

Study on the Effects of Sex, Intimacy, and Locality on Personal Space Preferences among Japanese University Students

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ABSTRACT: Edward T. Hall's theory of proxemics suggests that various cultural and personal characteristics influence people's preferences of personal space. "Personal space" can be defined as an invisible domain surrounding a person which they regard as their territory, and an unspoken bubble that travels with them wherever they go. Previous studies suggest that sex, intimacy, and nationality directly affect how someone reacts to another in their personal space. The present study purposed to explore with Japanese university students' the influence of sex, intensity, and locality on the size of their personal space. Participants used tape measures and were asked to say stop when they began to feel anxious or uncomfortable with the approach of another individual. Results of the study indicate that individual characters such as sex influence Japanese university students' interpersonal space preference. Results also suggest that there is a variation in interpersonal space preference based on participants' locality and the intimacy among the participants.

KEYWORDS –Personal Space, Sex, Intimacy, Locality, Proxemics

I. INTRODUCTION

Edward T. Hall's theory of proxemics (1966) describes four zones of interpersonal space or interpersonal distance, each of which reflects different relationship between individuals [1]. The four types of distance are intimate (0-45 cm), personal (45-120cm), social (120-360cm), and public (greater than 360cm). Referring to the notion of earlier studies on animal behavior by Hediger[2], Hall [3] defined "personal space" as an invisible domain surrounding a person which they regard as their territory, and an unspoken bubble that travels with them wherever they go. Allowing someone to "enter the bubble signifies trust and willingness" to let the person "touch us, a message with various social and emotional implications [4]". It is difficult to ignore someone at this distance, so unexpected invasion of the space makes the person whose space was invaded to feel stressed, uncomfortable or annoyed [5].

The theory of proxemics suggests that various cultural and personal characteristics influence people's preferences of personal space. Hall [3] claimed that cultural norms are important factors that affect the preferred interpersonal distance. Hall found that Southern European, Latin American, and Arabian people use relatively closer interpersonal distances and engage in more touching, while North American, Northern European, and Asian people use relatively larger interpersonal distances and do not engage in much touching. Hall named the former group contact culture, and the latter group noncontact culture. Sussman& Rosenfeld [6] found that Venezuelans have smaller personal spaces compared with Americans and Japanese. However, when the participants were asked to talk in English, the personal spaces of Venezuelans widened, while the personal spaces of Japanese narrowed. The results of the study suggest that not only nationality but also communication style has effect on the preference of interpersonal distance.

II. LITERATURE REVIEW

Many researches of interpersonal distance have revealed that participants' gender and biological sex have influence on their preference of personal spaces. The general consensus among researchers is that male pairs have larger personal spaces than female pairs [7]-[10].

The relationship between the individuals, that is, intimacy also has been reported to have a significant influence on individuals' preference of personal space [11]-[13]. Shibuya [11] investigated the effects of sex and intimacy on personal spaces of Japanese university students in Yamanashi. As a result, Shibuya reported that larger personal space was obtained in the opposite sex condition than the same sex condition, and larger personal space was obtained in the stranger condition than the acquaintance condition (table 1).

Table 1

Personal Space of Japanese University Students in Yamanashi (Shibuya, 1985)

Participant	Target	Intimacy	Personal Space (cm)
Male	Male	Acquaintance	70.0
		Stranger	124.0
	Female	Acquaintance	74.0
		Stranger	168.0
Female	Male	Acquaintance	139.5
		Stranger	147.7
	Female	Acquaintance	65.9
		Stranger	117.7

However, it has been more than 30 years since Shibuya's study on Japanese university students' personal space preference. As culture is dynamic and changes all the time [14], it is expected that Japanese university students' personal space preference might have changed.

Furthermore, Yashiro et al. [15] notes that interpersonal distance preference tends to be smaller in urban cities compared with suburban cities, since people who live in large cities are used to being in crowds. As Chuo, Yamanashi in which Shibuya conducted the study is a provincial city with about 30 thousand people, while Yokohama where the current study is to be conducted is a large city with about 3.7 million people, it is expected that university students in Yokohama tend to maintain smaller personal spaces compared with students in Chuo.

Therefore, this study aims to identify the influence of sex, intensity, and locality on Japanese university students' size of personal space.

III. PURPOSE

The purpose of the present study is to explore with Japanese university students' the influence of sex, intensity, and locality on the size of their personal space.

The research questions to be addressed in this paper are: 1) Are Japanese female students' personal spaces smaller than male students' personal spaces?, 2) Are acquaintances' personal spaces smaller than strangers' personal spaces?, 3) Are personal spaces of students in Yokohama smaller than that of students in Yamanashi?

IV. METHODOLOGY

The study was conducted on July 4th, 2017, with the purpose of exploring the influence of sex, intensity, and locality on Japanese university students' preference of personal space.

Participants

Participants of the study were 51 Japanese university students in Yokohama, Japan. Among the 51 participants, 26 were male, while 25 were female. All of the participants participated in an intercultural communication class.

Materials and Procedure

Participants were provided a standard tape measure scaled in centimeters, and a data sheet to record the distance between the participant and the approaching individual.

Procedure

Participants were instructed to form a group of three. One served as a target and another was asked to approach the target from front. The target was informed to say "STOP" when they began to feel anxious or uncomfortable with the approaching individual. The third member was asked to use the tape measures to record the distance in centimeters between the participant and the approaching individual. Once the distance measure was taken, the participants were informed to change roles among each other. When the distance measures were taken with one group, another group was formed and measurements were taken in the same way. Thus, all measurements between all of the participants were taken.

V. RESULTS

Among the 51 participants, all of them completed the distance measurements. Hereinafter, results of the 51 participants' distance measurements will be introduced.

Table 2 shows the average personal space of the participants broken down by sex and intimacy.

Table 2

Personal Space of Japanese University Students in Yokohama

Target	Approach	Intimacy	Personal Space (cm)
Male	Male	Acquaintance	25.0
		Stranger	63.4
	Female	Acquaintance	38.4
		Stranger	69.0
Female	Male	Acquaintance	32.3
		Stranger	68.5
	Female	Acquaintance	20.4
		Stranger	46.9

Results of the study show that, such as Shibuya’s study, the Female Center-Female Acquaintance Approach group maintained the smallest personal space. However, the average distance between two acquainted females in this study was 20.4 cm, which is much shorter than the distance between the acquainted females in Shibuya’s study (65.9 cm). The group which maintained the largest interpersonal distance was the Male Center-Female Stranger Approach Group. The average distance was 69.0 cm, which is much larger than the distance between unacquainted males and females in Shibuya’s study (168.0 cm).

Results show that females’ personal spaces are smaller than males’ personal space. The average personal distances for females and females (acquainted: 20.4 cm, unacquainted: 46.9 cm), and females and males (acquainted: 32.3 cm, unacquainted: 68.5 cm) were smaller than the distances for males and males (acquainted: 25.0 cm, unacquainted: 63.4 cm), and males and females (acquainted: 38.4 cm, unacquainted: 69.0 cm), whether the two individuals were acquaintances or strangers.

Results also indicate that interpersonal spaces of acquaintances are smaller than that of strangers. The average personal distances for acquaintances was smaller than strangers whether the target individual and/or the approaching individual were male or female.

Moreover, results of the study show that the personal spaces of Japanese university students from Yokohama are smaller than the personal spaces of students from Yamanashi no matter what the participants’ sex and relationship were.

VI. DISCUSSIONS

The purpose of the present study was to explore with Japanese university students’ the influence of sex, intensity, and locality on the size of their personal space. In order to measure students’ personal space, standard tape measures, and data sheets were used.

Regarding the first research question “Are Japanese female students’ personal spaces smaller than male students’ personal spaces?”, results of the study show that the average personal distance for females and females, and females and males were smaller than the distance of males and males, and males and females. Therefore, it is suggested that female students’ personal spaces are smaller than male students’ personal spaces.

With regard to the second research question “Are acquaintances’ personal spaces smaller than strangers’ personal spaces?”, results suggest that interpersonal spaces of acquaintances are smaller than that of

strangers. Accordingly, it is suggested that the deeper the two individual's relationship gets, the closer the interpersonal distance between the two becomes.

Regarding the third research question "Are personal spaces of students in Yokohama smaller than that of students in Yamanashi?", results suggest that Japanese university students from Yokohama maintain smaller personal spaces compared with students from Yamanashi. That is, Japanese university students who live in large cities tend to maintain smaller personal spaces compared with students who live in small cities. It is interesting that the participants' personal spaces were much smaller than Japanese people's personal space that is noted in Hall's [3] study (90 cm). Accordingly, it is suggested that Japanese students' dynamics of personal space seem to be changing. As big cities in Japan have high population density, it is expected that Japanese people living in urban cities are used to communicate in short distances.

VII. CONCLUSION

The results of the present study suggest that personal spaces of Japanese female university students tend to be smaller than that of Japanese male university students. Results also suggest that the deeper the Japanese university students' relationship is, the closer the personal space between them becomes. Furthermore, results indicate that the personal spaces of Japanese university students who live in urban cities with relatively high population density tend to be smaller than that of Japanese university students who live in regional cities.

Since the participants of the current study were Japanese university students who live in a relatively large and urban city, using other samples from elsewhere is expected for future generalization. Especially, exploring the influences of variables such as age [16]-[18], personality [10], [19] on interpersonal distance is important. Moreover, it is expected to investigate influences of experimental settings and environments such as approach angle and room size.

Nevertheless, the current study suggest that the dynamics of personal space among Japanese university students in an urban city seem to be similar to those reported in studies conducted with individuals in other countries, and other cities in Japan.

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