information processing and include the self as described earlier, and it is thought that information related to the self easily reflects concepts of value beyond gender. This could be about simple profit-and-loss arithmetic or it could be profound human qualities which are extremely opposed to such arithmetic. This varies depending on the concepts of value of each individual.

When studies are conducted on gender stereotypes in relation to matters in everyday life, as with the study in this chapter, it might be more reasonable to examine their relation to Gender Schemas at the level of everyday life. There is also the possibility that Gender Schemas are different among the three public domains of the workplace, the private domain (including home), and the personal domain. This can be predicted from the results of a study conducted by Ui (2002), as that study revealed that the judgment criteria for the equality of the sexes are different among these three domains. Humans behave while using Gender Schemas in different domains and at different levels, and thus their behaviors might not be identified easily in Gender Schemas which are understood in accordance with questionnaires.

#### Future areas to be considered

The following are the points requiring some improvement when related studies are conducted in the future. The first point is that people understand in different ways the phrase "drink alcohol." It was discovered that some people think that males should pay 100 %, regardless of the amount of alcohol male individuals can drink, based on the assumption that females cannot drink as much alcohol as males. In other words, this study had a potential to reflect descriptive gender stereotypes such as "females can drink more than females." Thus it is necessary to improve the details of the experiment so that various kinds of gender stereotypes are applied more specifically. It was also found that people who cannot drink can eat more instead. When instructions were given before the experiment, the participants were asked to think of drinking and eating separately, but this condition was managed poorly.

The second point is that the experiment was conducted with the premise that the amount of money paid should be decided on as being the same for each female group (3 females) and male group (3 males). This was done so that the participants could decide the amount of money easily. However, some participants felt uncomfortable in thinking that the amount of money paid should be decided by a group of males or females. This experiment activated some Gender Schemas of the participants unintentionally. This point also needs to be improved in the future.

The third point concerns how the results of this study are interpreted. The results of the study can be viewed as showing a change in gender stereotypes and a change in how gender stereotypes are applied, but it is impossible to choose only one as a possibility. It would be more effective if we developed experiments which can identify which possibility is valid. It is also necessary to accumulate more data and to investigate conditions under which differences occur easily in accordance with gender types and differences by sex in relation to decision making over the amount of money.

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## Sleeping habits and attitudes:

A comparison of French and Japanese university students, with reference to individualism-collectivism and "shadow work"

#### Sleep as a part of culture

Sleep is one of the physiological needs of human nature and shows common behavior among people throughout the world. However, differences are found in whom you sleep with, where you sleep, when you sleep, what kind of bedclothes you sleep in, and what kind of lifestyle habits of sleeping you have. Sleep is an element of each culture. There are quite a few folk stories and lullabies related to sleep. In Japan, for example, throwing pillows and stepping on them is considered dreadful, and when people die, the corpse is often placed with no pillow and with the head towards north, according to popular belief (Shimizu, 1991). However, there are not many studies about the culture of sleep. According to Yoshida (2001), traditional studies of cultural anthropology have placed focus on people's activities when people are awake, though the culture of sleep exists in a different dimension, ranging from how to sleep, the concept of sleep, and something physiological. Thus, the field of sleep is a field open to study.

In talks about the cultural differences of sleep, people often make comparisons between the West and Japan. Children in the West sleep in separate rooms from their parents and children in Japan sleep in the same bed as their parents, and often they sleep between their parents. Sharing a bed reflects how parents have physical contact with children as a part of child care. According to a book by Tsuneyoshi & Boocock (1997), in which international comparisons were made on child-raising, in the West people traditionally believe that if babies are picked up often by their parents the babies will fall into the habit of being picked up and grow up to be self-centered

children. It is also believed traditionally that, unless they are guided as to what is good and bad by rational adults, children growing up will have no ability to control their own needs and will end up becoming adults who are swayed by their needs and live pitiful and primitive existences. In contrast, Japanese people accept the needs held by children more than the people in the West traditionally do, and it is often said that Japanese hold a view that human nature is fundamentally good. However, many books on parenting in France, America, and England have turned away from their arguments in the past and they are now showing a tendency to put more emphasis on physical contact between parents and children, as Japan has done. Nevertheless, there are still differences between the West and Japan, and attitudes toward sleep, such as sharing a bed between parents and children, is one of the differences.

Studies and investigations into the culture of sleep need to be conducted multilaterally based on information such as data collected from empirical studies about international comparisons, and at the same time these studies require making reference to people's attitudes towards physical contact, the privacy of individuals, controlling one's own needs, individualism, and collectivism. It is also important to investigate sleep behaviors and attitudes in the relationship of married couples, as well as the influences of sleep behaviors over parent-child relationships. This is important because sleep related to parent-child relationships as well as to married couples is often described in terms of completely opposite concepts between the West and Japan. In Japan, where sharing a bed between parents and children is favored, it is common for married couples to sleep in separate rooms or in separate beds, while in the West, where the idea of sharing a bed between parents and children is still rejected, if married couples stop sharing one bed when they sleep, this is interpreted as their relationship as a married couple being almost at an end. It is important to explain how such a delicate sleep culture exists in families.

To change the subject, Japanese people often doze in public places, and some western people, for example people who live in Japan have commented on this with surprise, that Japanese people doze in trains, libraries, and class rooms more often than western people. However, there is little data available and little discussion has been conducted on the issue. Naturally, attitude formation concerning dozing in public place relates to pickpocketing and other issues of public safety, and dozing in classrooms relates to how easily credit can be obtained in schools and to the number of students

attending each class. However, this is also related to attitudes towards dozing and behavior-related norms. For example, the importance of self-control is one of the reasons why people refuse the idea of sharing a bed with their children and this refusal is stronger in the West, where people are considered to be more individualistic than in Japan, which is considered to be a collective society. Accordingly, dozing in public places is rejected more strongly in the West than in Japan as people in the West see it as exhibiting a lack of self-control.

# Existing study results and the purpose of this study: Comparing Japanese and French sleep cultures

Azra & Vannieuwenhyuse (2002) conducted a study in France on sleep habits and people's attitude toward sleep behaviors. The study was conducted on 140 university students (49 French students and 91 Japanese students) by using questionnaires about their sleep habits at the time when they were answering the survey and in their childhood. The participants were also asked about their attitude towards sleep behaviors. The study found: 1) The average hours of sleep for French students per night was nearly one hour longer than for Japanese students; 2) In France, children and their parents begin sleeping in separate rooms when the children are very small, while Japanese children and their parents share the same bed and this lasts until the children become much older; 3) It is thought of as a problem if couples who have been married for a long time sleep in separate rooms in France, while Japanese people do not think it is a problem; and 4) Most Japanese often doze in trains, libraries, and other public places, while many French do not doze in such places.

In this study, a survey was conducted on sleep cultures by comparing the data collected in France shown above and data newly collected in Japan. The purpose of this study was to identify the differences of sleep habits and attitudes between Japan and France. Investigations were made into: first, sleep habits (behaviors) found in the relationships of child-parent and wife-husband, and their attitudes towards sharing the same bed; and, second, dozing-behaviors on public transport vehicles, in classrooms, and other public places, and how people in general feel about people who are dozing in public places. Then, the results of the study were explained and a tentative model on sleep cultures was made, while making references to cultural dimensions advanced by Hofstede (1991) and earlier studies conducted

by the author and others (Vannieuwenhuyse et al., 1998; Hirokawa et al., 2001).

#### Questionnaire survey in France and Japan

#### Participants and the contents of the questionnaires

The questionnaire survey in Japan was conducted with 197 female university students (mean age: 19.0) in 2001. The survey was conducted during classes. A part of the data already collected in the study conducted by Azra & Vannieuwenhyuse (2002) was used as the data for France. The study was conducted on 49 university students in Paris. However, missing values were included in the data, and thus the analysis made in the study was not necessary from all the 49 participants.

The questionnaire used in Japan was based on the translated version of the questionnaire used in the study conducted by Azra & Vannieuwenhyuse (2002). After the translation was conducted first by students who were majoring in French at K University, the Japanese translation was translated into French again by native speakers of French. Then, the translation in French was compared with the original questionnaire in French, and the questionnaires in Japanese were checked by Japanese teachers at a university in France. The questionnaire used for French students was the original questionnaire in the French language.

The following survey was conducted with both French and Japanese people. First, the participants were asked to answer about their daily sleeping hours using numbers. Then, the participants were asked to state their opinions about sleep related to family relationships. The contents of the questionnaires were: 1) when do you think is the best age for children to sleep in a separate room from their parents?; 2) In France and other western countries, it is thought that parents and children should begin sleeping in separate rooms when children are small and it should be done as soon as possible after the children are born. What do you think about this?; and 3) Imagine you have a spouse or a partner who you have been together with for nearly 20 years. How do you think you are sleeping with the spouse or partner? Choose one from "sleeping in the same bed," "sleeping in the same room but in separate beds," and "sleeping in separate rooms." Then, explain why you chose your answer.

The participants were also asked to answer questions related to dozing

in public places. They were asked: 1) Do you sometimes doze in parks, university cafes, libraries, classrooms, and other public places?; 2) What do you think about dozing in public places?; 3) Do you sometimes doze in trains, buses, and on other public transportation vehicles?; 4) What do you think about dozing in public transport vehicles?; and 5) Do you see anyone dozing during lectures? Each question had 10 items and the participants were asked to choose several items for each question.

The question of what kinds of bedclothes they were using, who they were sleeping together with when they were at age 3 and 10, and what they would do if they became sleepy at university are examples of the questions which were included in the questionnaire made in France but not included in the short version of the questionnaire which was made in Japan.

#### Usual sleeping hours

The following is the result of the survey. The usual sleeping hours for Japanese university students was 6.27 hours (SD = 1.15) on average and for French university students it was 7.74 (SD = 1.11) on average. A French-Japanese comparison was made based on this result and the results from Azra & Vannieuwenhyuse (2002), and it was found that the average hours of sleep for Japanese university students was much shorter than that of French university students. A Mann-Whitney U-test was conducted and

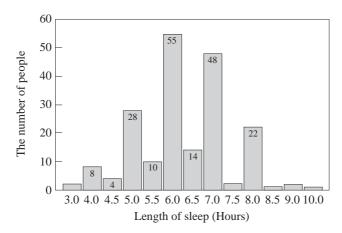


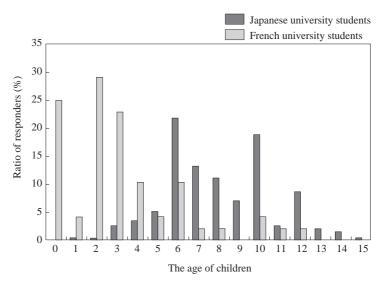
Figure 12.1 Distribution of hours of sleep hours of Japanese university students

the *U*-value was 498.5, and the difference between Japanese and French was found to be significant (p < .001). The results of Japanese students are shown in a graph in Figure 12.1.

#### Child-parent relationships and sleep habits

Figure 12.2 shows the appropriate age for parents and children to sleep in separate rooms. As shown in the figure, Japanese university students think that children should sleep in the same room with their parents until they become a littler older. Almost none of the Japanese university students thought that children should sleep in a separate room from their parents at age 0, 1, and 2. The students judged that children should start sleeping in a separate room from their parents at around 6 years old. The number of French university students who thought children should sleep in a separate room from their parents even at age 0 was as high as 25 %, and as high as 80 % of French students thought that children should start sleeping in a separate room from their parents before they become 3 years old.

So, the difference was significant in the quantified data. On the other hand, in the responses to the question: "In France and other western countries, it is thought that parents and children should begin sleeping in sepa-



**Figure 12.2** Distribution of the age of children at which it is thought appropriate for them to sleep in a separate room from their parents

rate rooms when children are small and it should be done as soon as possible after the children are born. What do you think about this?," a significant number of Japanese university students responded that children and their parents should sleep in the same room until the children become a littler older, but at the same time, many of the students had positive opinions on French and Western sleep habits. Even so, though there were critical opinions expressed about this Western sleep habit and some participants stated opinions such as: children may feel lonely if they sleep alone at a young age; and it is as if parents are leaving the children alone and it is pitiful. The most common response among the positive opinions was that sleeping in a separate room from parents would make it possible for the children to become independent from an early stage. Moreover, French university students described the reasons why they thought that married couples should sleep in the same bed from the viewpoint of respecting the privacy of married couples. Their responses included: 1) Children should have their own space which is separate from their parents; and 2) They should not interfere with the intimacy of their parents. Such responses were not found in the responses made by Japanese university students.

#### Relationships of married couples and their sleep habits

Table 12.1 shows the responses to the question of how people would sleep with a spouse or a partner with whom one has been together for 20 years. A chi-square test was conducted and the results became  $\chi^2$  (2) = 73.05 (p < .001). It shows that there is a significant difference between Japanese and French students about how married couples sleep. Almost all of the French university students responded that they would sleep in the same bed with the spouse or partner with whom they would have been together for 20 years, while only 25 % of the Japanese university students responded that

	Japanese university students	French university students
Sleep in the same bed	49 (24.9 %)	41 (93.2 %)
Sleep in the same room but in separate beds	134 (68.0 %)	1 (2.3 %)
Sleep in separate rooms	14 (7.1 %)	2 (4.5 %)

**Table 12.1** Frequency of opinions about how married couples sleep

they would do so. In addition, the number of the Japanese university students who responded that they would sleep in the same room but in a separate bed with their spouse accounted for 2/3 of the total number of Japanese students.

Similar to the case where they were asked about the sleep habits of children and parents, French and Japanese university students were asked for the reasons for their responses. Significant differences were found between Japanese and French students on how they thought about the relationships of married couples and their sleep habits. Japanese university students who chose "sleeping in the same bed" as their response wrote such reasons as "cuddling together is important for love relations," "sharing time with a spouse as long as possible," "hoping to talk until just before falling to sleep," and "it is lonesome to sleep separately." Though these response show that they placed an importance on the intimacy of married couples, the number of such reasons was small, and none of the reasons written by the Japanese students were as insistent as the reasons written by the French students. Moreover, none of the reasons written by the Japanese students were related to sexuality. Some Japanese students explained the reason why they chose "sleeping in the same room but in separate beds" is because sleeping in the same room would increase the level of intimacy of the couples. However, many Japanese students also wrote that it would be physically uncomfortable sleeping in the same bed as the size of bed might be small or the spouse or partner might toss around in the bed. Some Japanese university students wrote that sleeping together was unnecessary after a couple have been together for 20 years, or that sleeping together during the honeymoon period was good enough. These responses suggest that intimacy and sexuality would not be much of a concern if wife and husband are together for a long period of time. Some Japanese university students wrote their reasons for choosing "sleeping in separate rooms" as wanting to have time alone, feeling more comfortable sleeping alone, and that it is tiring if a couple has to be together even when they are asleep.

#### Dozing in public places

A chi-square test was conducted on the difference of dozing habits in public places between Japanese and French people. The results became  $\chi^2$  (3) = 75.10 (p < .001) and a significant difference was found. The difference is obvious even in the attitudes to dozing behaviors in public places. French university students seldom sleep in parks, cafes, libraries, and classrooms,

Table 12.2 Frequency of dozing in public places

	Parks, university cafes, libraries, classrooms, etc.	cafes, libraries, ns, etc.	Trains, buses, etc.	ses, etc.
•	Japanese university French university students	French university students	Japanese university French university students	French university students
Every day	72 (36.9 %)	0	80 (40.8 %)	6 (13.6 %)
Once or twice a week	69 (35.4 %)	6 (13.6 %)	51 (26.0 %)	6 (13.6 %)
Once or twice a month	25 (12.8 %)	4 (9.1 %)	14 (7.1 %)	3 (6.8 %)
Almost never *	29 (14.9 %)	34 (77.3 %)	51 (26.0 %)	29 (65.9 %)

Note: \* The number of "Almost never" responses in the French version is the combined number of "Once or twice a year" and "Never."

and almost no students sleep in public places as frequently as every day. However, it was found that about 1/3 of the Japanese university students dozed in public places every day. It was found that more Japanese university students dozed in trains, buses, and other public transport vehicles ( $\chi^2$  (3) = 25.36, p < .001), though the difference was not as significant as the case of dozing in parks and cafes.

The participants were also asked, "Imagine there is a student who is dozing in class and consider what you would think. Please choose several responses from the 10 items listed in Table 12.3." Table 12.3 shows the 10 items and the number and percentage of the participants who chose each item.

The attitudes of the participants towards sleep habits in public places were found to be significantly different between Japan and France. However, in the case of attitudes towards snoozing, a statistical significance in differences was found only with regard to a few items. As a result of a chi-

Table 12.3 Frequency of attitude towards sleeping in classes

	Japanese university students	French university students
1. Cannot control their sleeping.	24 (12.2 %)	3 (6.8 %)
2. They have no proper routine.	46 (23.4 %)	1 (2.3 %)
3. They worked without sleep last night.	38 (19.3 %)	8 (18.2 %)
4. They studied without sleep last night.	28 (14.2 %)	12 (27.3 %)
5. They were playing until late last night.	69 (35.0 %)	16 (36.4 %)
6. If they are sleepy, they shouldn't come to school.	17 (8.6 %)	6 (13.6 %)
7. If they are sleepy, they should sleep at home.	20 (10.2 %)	13 (29.5 %)
8. They show a lack of respect to their teachers.	27 (13.7 %)	13 (29.5 %)
9. Teachers should throw them out of the classroom.	1 (0.5 %)	2 (4.5 %)
10. It's nothing to do with me, so I have no opinion.	133 (67.5 %)	11 (25.0 %)

square test significant differences between Japan and France were found: Japanese students think, "They have no proper routine" more strongly than French students ( $\chi^2$  (1) = 10.45, p < .001); French students think, "They studied without sleep last night" more strongly than Japanese students ( $\chi^2$  (1) = 4.12, p < .05); French students think, "If they are sleepy, they should sleep at home" more strongly than Japanese students ( $\chi^2$  (1) = 10.92, p < .001); French students think, "They show a lack of respect to their teachers" more strongly than Japanese students ( $\chi^2$  (1) = 6.12, p < .05); French students think, "Teachers should throw them out of the classroom" more strongly than Japanese students ( $\chi^2$  (1) = 6.12, p < .05); and Japanese students think, "It's nothing to do with me, so I have no opinion" more strongly than French students ( $\chi^2$  (1) = 28.20, p < .001).

One point to note is that the results show that only a few French university students think that students who are dozing do so without personal self-control. The attitude was found to be rather stronger among Japanese students. The results show that 12.2 % of Japanese university students think that students who are dozing do so without personal self-control and 23.4 % of the students think, "They have no proper routine." Another point to notice is that the 2/3 of the Japanese university students thought, "It's nothing to do with me, so I have no opinion," and this suggests that they have an attitude of having no interest in others in general.

## Similar opinions about the sleep of children and parents in France and Japan

From the results of survey mentioned before, a significant difference was certainly found in the opinions about what ages children should start sleeping in a separate room from their parents. However, the reasons for thinking that children should sleep in a separate room from parents were in fact very similar among French and Japanese university students, and thus it does not seem valid to focus only on the differences in their opinions about the ages, but the reasons. Similarly to French students, many Japanese university students have positive opinions about children and parents sleeping in separate rooms, and this tendency conforms to the results of the study made by Azra & Vannieuwenhyuse (2002). More specifically, similar opinions were found in French and Japanese students in the written responses given by each student as answers to the question of why they think children and parents should sleep together till the age the participant thinks appropriate, and why they think children should not sleep in a separate room from parents till the

children become a little older. The answers found to be similar were, for example: 1) It is safer for children and parents to sleep together because parents can deal with situations when something happens to their children, and this will stop parents from worrying about their children; and 2) Children will feel safe if they sleep together with their parents, and it is important for them to feel the warmth of being with their parents. Moreover, many common views were found among French and Japanese students in the various opinions which were written as responses to the question, "why should children and parents sleep in separate rooms?", which was included in the survey made by Azra & Vannieuwenhyuse (2002). The answers found to be similar were, for example: 1) In order to foster independence in the minds of children; 2) Children will sleep alone eventually, and thus earlier is better for them to learn it; 3) Children can sleep without being disturbed by the schedule of their parents; and 4) Parents can sleep better.

These responses suggest that people in the West and Japan have begun sharing more similar attitude towards contact between parents and children (Tsuneyoshi & Boocock, 1991). This is happening because people in the West have started feeling positively about children and their parents having closer contact, while people in Japan have started feeling negatively about children and their parents having contacts which are too close. If, in Japan, it becomes possible for families raising children to have extra rooms in their houses, and if the number of children decreases further, then the physical conditions will change and children and their parents will have contact in similar ways to the west.

### Contrasting opinions found in Japanese and French people about the sleep habits of married couples

A significant difference was found between French and Japanese university students in the attitude they took to the sleep habits of married couples. The results show that people in France think that married couples should sleep together and that people in Japan do not have strong opinions about whether married couples sleep together. One of the reasons for the results is that people in France understand about married couples sleeping in the same bed in more sexual ways than Japanese people do. French people understand the sleep habits of married couples in the same bed as an essential form of behavior for married couples who are connected by heterosexual love. The comfort of sleeping alone in bed and other reasons related to comfort while sleeping which are pointed out by Japanese people should probably mean

the same to people in France. However, French people must be thinking that they cannot sacrifice the intimacy of married couples for such reasons.

Another reason is that Japanese married couples appear to have less romantic affection than French married couples do. Today, almost all Japanese marry for love, but not many couples seem to keep having a sense of love even after love marriage. This seems to be one of the reasons why they do not sleep in the same bed, even though the couples sleep in the same bed for a certain period after being married. If this is a valid opinion, then why is it difficult for Japanese married couples to keep having a sense of love? One of the reasons is that married couples have to endure strong "social pressure" in order to stay as married couples in Japan. Japan is said to be a society where marriage is an obligation and it is also said to be a coupleunit society (Ida, 1995). The divorce rate in Japan is still relatively low among advanced countries, and though many females get married later today, many females think they will marry eventually. Thus, this is an extension of the marriage moratorium. As we see in the environment surrounding married couples in Japan, getting married as a result of being forced to do so by others may prevent them having a sense of love after marriage. Before they think they marry because they love each other, they are forced to think that they have a relation called being married as a response to, for example, social norms or the expectations from their families. This tendency can be found in the written responses given by the Japanese university students. The students wrote things like, "because they (married couples) have to be together all the time," and they "want to be alone least while sleeping." These responses indicate they are feeling compelled to continue being a wife and husband. At the same time, some students wrote, "because it is strange for married couples to sleep in separate beds" as the reason why they chose that they would sleep in the same bed when they marry, and this suggests that they also think in this way in the sense of following social norms.

The differences in sleep culture between Japan and France from the viewpoint of individualism and collectivism

This section will discuss how individualism and collectivism are different in nation and self-construals between Japan and France by making reference to the attitudes towards the sleep habits of married couples. Hofstede (1991) conducted an extensive survey about how people place values on labor, family, and society in general in 1967 and 1973. This survey was conducted

Table 12.4 Index of individualism in countries in the world

Country or region	Score for individualism	Country or region	Score for individualism
1. United States of America	91	28. Turkey	37
2. Australia	90	29. Uruguay	36
3. G. Britain	89	30. Greece	35
4. Canada	80	31. Philippines	32
4. Netherlands	80	32. Mexico	30
6. New Zealand	79	33. East Africa	27
7. Italy	76	33. Yugoslavia	27
8. Belgium	75	33. Portugal	27
9. Denmark	74	36. Malaysia	26
10. Sweden	71	37. Hong Kong	25
10. France	71	38. Chile	23
12. Ireland	70	39. West Africa	20
13. Norway	69	39. Singapore	20
14. Switzerland	68	39. Thailand	20
15. Germany	67	42. El Salvador	19
16. South Africa	65	43. Korea	18
17. Finland	63	44. Taiwan	17
18. Austria	55	45. Peru	16
19. Israel	54	46. Costa Rica	15
20. Spain	51	47. Pakistan	14
21. India	48	47. Indonesia	14
22. Japan	46	49. Colombia	13
22. Argentina	46	50. Venezuela	12
24. Iran	41	51. Panama	11
25. Jamaica	39	52. Ecuador	8
26. Brazil	38	53. Guatemala	6
26. United Arab Emirates	38		

Note: The higher the score for individualism, the more the society encourages individualism. Source: Hofstede, G. (1991). Cultures and organizations: Software of the mind. London: McGraw-Hill International.

on 117,000 employees of IBM in 53 countries. Table 12.4 shows the index of the degree of individualism and collectivism of each country, which was calculated based on the survey results. Here, individualism means by the idea of placing priorities on the benefit of individuals before the benefit of groups, and collectivism means by the idea of placing priorities on the benefit of groups before the benefit of individuals. According to the survey, Japan is positioned at around the middle level of individualism, and France is judged as a country with a tendency toward individualism which is much stronger than Japan's. Markus & Kitayama (1991) advocated two types of self-construals: the independent self-construals and the interdependent selfconstrual. The independent self-construal is about how the self exists in individualistic cultures in the West, where the independence of each individual is respected, and the interdependent self-construals are about how the self exists in cultures of collectivism in Japan and other Asian countries, where interdependence and harmony with other people are considered important. Likewise, Takada (2000) argued that individuals are considered separate and independent from others in the West, while it is thought important for individuals to be a part of interrelationships with other people in the East, including Japan (Oishi, 2000).

Based on the literature above, it can be hypothesized that Japanese people place more emphasis on groups than individuals and that they value collectivism at both the national level and the level of the self-construals. In the West, including France, people place more emphasis on individuals than groups and they value individualism. Therefore, if it is possible to consider that the relationships of married couples are a kind of group relationship and that placing importance on them being together is "collectivism," and if in contrast it is possible to consider that placing importance on comfort and having a good sleep is one example of "individualism" found in sleep behaviors, then the hypothesis is contrary to the fact that French married couples value the relationship with their spouse more than Japanese do and that they believe strongly that they should sleep together. How do we understand the conclusion that Japanese people are more individualistic than French people when only sleep habits in the relationships of married couples are taken into account?

Individualism and collectivism depending on different aspects of interrelationships among people

As shown above, the sleep cultures of Japanese and French people cannot

be explained from the viewpoint of the individualism and collectivism of each country, and this makes it possible to predict that the individualism and collectivism of a nation can be different among different areas of interrelationships among people. If the areas of interrelationships among people are divided into a private area and a public area, and the private area and the public area mean outside and inside the family, then when people talk about the traditional assumption of the West being individualist societies and Japan being a collectivist society, this refers to the public area and is about informal interrelationships among people who are acquaintances and who require certain constraints. In the analyses which have been made concerning individualism and collectivism traditionally, no consideration was given to the public interrelationship among people who are unacquainted in public. This suggests that the formula of Japan = collectivism and the West = individualism is invalid for complete strangers, according to the data about dozing in public. The tendency to think "it is nothing to do with me" was stronger among Japanese university students than French university students when they saw other students dozing in classes. Japanese university students dozed in public places and on public transport vehicles more frequently without any hesitation and without being conscious about the atmosphere around them and about what others thought, in comparison to French university students. French society is known as an individualist society. However, there was no tendency among people to think of someone dozing in public as having no sense of control of the self by attributing this to individuals. French university students seem to think that they should not doze in public because of good manners rather than as a way to control the self. This leads to the possibility that there are distinctions between being acquainted with others and complete strangers in the "public" area. This was also pointed out in the book "The Anatomy of Dependence" by Doi (1971). According this book, Japanese do not depend on complete strangers, and they have no consideration for others and feel no shame in front of complete strangers. The "public" has characterized Japan as a collectivist society, but the "public" which is a public with complete strangers rather characterizes Japan as a society where people do not care about the morals of groups and society. In other words, it is a negative aspect of individualism. Meanwhile, the "public" which has characterized the individualism of the West has another aspect which is in accordance with collectivism, where people try to think about the atmosphere and keep norms in classrooms or with complete strangers on public transport vehicles.

The West has been known as individualist, and Japan has been known as a collectivist society, traditionally in the "private" area. This distinction was made possibly because only the "self" was concerned with the "private," and it was divided into the independent construal-self or the dependent construal-self. However, this study has found that French people, who are supposed to have an independent construal or to be individualistic, actually have a sleep culture in which people care about the relationships of married couples. The individualistic societies in the West accept individual achievements and abilities as holy writ, but when someone becomes a president, for example, his wife will be made a great fuss of as first lady and they are invited to social parties as a married unit. Observing such situations, the author had been wondering how to connect these outcomes to individualism, which has been thought strong, but this new view now can be examined through the sleep habits of married couples.

Dohi (2000) pointed out that married couples and families are shadow-like parts in society. And the interrelationships and mind among the couples and families was named the "shadow work of males and females," and was argued that the "private" and "public" areas were closely related. Shadow work includes both the personal behaviors and mind of married couples as a unit and the behaviors and mind of the couple as individuals. In other words, the "private" area also contains the area of married relationships and the area consisting only of the self, and with regard to sleep behaviors which were found in this study, Japanese society is collectivist and French society is individualist in the area of the "self", but in the area of married relationships it is reversed. People in French society seem to show more consideration concerning the group called married couples and have a stronger sense of collectivism in this regard than do people in Japanese society.

#### The individualist-collectivist model in areas of interrelationships

Based on the argument above, individualist-collectivist models are formed for Japan and France in every area of interrelationships. Figure 12.3 and Figure 12.4 show the models for Japan and France, respectively. The ellipses and squares in the figures are used to show the differences of traditionally known "private" and "public" areas, and the ellipses show the "private" areas and the squares show the "public areas. Furthermore, each "private" and "public" area consists of two layers. The "private" area has "individuals" inside and "married couples" outside, and the "public" area has "acquaintances and close interrelationships" inside and "complete

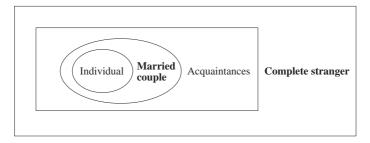


Figure 12.3 Spatial restriction model of individualism and collectivism (Japan)

Note: Individualistic area is expressed in bold letters.

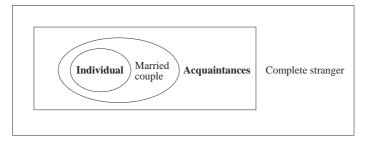


Figure 12.4 Spatial restriction model of individualism and collectivism (France)

Note: Individualistic area is expressed in bold letters.

strangers" outside. Sleep habits based on these four areas are then divided into individualism and collectivism. First, Japanese society has been known as a collectivist society, but people place importance on comfort in sleep in the "married couples" area and they "think nothing" about the sleep habits of complete strangers. Thus, it is so-called individualist. In contrast, "individual" area and "acquaintances" area, it is so-called collectivism. Second, French society has been known as an individualist society, but in the "married couple" area they place much importance on the interrelationships of married couples, and thus it is considered as a collectivist society. Moreover, French people resist the behavior of dozing in front of complete strangers, and this suggests that whether people doze in public places have self-control or not is not an issue for them, but rather they believe such behavior must not be performed in public places. In this sense, they are collectivist

people. In contrast, "individual" area and "acquaintances" area, it is socalled individualism.

#### Findings and future areas for study

This study was conducted using a pilot survey, and the data, as well as the number of participants, were insufficient. Therefore, this can make no more than a tentative assumption. However, there were some findings to be drawn in the three points below. First, "behavior" in sleep is also an indication of culture, and empirical studies on sleep culture can be meaningful studies. Especially, sleep behaviors are one style of "shadow work," conducted mainly in the relationships among married couples and families, and since sleep behaviors are generally conducted at night, they are likely to be influenced by sexuality. Thus, studies of sleep behaviors can help us understand human behaviors better. Second, quantified data are not adequate for determining individualism or collectivism, and it is more efficient when a form of free description is also employed when data is collected. Between Japanese and French participants, a big difference was found in people's ideas of when the preferable ages may be for children to start sleeping in a separate room from their parents. However, the attitudes of Japanese and French people towards sleep were very alike. So, this result can be attributed to physical conditions, such as the size of houses and the number of children in a family. Third, studies of sleep habits, dozing, and other sleep behaviors indicate that traditional studies of individualism and collectivism may concern only limited areas of human relationships. It seems that such studies have formed conclusions related to individualism or collectivism by focusing only on relationships among people who were acquainted in the public area and by focusing only on individuals in the private area. The relationships of married couples and relationships with complete strangers should be taken into account in such studies. When collective and individual orientations of the self are measured in the future, identifying types and areas of interrelationships will be necessary. Moreover, surveys should be conducted on those countries other than Japan and France which are considered collectivist and individualist societies.

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# Family-unit orientation and Gender Personality in Japan

In Part III, discussions were carried out based on the results of empirical studies by the author into how the gendered society of Japan affects Gender Personality, family life, and interrelationships among males and females. Several issues have been found consistently in the studies.

# Couple-unit society and shadow work as factors related to Japanese-style genders

In Chapter 8, the concept of a "couple-unit society" was examined as one of the factors related to the genderization which is typical to Japanese society. Many social systems in Japan force legal marriages on people in a way, and thus the ratio of marriage is high and the ratio of divorce is low in Japan in comparison to other advanced countries. Japanese couples tend to get married when females get pregnant as a way to avoid their children being born outside of marriage. This is because the married legal relations of parents will involve their children in Japan. In a society like Japan, where marriage is somewhat forced, married couples are directed to have the concept of value that a wife and husband should be one even mentally. However, when couples are forced to marry, they will conduct static role behaviors at home in accordance with social norms. Because of this, Japanese married couples, ironically, often end up focusing entirely on their different roles and being closed into separate worlds. They lack communication to express their affection in having an understanding of each other, and as a result, they will be less likely to be connected personally. Moreover, husbands are likely to

have only masculinity and wives are likely to have only femininity in their individual personalities, in accordance with gender roles.

This hypothesis will be tested when the Japanese situation is compared with the situations in other countries. For example, people in the West do not receive as much merit as Japanese from tax, pension, social security, and other system, by getting legally married. Accordingly, there are many cases of de facto marriages, as in Australia and France. There are many children born outside of marriage, and this is not unusual at all. However, married couples in the West often take their spouses together with them when they go places in daily life. This makes us think that the West is a society of couple-units. This is because couples in the West, where unlike Japan legal marriage is not forced, put effort into expressing their affections, consider how their partner or spouse feels, and often act together in order to keep having close communication. In other words, whether their relationship is good or not is depending on how they feel towards each other, and thus they make efforts to maintain a good relationship. Since they have less social pressure, they realize that there is a chance that they may fail in maintaining their relationship. Therefore, both males and females have a strong independent consciousness, and unlike Japan the tendency to have only masculinity for males and femininity for females is weak. As society is expected to consist of married-couple units, ironically, the two individuals in each couple are less likely to have an understanding of each other. On the contrary, when couples are less forced to live as couples, they succeed in living as couples spontaneously.

In a "couple-unit society" as was presented in Chapter 8, marriage in Japan is something forced and legal marriage is oriented by each individual, so that each individual tries to be one with his/her spouse mentally too. This "couple-unit society" refers to the concept named by Ida (1995). In Chapter 10, "family-unit orientation" was proposed. The concept of "family-unit orientation" is developed by applying the concept of couple-unit orientation not only to married couples but to their entire family, including their children and parents. The details of couple-unit orientation and this new family-unit orientation actually overlap. In addition, in Japan, as mentioned before, it is hard to be a purely romantic married couple. Thus, couple-unit orientation and family-unit orientation are called family-unit orientation together from now on. Incidentally, the opposite concept of family-unit orientation is "single-unit orientation." This was also termed by referring to Ida (2003).

#### Accent on maternity in child-raising in Japan

As shown in Chapter 9, a questionnaire-survey was conducted among married couples who were raising children. The participants of the survey were asked to evaluate themselves as to whether they consider child-raising is the role of mothers or whether they consider the role should be shared between mothers and fathers equally. The results revealed that fathers had a stronger tendency to consider child-raising as a job for mothers.

The theory of the maternal instinct (Ohhinata, 1998) has been believed widely and for a long time in Japan. According to this theory, a mother's ability to raise children affectionately is an innate and instinctive quality, and maternity has been an important element of the female gender stereotype in Japan. In Japan, mothers act as if only they have responsibility in raising their children and they tend to place disproportionate weight on caring for their children. Such behaviors can cause them to raise their children as if the children were only theirs, not the children of both themselves and their husbands. In Japan, therefore, mothers win custody of their children when they get divorced. When internationally married couples get divorced outside Japan, Japanese wives often bring their children back with them even without having agreements with their husbands. However, this mentality of mothers is often easily understood by Japanese people. This is one of the reasons why Japan was late in ratifying the Hague Convention which includes the protection of children and a prohibition of taking away children in respect to international marriages.

Due to the mother-emphasis in children-raising, Japanese fathers are less likely to claim the right to meet their children after divorce, and in many cases fathers do not pay the child support which was agreed on when the couple divorced. It appears that mothers also believe that they are responsible for raising their children. Such a belief is probably causing mothers to feel anxiety and stress over child-raising, and also it results in them suffering from the empty-nest syndrome. Both mothers and fathers cannot behave in a balanced manner as parents in modern Japan.

This accent on maternity affects not only parent-child relationships but it also affects and encourages the orientation of role sharing by wives and husbands which is widely spread in today's Japan. Based on the study results in Chapters 9 and 10, it is possible to hypothesize that husbands will conduct inappropriate role behaviors once their children are born. They are expected to focus only on their job as a way of achieving their role and to

leave child-raising to their wives. It is too much of a burden for wives to take care of children alone, but few males take child-care leave from their jobs in Japan. This indicates that Japanese males depend on their wives too much for household chores, and this is probably linked to the falling birth rate in Japan.

## Why is Japan facing a falling birth rate despite its accent on maternity?

As described so far, Japanese mothers as well as Japanese society place a high priority on maternity. Then, why does Japan's birth rate still have a tendency to fall? One of the biggest reasons is that having children means losing occupational opportunities for Japanese females. The myth that children should be raised by their mothers discourages females from having both children and jobs. Females who have given up having both children and jobs at the same time usually chose to live as mothers, but their ages of having first babies are getting older, so it is impossible to have plural babies they want. And deciding to leave one's job when giving birth means that they have chosen a life dependent on their husbands. If society expects to increase its birth rate under such a condition, it should consider how to increase the wages of young males who are the husbands of such females. In reality, however, only a few males can earn enough money to compensate for the loss made by their wives when they have given up their jobs for marriage and/or children. Females who have some knowledge of such actual conditions avoid having babies and getting married. It does not necessarily mean that they do not have children because they want to work. They are afraid that their level of life will be lowered when they give a birth to and take care of their children.

However, there is an effective way forward which is the opposite of encouraging females to rely on their husbands economically and for comfort. This method is effective for females with a sense of professionalism and an intention to remain independent. Such females usually chose not to have children if they have to rely on males economically. Their own independence comes before children for such females. Accordingly, when low fertility becomes an issue, there is often talk about how females have become highly educated and participate in society actively and how these facts have encouraged females into thinking that they do not need to marry or to give birth in order to be supported by their husbands. All of this sounds as

if females are doing something wrong by gaining a higher education and participating in society. However, this does not mean that they participate in social activities because they don't want to have children. They don't want to have children because of the environment in which, if females with a high sense of professionalism and intention to remain independent, they cannot have children if they decide to participate in society. Their concern is not whether they chose having children or having jobs anymore. It seems that having a job is not a matter of choice anymore, and what they are trying to chose is whether they have children or not. Therefore, if an environment in which females can continue working even after they become mothers is established, they will chose to have children as in northern Europe.

It is necessary to devise flexible countermeasures to halt the falling birth rate which cover the various ways of thinking among Japanese females, and at the same time, it is necessary to think about whether countermeasures for the falling birth rate are really necessary and what is so wrong about a falling birth rate anyway. According to Nishimizu (2013), if the ability and power of females who are not working were used now, Japanese society could have the same results as if the number of children was increased, and this is possible without investing money and time spent on raising children. It takes a long time before children become adults. Using the power of females is possible at this moment. Accordingly, we should consider setting the retiring age a little longer for females than males depending on the number of children they have raised in their lives, as a method to re-compensate for the time they have allocated when they were younger to child-raising. At least, the expenses for child-raising should be considered tax deductible. If this happens, more females will chose to raise children while having occupations. In this sense, one of the most effective countermeasures to the falling birth rate is to establish an occupational environment and supports for child-raising which are suited for females with a high sense of professionalism and an independent consciousness. Such females can compensate the loss caused by the decrease in child birth, and also they can give birth to their own children.

The consciousness of family and ancestors today, and parenting by sex and family-unit orientation according to sibling structures

In Chapter 9, it was shown that parents change their parenting by sex in accordance with sibling structures. For example, parents who have sons and

daughters have less tendency to expect communion from their sons than do parents who have sons only. This happens because parents do not raise their children as each individual with different personalities but rather as a group with one personality. This idea is consistent with the experiment conducted in Chapter 7 of Part II in respect to the communication held between males and females. In Chapter 7, situations where a male and a female are having a conversation were examined to find out whether each of them would have either masculinity or femininity, or whether each of them should have both masculinity and femininity in order to have successfully adaptive communications. The results suggested that the most adaptive communications were held by the couples of androgynous individuals who have both masculinity and femininity. Unfortunately, Japanese parents do not place emphasis on the androgynous traits of each individual, and as the results in Chapter 9 suggested, they tend to see their children as a group rather than as individuals. From the viewpoint of each sibling, however, he/she is a separate being from others. Parents are required to build the base of character formation for each child as an individual.

In addition to the discussion above, there are possibilities that the results of the study in Chapter 9 are influenced by the consciousness of family and ancestors which is the base for Japanese-style genders and which consequently strengthens family-unit orientation. Japanese people's consciousness of family and ancestors has a significant meaning in facilitating family-unit orientation. This is because defining who will be the inheritor of the family requires the family to be stable and highly cohesive. Parents with sons only expect agency and the continuation of parent-child relations from the oldest son and there is an expectation that the oldest son be stronger than the second oldest son, for example. This research result suggests that a consciousness of family and ancestors still exists in Japan. It was also found that, when parents have both sons and daughters, parents do not invest any hope of a continuation of parent-child relationships in their daughters. However, when parents have daughters only, they have a high expectation for their daughters to have longer parent-child relationships.

The Japanese Civil Code, which was established in the Meiji era (1868-1912), enacted and generalized the Japanese family system which had already spread widely in samurai stock and other social strata. Today's Civil Code in Japan was established by adding only small changes to the old Civil Code after the war, as Japanese married couples have, for example, been obliged to have one surname since the establishment of the old Civil

Code. This is a law found only in Japan. Under such an environment, in many cases females are the ones who change their surname when they get married. Disadvantages caused by this obligation sometimes become an issue for discussion, however, the system has not changed yet. One of the reasons for Japanese people to prefer having one surname for each family is, "if members of a family have different surnames, the tie as a family becomes weak."

The author conducted a study (Dohi, 2007) which measured people's emotional attachment to their own surnames by finding out whether people like their surnames and whether they know the derivation of their surnames. The study found out that people with unusual surnames have a stronger emotional attachment to their surnames, and it also found out that people have a high sense of camaraderie and friendliness if they have the same surnames. However, the study also found out that having an emotional attachment to one's surname has no connection to the tendency for people to aspire to family-unit orientation (in other words, having one census registration because of marriage), to obey their roles as mothers and fathers devotedly, and to maintain and care for traditions and tombs which they have inherited generation after generation. Therefore, attachment to having one surname after marriage causes a demerit in increasing a sense of dislike of marriage among females, and this is producing an unexpected result for those people who have a high family-unit orientation and hope everyone will recognize each family as a unit in society.

## Does shadow work shake up family-unit orientation and make individuals independent?

In the interviews conducted with double-income married couples in Chapter 10, it was sensed that people of the younger generation today have less consciousness of family and ancestors than the generation of their parents. The consciousness of family and ancestors may be weakening, though gradually, in Japanese society. However, the consciousness of family and ancestors will not disappear immediately. The family-unit orientation, which is thought to be formed under the influence of consciousness of family and ancestors, will continue to be supported by Japanese people.

Chapter 10 presented a survey conducted on double-income married couples who had children and lived as extended families. The results of the survey identified that, when couples have a high family-unit orientation, the traditional gender roles are emphasized as the role of household chores is placed on wives disproportionately and the role of earning living expenses is placed on husbands disproportionately. As the tendency for people to have family-unit orientation is unlikely to disappear, it is necessary for people to consider how wives and husbands should play their roles appropriately and how individuals should become independent in a society consisting of people with family-unit orientation. For example, when wives work outside in Japan, those whom they usually ask for support are not their husbands but their mothers or mothers-in-law. When family members have a high family-unit orientation, it is common for them to live as an extended family and receive support from their mothers or mothers-in-law over raising children. It is also well-known, however, that husbands do not engage in household chores in such a circumstance. In extended families, mothers and fathers of children continue to be treated as the children of grandparents.

One of the ways of sharing roles between wives and husbands of double-income families is to use services supplied from outside the home for household chores and child care. In Japan, only a small number of private companies provide these services related to household chores and child care. Nurseries have been understood as a "welfare" service for "families which lack of childcare" in Japan. In contrast, in Northern Europe, for example, mothers and fathers reduce and increase their working hours flexibly in order to engage in household chores and childcare. In other words, they are ready to reduce their salaries in order to be involved in household chores and childcare. In America, mothers and fathers employ babysitters for their children by using their money. The work environment and social-life environment in Japan should be maintained properly so that mothers and fathers can raise their children in creative ways, and society should support the parents of children so that they can contrive and find ways to share roles.

### From gender in school education to the genders between wife and husband

Chapter 9 focused on the socialization of gender towards pre-school-aged children at home. When these children start going to school, their Gender Personality will be established through their relationships with friends. They change in accordance with their schools, not with their families as a reference group. A typical "hidden curriculum" in Japanese school educa-

tion includes the subject called "technics and domestic science" (see Part II conclusion). This exhibits the idea of how roles in society are differentiated into roles for males and roles for females. This is a problem, but there is a more serious problem than this. As discussed in Chapter 8, when biased views related to genders—a tendency found in the relationships between males and females in general—are applied to the personal and private relationships of a male and a female, people tend to neglect gender-related bias. For example, when a group of females in society are affected by gender, they consider the large wage difference between males and females or the poor labor conditions for married females as problems. However, in the relationship between a couple as wife and husband, they do not consider it a problem if the wage earned by the husband is higher than the wife's, even though the wife works as a full-fledged employee. In Japan, the hours spent by females on labor related to household chores and child care are much longer than the hours spent by males, and this is an issue unique to Japan. However, Japanese married couples accept this as a form of role sharing by couples.

They accept this because they do not want to bring the inequality of the sexes and other social problems into the private areas of their lives, and also it is because wives are afraid that complaining about heavy burdens caused by household chores and childcare makes them misunderstood as lacking affection towards their families. This situation makes them spend more time on household chores in order to offer something better to the family despite the convenient home appliances that are available to them. According to data collected in a study conducted by the Ministry of Internal Affairs and Communications on how Japanese people spend their 24 hours in the day, females spent 2 hours and 37 minutes on household chores while males spent only 18 minutes in 2011. The numbers showed almost no difference from the same study conducted 15 years earlier.

#### Re-examination of the developing process of Gender Personality

According to the hypothesis made based on the author's determinant model of femininity and masculinity, individuals belong to an "undifferentiated" gender type at first, and then males gradually become "masculine" and females become "feminine" gender types. "Undifferentiated" individuals are predicted to have low masculinity and femininity of both negative and positive aspects. However, as described in Chapter 2, both undifferentiated

males and females have strong negative femininity (communion) and their negative aspect of masculinity (agency) is not so strong.

The mechanism of how the negative aspect of femininity is strong for both males and females needs to be interpreted by various methods, since femininity for males and masculinity for males are different. In the case of females, it is thought that the negative aspect of femininity is not mitigated because positive masculinity is suppressed by the socialization of genders. In the case of males, it can be thought that, similarly to females, males have a period in their lives when they experience a socialization of genders which is opposite to their general gender.

This is also suggested by the results from the study in Chapter 9. Grand-mothers invest hopes for communion and the continuation of parent-child relationships in their sons (the fathers of the children in the study) and this expectation increases negative communion in the sons. This phenomenon may be unique to Japanese. Childcare at home is mostly conducted by mothers in Japan, and as a result, grandmothers end up making their sons as well as their daughters have femininity (communion). Alternatively, sons may also have a period when they try to have communion based on their mothers, who have high communion. However, this is not expected socially for males outside the home, and this may be connected to them having negative femininity. If this is true, males should participate in child-raising, and also it is necessary to present a model of the male figure, especially to sons.

# The economic situation of young people today and changes in genders

In Chapter 11, an empirical study was conducted on university students in order to examine how the amount of money paid for drinking parties was arranged depending on the numbers of males and females who could drink alcohol. The result identified that there are two kinds of judgments on how the payments should be arranged. One judgment is that males should pay more than females, regardless of the number of males and females who can drink alcohol, and the other judgment is that people who can drink alcohol should pay more regardless of being male or female.

Even university students make the judgment that males should pay more than females, and this is based on the view of genders by sex that there should be "work for males and home for the females," so that therefore "males earn money and females are fed by males." However, do the results relate only to an assumption based on gender roles? Or, was the judgment made based on the wage difference between males and females, with consideration of the current economic situation? If the judgment was made as a result of considering the economic situation, and if this study was conducted when the economic situation in Japan was sounder and females were expected to spend their lives as full-time housewives, would males have been expected to pay more? This should be studied more in the future if changes occur in the wage difference between males and females or in income averages.

Under the current employment situation, the ratio of full-time house-wives who are "supposed to be fed" is continuously decreasing, and the number of part-time employees is increasing among both males and females. The number of families which can afford for wives to be full-time housewives has been decreasing as the wages of husbands decrease. Meanwhile, the wage difference between males and females is still large in Japan and the ratio of Japanese females taking up administrative position is still low in comparison to advanced countries. How is this related to gender and the role sharing of married couples?

Females still think that the high economic power of males is one of the requirements for marriage, and they still think the major source of income is husbands after marriage. The contents of jobs taken up by most of females do not motivate them as employees and the opportunity for females to have jobs is still small. This is a part of the reason why more females get married having the intention to be full-time housewives, and they wish to have a job as a kind of hobby while demanding that their husbands share the roles of household chores and childcare equally. There are females who wish to continue their careers, but even if such females earn high wages, their labor at home will not be reduced. As a result, they tend to have a high sense of dissatisfaction with their husbands. In contrast, males have come to wish their wives would continue their careers instead of staying home as full-time housewives, if it is possible. This change has been made because, under the current economic situation, males cannot earn high salaries anymore or they cannot have promotions or pay rises. Males are even feeling that they are at a risk of being restructured, too.

Married couples of the younger generation have started expecting each other to exhibit the same gender roles they expected from spouses earlier, and this is an ideal re-categorization from the viewpoint of gender roles. If the couples invest hopes in their spouses to achieve role sharing, the couples

should try to achieve the roles which they first expected from their spouses. In other words, if wives wish their husbands to share more work related to household chores, then wives should work and earn wages, and if husbands wish their wives to work and earn money, husbands should increase the number of hours they spend on household chores and childcare at home. Today's undesirable employment and economic situations could bring good opportunities for restructuring gender roles.

The ratio of full-time young employees will continue declining. It has become difficult for males to feed their families as a breadwinner of the family, and accordingly, the ratio of males with a low income getting married is declining. Before this phenomenon is considered as a natural consequence, genders in Japanese society have to be changed quickly. The current situation of economic recession might to be a good opportunity for bringing innovative changes to gender roles.

#### The long-range outlook and gender in Japan

Japanese people have a tendency to consider and build interrelationships with a long-range outlook, compared to the West. Although this was not discussed as a theme in the empirical studies in Part III, this is one of important characteristics of Japanese. For example, the number of divorces among older couples is increasing in Japan today, and in most cases, wives are the ones who ask for the divorce. Wives ask for divorce in their later years of life, and it doesn't appear that this is because they suddenly want to get divorced when they get older. It appears that resentment in their married life had been built up and they have been wishing to get the feelings off their chest for a long time. Married couples do not get divorced immediately even if they are unhappy together. However, it also does not mean that they continue their married life because they are happy. One of the main reasons for them to continue their life together is their children. They postpone getting a divorce by thinking, "until my children start going to primary school," "until my children start going to university," or "until my children get married." As shown in the study of sleep behaviors in Chapter 12, Japanese tend to cling to their children emotionally longer than French people do, and the lack of economic power among wives also prevents them from getting divorced. In a family-unit society, children with one parent easily become targets for prejudice.

The relationships of married couples are not always sound, and this is

not something limited to Japanese couples. However, communication held by married couples is often unsatisfactory in Japan, and they live together for a long time without understanding each other's feelings. What kind of prospect are Japanese married couples expecting in their daily lives over the long run? Cultures with interrelationships with a long-range outlook have patterns of social behaviors which are in contrast to cultures with interrelationships with a short-range outlook. Studies of gender require considering such characteristics of interrelationships in the future.

### Pairwise relationships, which are neither individualism nor collectivism

In Chapter 12, the interrelationships and genders of Japanese people were examined by comparing them to the French, and sleeping behaviors were used for the study. Traditionally, Japanese are said to be collective in comparison to the people in the West, including France. However, the study results in Chapter 12 showed that neither individualism nor collectivism can be applied to every kind of area of interrelationships in a given culture. People become individualist or collectivist depending on the areas of each interrelationship, such as "individual" and a "couple" in the private area and "acquaintances" and "perfect strangers" in the public area. In other words, in the relationships of "couples" in the private area, Japanese couples do not often go places together with their spouse, and they seem to have a weak sense of love. It is difficult to think, based on this, that Japanese are collective. It suggests that Japanese are rather individualist. In the public area, Japanese behave collectively as they exhibit their care towards "acquaintances" and have a sense of camaraderie towards them. However, they are extremely uninterested in "perfect strangers." In other words, they make a clear distinction between the outside and inside areas of life. In this sense, too, it is difficult to think that Japanese are collective, and they appear more like individualist people. Based on this, the chapter presented a theory that the West is a more collective society than Japanese society in the area of interrelationships. Moreover, among 15 studies which conducted metaanalyses on comparisons between Japanese and American individualism and collectivism, 14 studies identified that Americans were not necessarily more individualist than Japanese (Takano & Osaka, 1999).

The pairwise relationship, existing either between individuals or in a group, should not be forgotten. As was advocated in Chapter 8, there is a

mind of couples which is different from group mind. When pairwise relationships and group relationships are assimilated, Japanese are considered as collective, and when pairwise relationships are assimilated with individual psychology, Japanese can be considered as individualist. For example, it is said that Japanese have a motivation towards a "relationship-enhancement" which places importance on the relationship with best friends and the relationship of couples, in addition to self-enhancement motivation (Endo, 1997). The "relationship-enhancement" here means neither a group nor the self, but it means a pairwise relationship, and thus it is not used in paradoxical discussions on whether people are individualist or collectivist. In Chapter 13 in Part IV, this pairwise relationship will be discussed by connecting family-unit orientation.

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# Exploration of "Japanese-style" Gender Personality

This final chapter will discuss the issues which we should consider the most in relation to how Gender Personality is formed in Japanese society. As the discussion is directly connected to the issues, a focus will be placed on Japanese family-unit culture, by which people believe that males and females have lives as one unity. Furthermore, as a discussion indirectly connected to the issues, focus will be placed on people's consciousnesses of family and ancestors as well as on the accent on maternity, and further discussion will be conducted on how such consciousness fosters people's belief that the relations of married couples and other types of male-female pairs are something dependable. In other words, even though the family relationships which are each individual's immediate environment are highly gendered in Japanese culture, people hardly realize this and how they receive psychological influences from this.

Concretely, at first the close relationship of males and females will be treated as a pairwise, not as individual nor as group. Then, "family-unit orientation" and "single-unit orientation" are positioned to be a psychological dimension of pairwise relationship. And then it will be proposed that the dimension will be connected to actual wives and husbands or to the relations of males and females.

Secondly, this chapter will present a hypothetical model which shows the process of how Japanese culture causes individuals to be gendered, or how Japanese culture facilitates the mind of the family-unit orientation. The family-unit orientation appears to be developed by social systems (such as social security, tax, marriage, the census register, etc.) which orientate people toward being inter-dependent on each other inside family, and these social systems are likely to be determined by Japanese culture (consciousness of family and ancestors as well as the accent on maternity, masculine culture, tolerance of power distance, collectivism, etc.). The family-unit orientation which is affected by those factors forms the Gender Personality of each individual, while Gender Personality, in reverse, strengthens family-unit orientation. It will also be connected to Gender Schemas and Identity, which have been discussed in relation to the determinant model of femininity and masculinity.

At the end of this chapter, discussion and proposals will be made on how genders in Japanese society will change, how they should be changed in the future, and what kinds of issues should be studied in the future.

# Cultural determinant factors of Gender Personality:

Plans for future studies

#### Family-unit orientation in pairwise relationships

The mind between individuals and groups was called the "mind of couples" in Chapter 8 of Part III. However, the term "couple" will likely give an image of the accompanying spouse found in Western culture, and thus the term is changed to "pairwise relationship" in order to avoid misunderstanding. Accordingly, the following will mention about the dimension of family-unit and single-unit orientation which are necessary to understand the mind of various pairwise relationships.

In sociology and social psychology, the interrelationships and mind among group members are characterized by formality and informality, levels of closeness, levels of cohesiveness, whether theme-oriented or interrelationship-oriented, following democratic leadership or absolute leadership, and the goodness or badness of the relationships between the leaders and their followers. In contrast, the mind of pairwise relationships can be understood as follows. Firstly, the family-unit orientation is present. It is hypothesized dependent pairwise relationships. Comparisons in interrelationships are made more easily with the relationships of wife-husband and love relationships, which are typical cases of pairwise relationships, than in group relationships. Thus, there is a difference in the potential power of influence which makes other persons or other parties act in a certain direction. This is why those without power follow those with power in their behaviors and depend on them mentally. When each other's roles are complementary and role sharing is fixed in pairwise relationships, then people's relationships will also be dependent for every role. For example, wives in general

depend on husbands economically and this makes the tendency for wives to depend on their husbands stronger in their mind as well. On the other hand, husbands depend on wives for personal cares related to food, clothing, and the house.

How, then, are the married couples who exhibit family-unit orientation dependent from the viewpoint of styles of communication? Traditionally, married couples are supposed to be attuned to each other without saying anything much to each other, and this communication style has been considered a virtue. Some people used to think that married couples should not have conversations while having meals. Such a concept of value has weakened, however, and Hirayama & Kashiwagi (2001) and other various studies have identified that, even today, husbands are typically intimidating and wives are typically dependent, and they do not have satisfactory communications with each other. One of the reasons is that role sharing according to the concept of "husbands work outside, while wives raise children and conduct household chores at home" still remains, and thus wives and husbands have different spheres of living which causes them to have little to talk about. Furthermore, according to the traditional role sharing of married couples, wives depend on their husbands economically and this weakens the empathetic attitudes of husbands towards their wives. In contrast to the economic dependence of wives on their husbands, the husbands depend on their wives for almost all of the personal cares related to their food, clothing, and the house. Wives undertake not only the roles of taking care of their children but also of their husbands (Hirayama, 1999).

#### Single-unit orientation in pairwise relationships

In contrast, single-unit orientation is hypothesized as an independent pairwise relationship. When family-unit orientation is applied to the dimensions described above, it will be placed at the pole of the mind of not so interdependent pairwise relationships as family-unit orientation. For example, for married couples who run business together or whose workplace and house are not separated, where both wife and husband share the roles related to work and the home, and for couples earn double-incomes, it is relatively easy to switch and share roles. Moreover, in North Europe and other countries where welfare systems are highly maintained and housework and child raising are commercialized, or in Eastern countries other than Japan, role sharing at work and home are not as clear as it is in Japan. Under such

circumstances, people depend on other person less mentally and they become more independent. They are also freed from the sense of duty over conducting their roles and, as a result, they place importance only on pure and emotional connections and they have more communication. Moreover, each of them has what they need as an "individual," and thus the roles are assembled. In other words, in the orientation, paired individuals can live alone, but to become much happier and to send high quality of life, they maintain pairwise relationships.

#### Hypothetical model of gendering individual

As shown above, it can be predicted that Japanese married couples have, in general, a strong "family-unit orientation" with the mind of a dependent pairwise relationship, and it can also be predicted that what makes this orientation is Japanese culture and the system of the family-unit society (such as social security, tax, marriage, the census register, etc.) which is made and supported by the culture. Figure 13.1 shows the cultural model of Gender Personality. This model shows various dimensions related to "family-unit orientation" and their causal associations. The cultural model shows how "family-unit orientation" is, as Hofstede suggested, formed by the concepts of values of a masculine culture, tolerance of power distance, collectivism, and the Japanese-style culture of consciousness of family and ancestors, as well as an accent on maternity, and it shows how this causes individuals to heighten "family-unit orientation" and eventually to form a Gender Personality which is disproportionate in either masculinity or femininity.

### The culture of masculinity, tolerance of power distance, and collectivism

### Understanding Japanese culture within Hofstede's cultural dimensions

In this section, the study conducted by Hofstede (1980) will be interpreted as a cultural factor which determines whether a given society is a family-unit society or a single-unit society. Hofstede's study assesses various kinds of cultures by using global dimensions. Through the interpretation of this, how such cultural dimensions are related to the family-unit society or orientation of individuals will be discussed.

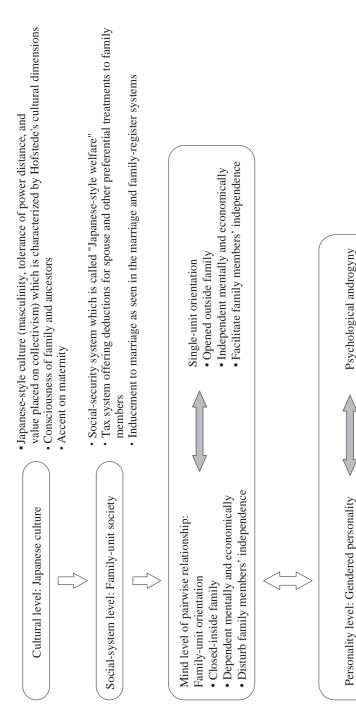


Figure 13.1 Hypothetical model of how Japanese-style culture facilitates the gendering of individuals (Cultural model of Gender Personality)

Hofstede conducted an extensive survey about how people place values on labor, family, and society among 117,000 employees of IBM in 53 countries. Then, Hofstede assessed the characteristics of concepts of cultural values in various countries by creating five dimensions and combining bipolar concepts. The first of the five cultural dimensions is the dimension of masculinity-femininity. This is a hypothetical dimension with two poles: one is a pole of masculinity, at which differences by sex have importance placed on them, role sharing by sex is accepted positively, and an emphasis is placed on males especially to achieve success in their work; and the other is a pole of femininity, at which differences by sex are considered as small, and an emphasis is placed on satisfactions held equally by males and females with their work and in their lives. Japan was positioned as the most masculine society in the 53 countries on which Hofstede conducted the study. This indicates that Japanese society places an extreme importance on biological sex as one of determinants of social status, and this means that Japanese society is strongly gendered (sexed-typed). It should be noted here the Hofstede's concept of masculinity-femininity is different from the masculinity and femininity of an independent two dimensions which were measured by the androgyny-scale of Bem (1974) and other researchers. Hofstede identified masculinity and femininity as characteristics of cultures, not as characteristics of individuals. Furthermore, according to Bem (1974), psychological androgyny is a condition where masculinity and femininity are accepted into one's self-concept in a balanced manner, regardless of individual genders, and this is equal to views which are easily formed in female-oriented cultures according to Hofstede's definitions.

The second dimension is the "tolerance of power distance." This dimension is about whether the power distance between males and females, leaders and their followers in business circumstances, and parents and their children is approved of as something appropriate. Japanese culture has a strong tendency to approve power distance, compared to the West, and it also has a tendency to approve of males being placed in higher positions in society than females. These tendencies might be the results of Japanese culture being under the influence of the Japanese family system, which will be discussed later, and the patriarchal system and the male-dominated consciousness of Confucius.

The third dimension is the dimension of "collectivism-individualism." This dimension is about whether the goals and other conditions of groups are prioritized over the desires of each individual, or whether each indi-

vidual is prioritized over the conditions related to groups. This dimension has also been proposed by Triandis (1989) and other researchers. Research into cultural differences conducted in Japan has placed disproportionate weight on the difference between Japan and the West, and this is the reason why a lot of attention has been paid to this dimension of collectivism-individualism, where differences between Japan and the West are significant. In the comparison between Japan and the West, Japanese society is considered a collectivist society. This suggests that Japanese society is a place where what is important for both wives and husbands, families, workplaces, and other groups is prioritized over satisfying the desires of each individual.

# How does Japanese culture as presented by G. Hofstede facilitate "family-unit orientation"?

How do the Japanese-style characteristics in cultural dimensions as presented by Hofstede develop a society so that it becomes a family-unit society, and how do they direct each individual towards "family-unit orientation"? In Japan's "masculine" culture, role sharing is conducted clearly by sex in the workplace, and production efficiency and performance are prioritized in accordance with role sharing. This is contrary to "feminine" cultures, where emphases are placed on the creation of a comfortable work environment and the satisfaction of workers. Such a masculine society facilitates role sharing by sex in pairwise relationships, too, and it directs males to think only of their occupational life and does not allow males to consider a balance with their family life. Such a society directs females, in contrast, to take on all responsibilities related to their families, and since it does not allow females to be treated as full-fledged workers, males and females do not have relationships which are independent of each other, but rather they become dependent on each other in the workplace and home. This suggests that a masculine culture strengthens the "family-unit orientation" of each individual.

Like other capitalist countries, husbands in Japan earn high wages as full-time employees and many wives earn secondary money for their families or have no jobs. Thus, husbands have more economic power and tend to have more power at home, and as a result a "power distance" is created. In Japanese culture, where power distances considered appropriate, even if females have no power at home, the relationships of wives and husbands are maintained without wives complaining about this condition, and as a result,

each individual is directed to have a "family-unit orientation."

Moreover, the Japanese culture of "collectivism" actualizes the distinction between inside and outside a given group and allows the members of the group to be dependent or be self-oriented. "Social identity" becomes more important than "individual identity" in such a society, and it becomes more important for each individual to find a place and a role in the group than to find a way of living as an "individual." In short, even if not-completed as individual, it does not matter if completed as family. This tendency makes the pairwise relationship a dependent and closed one, where the family is considered a unique example of a group, and consequently it can strengthen the "family-unit orientation" of each individual.

### Consciousness of family and ancestors

Apart from the cultural factors in Japan which were characterized by Hofstede, there are other cultural factors which are related to the family-unit society and orientation of individuals.

Nakane (1967) examined the cultural structure of Japanese interrelationships from the viewpoint of social anthropology. The study suggests that Japanese groups are less likely to be formed by the horizontal relationships of members who share the same "attribution." Instead, groups are formed by members who share the same "frame", and what is then necessary for maintaining the "frame" are the orders of rank within the groups which are formed by vertical relationships. One of the typical examples of this is the Japanese family system of the Meiji era (1868-1912), and in the system a rank-order with the male patriarch at the top was a base for the structure of Japanese family groups. In addition, the Japanese Civil Code guaranteed the "predominance of males over females" which supported the system, and females were forced to obey their fathers, husbands, and sons all the time. The vertical society and the family system in Japan allowed people to think naturally that males were superior to males, and this helped Hofstede (1989) to conclude that Japanese culture tolerated a great deal of power distance. Though the Japanese family system was dissolved by amending the law, the interrelationships which connect to a consciousness of the family and ancestors and which are in the vertical society still exist, since informal interrelationships are the hardest to change (Nakane, 1967).

Such a consciousness of family and ancestors can justify emotional dependence between wives and husbands and parents and children, as well as dependence among siblings, and this makes their relationships essentially the relationship of a boss and henchmen. In accordance with the order of rank in each group, the people who are on lower ranks obey the people who are on the higher ranks and the people on the lower ranks receive protection from the people who are superior to them. Moreover, the group as a family is considered more important than the will of each individual and this heightens "family-unit orientation."

### Accent on maternity

Another cultural factor is the accent on maternity which is related to the concept of the value placed on being a dutiful wife and devoted mother. The system of patriarchy in the pre-modern period in Japan carried with it the concept of the value of supporting the predominance of males over females, like other Confucian countries, and it was believed that the main task and the only task that females could be responsible for was child-raising. However, the tendency to invest hope in females to be dutiful wives and devoted mothers became stronger after the Meiji era. In 1899, an edict was issued to establish schools where females could receive a high-level education. In the females' schools, which were ranked equal to junior high schools in the Japanese old system, the purpose of an education was to make females "dutiful wives and devoted mothers," and this was shared as a common perception.

As more females participate in society today, the term "dutiful wife and devoted mother" has come to have an old-fashioned sense as a concept of values. However, the view that the greatest role for females is the role of mother and the tendency to laud maternity still exist strongly even today in Japan. The "maternal instinct" is said to have been first advocated by Rousseau and Freud (Saito, 2009), but this theory has not yet been proved and it is denied in the Japanese Annual Report on Health and Welfare in 1998 and it has been denied in longitudinal studies. In other words, it is a "vulgar belief" that mothers' devotion to their children is equal to their instinct as animate beings. Despite this, the idea of the "maternal instinct" and the idea that child-raising is best done only by mothers are still believed in strongly in modern Japan. This means that it is taken for granted that the biology which makes females bear children and the gender of raising children as a part of social behaviors are connected.

The accent on maternity, the "maternal instinct," and the notion that

raising children is the role of mothers, as described in Chapter 9, still exist in Japan as ideologies to support "family-unit orientation" and the role sharing in "husbands going to work and wives raising children and conducting household chores." The female employment rate according to age still forms a M-shaped line in Japan, and the strong belief that child-raising is a job for females is one of the causes of females retiring from their jobs in the period when they engage in child-raising. Even when they resume working at the end of that period, they tend to take part-time jobs in order to help the home budget.

# The social system which directs individuals to "family-unit orientation"

The cultural factors described above also have impacts on various kinds of systems which influence on how the relationships of husband and wife should be, and this is connected to such systems as social security, tax, marriage, and census registration. As wives and husbands conduct their daily lives in accordance with these systems, their pairwise relationship becomes a dependent one and they become accustomed to prioritizing the relationship of wife and husband over independence as individuals, and thus the family-unit orientation" of individuals is facilitated as a result.

Sechiyama (1996) broke down the people and labor that are responsible for activities such as child-raising into several types. The types are, for example: the "social-welfare type" in countries in Northern Europe, where governments get involved strongly; the "free-market type" in countries such as America, where baby sitters and private nurseries are used; the "statecontrol type" in such countries as North Korea and China; the "domesticservant type" such places as Hong Kong and Singapore; the "familynetwork type" in Taiwan; and the "full-time housewife type" in Japan, where females become full-time housewives for child-raising. The reason why Japanese females have a strong tendency to become full-time housewives in comparison to other countries is because the Japanese government supplies various kinds of benefit packages to wives as dependent members of families. For example, a spouse allowance is added to the salary given to each husband if his wife is a full-time housewife. If the annual salary of husbands is under a certain amount, they can claim an exemption for their spouse from their salary so that their wives do not need to pay premiums for health coverage, and their wives can receive an annual pension while their

insurance expenses are exempted. Because of this, females are oriented to be full-time housewives once they have children, and it is considered to be a lifestyle suited to the society. This situation causes the female employment rate according to age to form an M-shaped line, and females are the ones who quit their jobs to take care of their parents when they get older.

In exchange for these benefit packages, females are burdened with responsibilities for almost all of the roles related to the home. The government relies on such labor by females and fails to establish adequate services related to social security (nurseries, after-school care for children, elderly-care services, etc.). This causes females to have difficulty working outside the home, even if females wish to do so. Consequently, role sharing by couples is fixed, and if females settle for such situations, they will lean towards "family-unit orientation."

Japanese census registration is conducted based on the unit of the family, though it is conducted based on individuals in most countries. Under the Census Registration Act in Japan, a new census registration is made as people get married and the marital relations of each individual remains in their registration. This can make people have a negative emotion against, for example, divorce. The "census registration is stained" or "one cross" (meaning one divorce) are expressions often heard in Japan, and children born outside of marriage are discriminated against. This shows Japanesestyle views over marriage. Moreover, each married couple must have the same surname in order to have the same census registration. Japan is an exceptional country among advanced countries, where dual surnames are not permitted for married couples. This is because the priority is to position married couples as the minimum unit in society, not to accept a wife and husband as separate individuals who conduct their social lives independently. This system of a family-unit society is possibly connected to what Hofstede and others said about Japan as a place where the culture of collectivism has thoroughly penetrated. The system of the common surname for husbands and wives forces most Japanese females to change their surnames and thus change their self-identity, because each name has a role in expressing the self-identity of the individual. This can be an obstacle for females in their occupational life when they wish to continue their career, and marriage also often puts a distance in their relationships with their friends. This has a great negative impact on their social lives. However, such issues are not considered seriously because people worry that changes to the system might disrupt the relationships of married couples and weaken the ties among the

members of each family. This system may act as a restraint for couples not to get divorced.

The relationships of married couples in Christian countries in the West are in contrast to those in Japan. In these countries, churches had traditionally administered the births, marriages, and deaths of their followers. This system has been passed down and these countries conduct the system of census registration according to the individual today. In France, for example, the ratio of children born outside of marriage accounts for more than 50 %. However, census registration is done according to the individual in other countries too, and there are many cases of de facto marriages and children born outside of marriage. Unlike Japan, clear role sharing by couples is not common in such countries, and females can continue working regardless of their marital status, children, and age. Furthermore, wage differences by sex are small, and thus the tendency of wives to become dependent is weak. In other words, the social system in these counties is based on a single unit. The fluidity of pairwise relationships is high, as are the ratios of divorce and re-marriage in these countries. In addition, couples do not need to depend on each other, and thus it is easy for them to be independent mentally and socially.

## "Family-unit orientation" and "single-unit orientation" linked to the genderization of individual personality

"Family-unit orientation" will eventually strengthen the genderization of personality, which is the tendency of males to accept only masculinity (agency) and females to accept only femininity (communion). This makes the personalities of a wife and husband become complementary and the difference becomes significant, and as a result they become dependent on each other. Moreover, if each person in a married couple has a biased Gender Personality, it becomes possible to make a hypothesis of a causal connection which directs stronger "family-unit orientation." In other words, the mind of pairwise relationships and personality influence each other.

In contrast, individual personality may become closer to psychological androgyny when the individual has a strong "single-unit orientation." This is because it is judged that having a biased masculinity or femininity in accordance with genders makes it inconvenient for individuals to live as psychologically independent people, and it is also thought that both agency—which is gendered as masculinity—and communion—which is gendered

as femininity—are the traits which should be accepted by an individual. As described earlier, many double-income couples who engage in works related to the home and children together have pairwise relationships with a strong tendency toward "single-unit orientation." These double-income couples ignore differences by sex and gender even if they are in a family-unit society, and they can decide how each of them will live without being restricted by genders. These couples are individuals who have strong Gender Identity and weak Gender Schema in the sense of forming their own personalities.

# From closed relationships to open relationships: Avoiding social isolation in an aging society with longer life-spans

So far focus has been placed on the connection between "family-unit orientation" and the Gender Personality of individuals in pairwise relationships. In this section, focus will be placed on how people should construct pairwise relationships in an aging society with longer life-spans. As people's life-spans become longer, the chances increase of people living as solitary elderly persons after their spouses have died. The individuals who have had dependent and closed lives in pairwise relationships with their spouses will be more likely to be isolated socially. In order to avoid such an isolation, individuals should try to create a broad range of interrelationships, even if they are still together with their spouses. Couples should not be bound to each other in closed relationships, but rather should have attitudes that respect each other's personality. This kind of attitude will be required more in an aging society with longer life-spans, and pairwise relationships should be independent relationships for this reason, too.

The numbers of males and females will be different in an aging society. In Japan, for example, more females are more likely to have no spouses when they get older. Thus, females are more likely to have troubles when they become older, if they continue to have closed and dependent pairwise relationships. Females, especially, need to establish open interrelationships in order to avoid depending on their children and being socially isolated when they become old. In Japan, children who are living together with an elderly parent are more likely to be single, and this is partly because marriage often means they should leave home and leave their parents who depend on them alone. Independence in pairwise relationships is important in the sense of avoiding having undue influence over children when they make

decisions in their lives. However, according to a survey conducted on single elderly persons by the Japanese Cabinet Office (2010), females tend to have networks with their neighbors and they tend to have people whom they can rely on when they have trouble, compared to males. This result suggests that males are more likely to have serious problems than females when they become alone.

# Future pairwise relationships in Japan: Singles who do not become pairs

In Japan, it is estimated that in less than 20 years one in three males and one in four females will stay single, as the number of unmarried and latemarried people increases. People are forced to be married, and this situation triggers a psychological reactance so that they may decide to run away from marriage. However, this is not the only cause. Females in Japan are still in an environment where they cannot continue working after marriage or giving birth. Single females predict this situation will also occur to them, and thus they look for males who can earn at least twice the amount they earn. However, they usually cannot find males who can earn such a high salary at a young age. Males also think that they do not need to marry if it is difficult to find persons who will help them in their daily lives. They do not have many problems in their everyday life as more shops open for longer hours, more convenience stores open, more shopping and more information and even banking are available through the Internet, and they can eat out or eat at home easily. Moreover, the divorce rate is increasing, though it is still low in comparison to the West. This means that Japanese society will stop being either a family-unit society or a single-unit society, but it will become a society where more males and females avoid establishing even pairwise relationships, and it can be predicted that the number of single-person households will increase. Unlike the "family-unit orientation" in pairwise relationships, people will not be able to depend on someone special or have closed relationships in such a society. Such tendencies can be understood positively as a chance for pairwise relationships to become free of "familyunit orientation" as more people live as singles. However, as we know that there are people who have "shotgun marriages" and who still live in pairwise relationships with a "family-unit orientation," then it can be predicted that such tendencies will create inappropriate situations where people depend on their spouse one-sidedly or fail to establish interrelationships with

people outside their pairwise relationships. In future, pairwise relationships should be gradually examined more from the premise that society will shift to a single-unit society.

## Independent pairwise relationships: Specific strategies by sex for keeping a balance of work and life

Interest in how to keep a work-life balance has increased recently. If the terms used in this book are applied to "work" and "life," they will mean "work" for males and "life" for females, and that will be a completely different idea from the pairwise relationships mentioned where the balance is kept up in single-unit orientation. Thus, keeping a balance between work and life is to spend one's life with the balance of work and life maintained for both males and females as individuals. This may suppress the genderization of the personality of each individual, and therefore specific strategies are presented in this section on how to keep a balance between work and life according to sex.

First is a strategy related to reducing males' "work," on which has been placed disproportionate weight. One of the methods is the system of the "Papa Quota." This system started in Norway in 1993. According to this system, at least 4 weeks out of 42 weeks of childcare leave with income indemnity are to be taken by males. If males do not take the length of leave, the length will be reduced from the total weeks of the leave anyway. In Norway, more than 80 % of males take the leave today. A system like this will encourage males to take leave, and it will also reduce the share of the burden on companies caused by leave taken only by female employees. According to the older system of childcare leave, it is better for the one with less salary to take leave in order to avoid the greater loss from the couple's total income. In Japan, leave is still something considered for females.

Second is a strategy to increase the amount of work at home for males. The quickest way to put this strategy in practice is for females to work outside home and thus reduce the time they spend at home. If females do so, males will have difficulties in depending on and expecting females to manage their personal cares related to food, clothing, and the house, and they will have no choice but to take care of themselves. However, there are still few opportunities for females to work outside the home for a long period of time as full-time workers. The revised version of the Equal Employment

Opportunity Act for Men and Women in Japan is aimed at evening up the work environment between males and females. However, this act was revised based on males' working hours, and thus overtime hours worked by females have increased to become as high as males' and this has created an environment that females find it difficult to work in. This act was revised with the purpose of providing more opportunities to females to work, but it is a case of the tail wagging the dog. If the tendency to equalize the hours of work between males and females is based on males' work, then the only way to provide more opportunities for females is to force males to reduce their working hours.

Nurseries and other social services need to be improved in order to reduce the female-side of "life" which has been disproportionately weighted towards household chores and child-raising. However, it is also necessary for females to deny the excessive sense of responsibility in their roles as mothers, which is seen, for example, in the myth that children should be raised by their mothers till they become three years old. If females believe that they should not leave child-raising to other people and that they should give themselves up to their children wholeheartedly in order to bring them up as good children, then their lives will result in their having only the role of mothers. Such mothers are also likely to be over-possessive mothers. This is further caused by a lack of affection between wife and husband. In this sense, Japanese couples should learn the love of couples from couples in Christian countries in the West. If couples place a high value on loving each other, the tendency of mothers to be over-possessive with their children will be reduced. In addition, not a few females believe that spending a lot of time on household chores as well as child-raising is a way to show their affection, and such females chose not to reduce their time spent on household chores. They should have a new concept of value where the time they spend on household chores should be conducted reasonably and cut short.

In order to increase "work" for females, it is necessary to create a labor environment and atmosphere in the workplace in which females do not find that pregnancy and giving birth are disadvantageous for them in terms of continuing work or gaining promotion. Systems such as reducing the working hours of females have been created so that females can, for example, take child-care leave. However, all such systems are created by targeting only females, and as long as these systems are created only for females, it will be difficult to increase "work" of females. Systems should be created

to support not only mothers with jobs, but to support both male and female workers. Moreover, females have the attitude that they work insofar as it does not cause any inconvenience to their work related to domestic affairs and raising children. This attitude is one of the causes why employers think that they cannot offer jobs to females, and thus females should not put such a fetters on themselves.

If the burdens related to reproduction are placed only on females and this is one of the causes of an imbalance between work and life, then males should share such burdens, too. Giving birth and child-raising are directly connected, and therefore work related to these are more likely to be jobs for females, but males can be involved with labor related to caring for the elderly people more easily than to caring for children. As life-spans extend, males will have more opportunities to be engaged in caring for the elderly people after they have retired from their jobs. If such opportunities increase for males, males who work for companies may need to take leave for care of the elderly and such a tendency might increase in future.

# Issues in the future: An approach from the internalized difference among individuals in Japanese culture

In cultural psychology, it is hypothesized that the cognitive process of individuals is mediated in something called the "social environment" (Hong & Chiu, 2001). This means that a process which has been shared by people for a long time and has created logical systems is thus mediated (Cole, 1996). In other words, though culture has been considered as something outer, static, general, and broad, in fact cultures are something which are created by people and change daily in the life of each individual. "Culture" is, after all, something possible to create empirically, as seen in the effects of cultural-priming.

Accordingly, in relation to the cultural model of Gender Personality which was described earlier, culture should be considered as something which can be changed and restructured continuously in people's daily activities, and something which can be controlled within specific fields. It can be hypothesized that individual differences arise in the tendency to internalize Japanese culture related to genders in such a process. If a scale is developed for measuring individual differences, it will become possible to identify how Japanese culture has influence over the Gender Personality of each individual. Thus, it will be necessary to develop a better scale to measure

"family-unit orientation" which can first reflect the influence of Japanese culture. This approach would make it possible to compare cultures which have been created as various factors are connected, and also make it possible for the impacts of cultural factors to be identified more effectively and more appropriately than merely predicting the impacts of targeted cultural factors. This will become possible because comparisons made within the same culture will be conducted in conditions under which factors other than the targets for comparison will be relatively controlled.

### Individuals who are sensitive to the Japanese-style genders

This book has tried to discuss the fact that individual life and personality forming are determined in accordance with individual sex, and thus Gender Personality was introduced as the core concept of this book. This book introduced a model which categorizes people not only in terms of masculinity, which places a disproportionate emphasis on males, and femininity, which places a disproportionate emphasis on females, but also in terms of psychological androgyny, which includes both masculine and feminine traits. Empirical studies were also conducted based on the idea that what is important for people is not how to apply Gender Schemas to themselves but rather to establish their own Gender Identity in order to face their own gender. The studies have identified that Gender Schemas have affects on the facilitation of the isosexuality of the self and on the suppression of contrasexuality, and that they have a tendency to lead people to behave in accordance with gender stereotypes. The studies also suggested that Gender Identity can weaken the tendency of people to have negative masculinity and femininity while making psychological androgyny more developed as people get older. Furthermore, it was found that unbalanced femininity and masculinity can cause undesirable impacts on people's psychological and physical health, on having communications with other people, and on daily family life.

Neither avoiding gender-related issues, nor only resisting the issues emotionally, or not obeying the issues blindly and axiomatically, should gender-related issues be considered objectively as well as relatively. As described in Part I, genders relate profoundly, for good or ill, to the sex of humans when they are born, and it is impossible to extinguish genders. Therefore, genders will continue to be an important part of the identity of individuals. The Gender Identity in the determinant model of Gender

Personality in this book does not include the sense of dissolving genders systematically and intentionally in order to create the "gender free" concept which includes ignoring genders. It has rather a sense of becoming free from the biased views related to genders. It means, in other words, to have a view which is gender sensitive (Martin, 1985).

Houston described Japanese people in a book containing an interview with Martin (Martin & Houston, 2006) as people who seem to understand genders as something derived from individual nature, especially from individual minds (the conscious). Genders are something developed not only by individual minds but also by their bodies and actions. Furthermore, it is important to understand that genders are relations among various people which are developed in various ways. Accordingly, the masculinity and femininity in the determinant model of Gender Personality which was proposed and examined in this book should not be understood as something which exists constantly in the minds of individuals, but rather masculinity and femininity as something ready for use or not for use by individuals. That is to say, personality is something which is changed depending on pairwise relationships and other conditions of interrelationships.

In accordance with the patriarchal system, roles for females and roles for males are allocated and fixed, and many of the roles are allocated based on the idea of male domination. This system still exists as the norm in Japan. Gender Identity will function in order for people to be sensitive to such role allocations. It will also become possible to know how dependent people become in pairwise relationships as a female or male without any hesitation, if we can use Gender Schemas depending on situations.

It is not only the wills of individuals that are responsible for people having gender-sensitive attitudes continuously. Gender Personality should not be understood as merely the traits of individuals, but it should be changed and reused constantly in pairwise relationships. Moreover, attention should be paid constantly to the role sharing of wife and husband, power structures, communications among family members, and other pairwise relationships. The personality of individuals has meaning because it exists in pairwise relationships and in interrelationships within society.

Changes will be made gradually to the gender stereotypes of what are considered masculine and what are considered feminine in society. Understandings and applications of gender stereotypes also differ depending on individuals. However, since individuals can live only in societies, a gendered society can make people expect agency from males and communion

from females, though both agency and communion are needed equally for both sexes, and individuals also accept these expectations.

As a result, males with masculinity and females with femininity will maintain such a gendered society. Individual schema and identity are not enough for society to break such an obstructive condition. Unless changes are made to society itself where such psychological relations are created, it is impossible to break through the relations of individuals and of a society which has come to be based on genders. The author will conduct further studies on this for the purpose of making Japanese people realize how much psychological influence people receive in a gendered society and of presenting a model to them of how they can be freed from genders in daily interrelationships.

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### Notes

The chapters from two to twelve of this book were composed by the author based on the following papers, which the author and/or co-author published in journals from 2000 to 2011.

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Itsuko Dohi is professor in the Faculty of Human Science at Kobe Shoin Women's University, Japan. She received her Ph.D. from Kwansei Gakuin University. She is the author/editor of thirty-one books and more than forty-two journal articles. She is one of the leading researchers of the psychology of women and gender studies in Japan. She contributes to a gender conscious transformation of human society by teaching to female college students and also speaking at public lectures. She believes that by changing the woman, it is possible to change the society. She said economic independence is very important for psychological independence. It is her hope that her field survey, which has continued for over twenty-five years, concerning gender-related concepts and interpersonal relationships between male and female, and research outcomes are reflected back to society.



Photograph taken by Prof. H. Mizohata

#### Commendations about this book

Japanese females are surrounded by gender issues everywhere in the workplace and home, as if they are captured by a kind of spider web. As a result, they are characterized about their mind, life style, and behavior unconsciously by gender. American females are also prevented from advancing upward into the higher level of their society by a glass ceiling. Dr. Dohi has compiled considerable data into this book, which is valuable as it clarifies the Japanese situation about gender.

Keiko Kashiwagi, Emeritus Professor Tokyo Woman's Christian University

Gendered living is a universal phenomenon. Yet, paradoxically, every culture provides unique solutions for the universal problems that biological sex presents. Dr. Dohi regards each person as a social navigator of the socio-cultural space who actively constructs his or her own personality within the available cultural resources while enabled and constrained by the social reality. Her decades of sustained research brings out insights into the cultural dynamics of gendered living in contemporary Japan, a society in the midst of cultural transformation.

Yoshihisa Kashima, Professor The University of Melbourne

