

Investigating Cross-Cultural Differences in the Privacy Regulation and Perception of Crowding

(Northern and Kurdish Women in Iran)

¹Fatemeh Mohammad Niy Gharaei, ²Mojtaba Rafieian

¹Ph.D. Candidate, Department of Art and Architecture, Science and Research Branch, Islamic Azad University, Tehran, Iran.

²Associate Professor, Faculty of Art and Architecture, University of Tarbiat Modares, Tehran, Iran.

Received 08. 11. 2013; Accepted 10. 07. 2013

ABSTRACT: This study investigated cross-cultural differences in the privacy regulation and perception of crowding among two Iranian sub-cultures (Kurdish and Northern women). The primary purpose of this study was to examine whether Northern and Kurdish women differed in their desired and achieved levels of privacy in parks. The second purpose of this study was to investigate the relationships between the desired and the achieved levels of privacy and the experience of crowding. The final purpose was to describe the cultural differences in the experience of crowding between Northern and Kurdish women. The research methodology was designed on interview and questionnaire. A random size of 600 Kurdish and Northern women was selected in Sanandaj and Rasht cities. Moreover, to examine the survey Chi-Square Test, Independent Sample Test and Analysis of variance were conducted. The results show that Kurdish women desired more privacy in public spaces than Northern women. Regardless of culture, women's desired and achieved privacy levels have associations with the level of perceived crowding in public spaces. These findings assist environmental designers to present strategies for achieving privacy in relation to Iranian sub-cultures.

Keywords: Privacy; Crowding; Culture; Iranian women.

INTRODUCTION

The desire for privacy is a public deed but it related to variables such as culture, age, gender, personality, and situated factors (Hall 1966, Altman & Chemers 1980). Edward Hall's theory (1966) conducted on the cultural effects of how people interpret space and utilize it. According to this research, cultural differences make a significant distinction between the spatial behaviour of Mediterranean and European cultures. He subsequently divided cultures into *contact* and *noncontact* cultures. Hall also states that differences in inter-personal distances are not limited to cultural groupings, but actually encompass subcultures.

Some other researchers are accomplished in the sequel to Hall's studies, which are done in the area of comparing the privacy regulation among and within different cultures and subcultures (Watson & Graves, 1966; Forston & Larson, 1968; Little & Henderson, 1968; Sommer, 1968; Ziller et al., 1968; Engerbretson & Fullmer, 1970; Evans & Howard, 1973; Altman, 1975; Hayduk, 1994; Sanders et al., 1985; Remland et al., 1995). Despite all these studies, there are lots of other cultures and subcultures globally whose spatial behaviour and utilization of space yet remain unstudied. Evans et al. (2000) results showed that most of cross-cultural studies on crowding and privacy have been conducted within Hall's classification; hence it would be necessary to examine the generalization of findings across a broad range of cultural groups.

On the other hand, Altman (1975) discriminates between the desired, achieved, and optimum level of privacy. Based on his privacy regulation model (1975), the degree of desired privacy may vary across individual and cultural factors. Besides, Evans et al. (2000) indicate that contact cultural groups perceive their environment as less crowded than noncontact groups.


Iran has many subcultures with different manners of responding to the privacy, but there haven't been any researches that imply on the effect of culture on privacy. In order to compensate for this gap in knowledge, this study covers two groups of women (Kurdish and Northern), assessing their differences in privacy regulation and perception of crowding, in city parks. Specific research question were examined:

Do Northern and Kurdish women differ in their desired and achieved privacy levels?

Is there a relationship between the desired and the achieved levels of privacy and the experience of crowding of Northern and Kurdish women?

Do Northern and Kurdish women differ in the experience of crowding?

In order to be more accurate for comparison purposes, economic and personality indicators were also utilized in the study.

 *Corresponding Author Email: fatemehgharaee@gmail.com

The Concept of Privacy

Privacy is a conventional process by that a person or a group of people exposes themselves to others. Altman (1975) defines it as follow: Privacy is a process to justify the borders among people by that a person supervises his/her relationship. According to Altman's opinion, privacy is a dialectic process which is built on the basis of two different powers: "being with others" and "avoidance of being with others". According to Gifford (2002) definition, privacy means selective control of access to self, either in person or in terms of information about oneself. It may be considered as a preference, expectation, value, need, and behavior.

Altman (1975) discriminates between the desired, achieved, and optimum level of privacy. Desired privacy is an ideal level of privacy at any specific time which an individual looks for it, while the achieved privacy refers to the actual level of contact experienced by an individual at a particular point in time. If the achieved privacy level equals the desired level, an optimum state exists, and when it exceeds it, the individual will cut his/her relation with others. In other words, in this condition, the person feels isolation, social solitude and boredom. But if the achieved level is lower than desired level, it can be concluded that the person's surveillance in social behavior is not proper and the individual suffers from "crowding". Consistent with Altman's studies, it was assumed that women's desired and achieved privacy levels would have associations with the level of perceived crowding in public spaces. Women whose achieved privacy level is less than what they desire would feel more crowded than either women whose level of achieved privacy is greater than what they desire or for those whose privacy is optimized.

Dimensions of Privacy

Westin (1970) established four basic states of privacy, each with its related function: solitude, intimacy, anonymity, and reserve. Solitude, or the condition of being alone, is the most commonly used term for the definition of privacy. In solitude, an individual is separated from others. In state of intimacy, the boundary is around two or more people, allowing them to interact unobserved by others. In anonymity, an individual is in the presence of others in public places, but he/she is unidentified and/or is not under surveillance. In the state of reserve, an individual communicates with others, but is able to select the information that he/she receives (Westin, 1970). Several studies employed factor analysis to identify types of privacy and to develop subscales (Marshall, 1974; Pedersen, 1979; Rustemli & Kokdemir, 1993). Marshall (1974) identified six types of privacy. The first four are known as an intimacy, solitude, anonymity, reserve, seclusion and neighboring. Seclusion is a preference to be unacquainted with neighbors and separation from others by visual and auditory means, while not neighboring is the dislike for friends or neighbors to drop in without warning and preference for noninvolvement with neighbors. Moreover, Pedersen (1979) identified six states of privacy: reserve, solitude, isolation (which involves a greater degree of physical separation than solitude), intimacy with family, intimacy with friends, and anonymity.

Cultural Influences on Privacy

The desire for privacy varies from one culture to another. Some cultures need more privacy in comparison with others (Altman & Chemers, 1980). According to this fact, Hall (1966) classifies the cultures into two different classes; contact and non-contact. Based on his studies, the spatial behavior of Mediterranean (contact groups) and northern European people (noncontact groups) are significantly distinguishable: Mediterranean societies prefer proximate interactive distances while northern European societies prefer more extensive interactive distances. Hall's studies became the basis of subsequent research in the field of cultural effects on special behavior and the personal space of citizenry. Researchers, working on the basis of Hall's classification, indicating Mediterranean (contact groups) and northern European (non-contact groups) characteristics, supported his results and ideas through surveys they had undertaken (Watson & Graves, 1966; Forston & Larson, 1968; Little & Henderson, 1968; Sommer, 1968; Ziller et al., 1968; Engerbretson & Fullmer, 1970; Evans & Howard, 1973; Hayduk, 1983; Sandor et al., 1985; Remland et al., 1995).

Privacy and Human Behavior

Privacy is influenced by personal and situational factors. It is also inextricably linked with other important behavior processes (Gifford, 2002). Westin's (1970) four functions of privacy provide a good framework for research on the relation between privacy and other human behavior.

Privacy is clearly related to communication. One reason an individual seek privacy is for protected communication. Both the informational and interpersonal themes of privacy are deeply involved with communication.

Privacy is intimately connected to an individual sense of control, or autonomy. The ability to choose solitude or company of others endows him/her with a sense of self-determination; not having that choice makes him/her feel helpless.

Privacy is important to an individual sense of identity, solitude and intimacy, in particular, can be used to evaluate him/her progress in life, who he/she is, what his/her relationship to others is, and what it ought to be. Sometimes, it is not easy to make sense of all the things that happen to an individual while he/she is still on the public stage. Privacy allows him/her the time and space to reflect on the meaning of events, to fit them into his/her understanding of the world, and to formulate a response to them that is consistent with his/her self images.

Privacy allows for emotional release. Society discourages public emotional displays except under exceptional circumstances such as weddings and funerals. People often feel more emotion than they are able to display, so privacy services as a vehicle for emotional release. In private, an individual can weep, make faces at himself/herself in the mirror, sing loud crazy songs, and talk to himself/herself.

The Concept of Crowding

Crowding is a social situation which appears after the inapplicability in the privacy regulation. Crowding is a complicated concept which happens in different circumstances. It can be claimed that crowding takes place

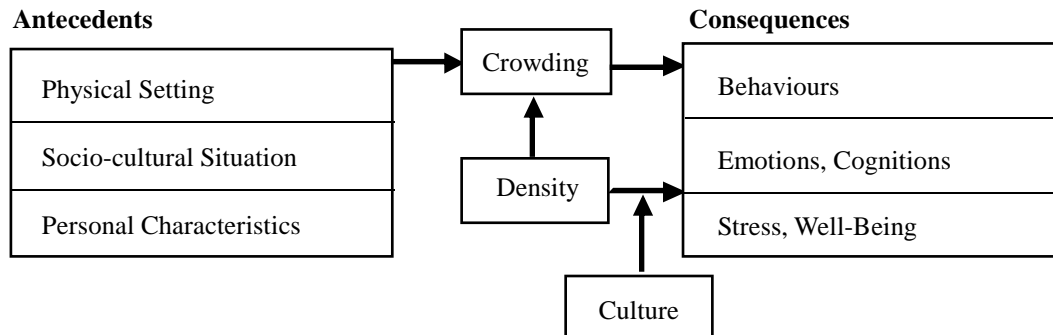


Fig. 1: An overview of crowding and density. Crowding depends not only on density but also on a person's characteristics, the physical setting, and social and cultural factors. Once crowding occurs, it affects—mostly—emotion, cognition, behavior, and well-being (Gifford, 2002).

when people are asking for more physical space, or their way toward a specific goal is blocked, or when their territory has been invaded. Crowding is an intrapersonal process that happens even in small groups in which people possess mutual relations (Altman, 1975).

On the basis of Stockols's findings, Altman (1975) claims that crowding is a subjective and psychological experience that is associated with a feeling of lack of control over the physical environment. Actually, crowding is the consequence of space shortcoming. He believes that crowding occurs when a level of social contact exceeds what is desired (Altman, 1975).

Environmental psychologists find that many factors led some individuals to feel crowded and others to feel uncrowded, even in the same objective setting. For example, certain personal characteristics are associated with a lower tolerance for proximity to others. In addition, for any given individual, certain physical and social situations lead to the experience of crowding but others do not (Gifford, 2002). A major task of researchers is to identify the personal (e.g. personality and attitudes, psychiatric status; preferences, expectation, and norms; gender; mood; culture and community size), social (e.g. interpersonal similarity; provision of information and behavior of others) and physical variables (e.g. scale; architectural variations; place variations and weather) that lead individuals to label and experience crowded. According to Gifford (2002), Fig. 1 is a basic model of crowding.

In present research, it was assumed that Kurdish and Northern women would differ in their perception of crowding that Kurdish women need more privacy and therefore may feel more crowded in city parks than Northern women.

The Difference between Crowding and Density

The terms crowding and density were used more or less interchangeably until Daniel Stockols made a distinction that is now generally accepted (Gifford, 2002). Stockols (1972) applies "density" in a physical meaning only, and defines it as the number of people in a unit of space. On the other hand, he defines the "crowding" as a psychological concept which possesses an experimental and motivational foundation. According to his opinion, density is a necessary condition for crowding, but it is not sufficient for it. In other words, all accumulated environments do not possess the crowding for people. And vice versa; i.e. every less accumulated environment cannot be considered without crowding, because

crowding may be felt even between two persons. There is a conception, called "understood density" in this equation; it means a sort of density that the person feels it on the basis of his/her own perception. This approach is related to the crowding concept (Gifford, 2002).

Crowding is divided into two different groups; social and spatial. Physical factor leads to the feeling of space shortcoming in spatial crowding. Social crowding is the consequence of exceeding presence of personal space. Increasing the number of people leads to the social crowding in the condition that the amount of space remains constant and changing the amount of space leads to the spatial crowding in the condition that the number of people remains constant (Gifford, 2002).

MATERIALS AND METHODS

Site Selection

Iran is divided to 10 cultural zones: Khuzestan; Lorestan; Azarbayejan; Kordestan and Kermanshahan; Mazandaran; Central Plateau; Big Khorasan and Golestan; Sistan and Baluchestan; Kerman and Fars, Yasuj, Persian Gulf (Amerian & Shiva, 2011). Amerian & Shiva (2011) state that differences amongst these cultural zones has led to differences in inhabitants' needs and spatial behavior. However, this study covers two cultural zones: the Mazandaran zone and the Kurdistan and Kermanshahan. Due to distinctive differences among these cultural zones (Mazandaran and Kordestan and Kermanshahan), this paper examines the privacy regulation between Kurdish and Northern women. The research was done in Melat Park (Sanandaj) and Shahr Park (Rasht). Sanandaj is the capital of Kordestan province and Rasht is the capital of Mazandaran province. Their population is almost the same. Sanandaj has 373987 and Rasht has 639951 inhabitants. The culture of most inhabitants in Sanandaj is Kurdish and that of Rasht is Gilaki (Northern). Both parks were selected in urban areas, have an urban scale and similar plan. Women go to these parks to do sport and for leisure activities. External visitors go to these parks in addition to the local population.

Sample Survey

In this study, 600 women who were using parks (specifically Melat and Shahr parks) in Sanandaj and Rasht were selected on a random basis: 300 of which were Kurdish

and 300 were Northern. The samples indicated healthy, extrovert, normal to high income average level type individuals. The age range of Kurdish women was from 18 up to 60 (M=34.78, S.D=12.50) and the age range of Northern women was from 18 up to 60 (M=30.76, S.D=10.80).

Process and Method

The study was undertaken through the methods of questionnaire and interview. The data collection occurred during the July 2011 at different time (8:00-12:00 am and 5:00-10:00 pm) on weekdays and weekends over a 2-week period in each park.

The primary purpose of this study was to examine whether Northern and Kurdish women differed in their desired and achieved levels of privacy in parks. The second purpose of this study was to investigate the relationships between the desired and the achieved levels of privacy and the experience of crowding in parks. The final purpose was to describe the cultural differences in the experience of crowding between Northern and Kurdish women. Thus, the questions were categorized into three different parts:

- A) General questions in the beginning of the questionnaires in order to make the participants ready for the rest of questions.
- B) The second part contains the estimated desired level of privacy in the park. These questions were organized according to Likert spectrum.
- C) The last part of the questionnaire evaluates the women’s perception of crowding through the semantic differential scales.

In order to assess women’s desired and achieved levels of privacy, women were asked to indicate how much privacy they would like to have in the city park, and then were asked how much privacy they actually have in the city park to assess their achieved privacy level. Participants responded these questions on the basis of Likert Spectrum (5-point rating scale from 1 (not at all) to 5 (a lot)). On the other hand, to examine how women perceive the city parks in regard to crowding; a total 10 items were used. These items were Semantic Differential Scales about the perception of the parks (e.g., cramped-uncramped, stuffy-not stuffy, crowded-uncrowded, free to move-restricted, spacious-confined), adopted from Kaplan (1982).

After gathering the data through the questionnaire on the basis of Likert Spectrum and Semantic Differential Scales, these data were analyzed through Chi-square Test, Independent-sample T Test, Pearson Correlation coefficient and Analysis of variance (ANOVA), on the following variables: culture, privacy regulation and perception of crowding. Methods used in data analysis are to examine the effect of Culture on the desired and achieved privacy levels and to find the relationships between the crowding and the desired and

achieved levels of privacy for Northern and Kurdish women separately.

RESULTS AND DISCUSSION

The Differences in Desired and Achieved Privacy Levels

Based on Altman’s regulation model (1975), the degree of desired privacy may vary across individual and cultural factors. Correlation results revealed a significant relationship between the two privacy levels ($r = -0.348, p = 0.00$). In order to examine whether the desired and achieved privacy levels differed between Kurdish and Northern women, Independent Samples Test was run. The results indicate that the women desired ($T = -2.57, d.f. = 86.87, P = 0.01$) and achieved privacy levels ($T = 4.88, d.f. = 89.66, P = 0.00$) were significantly different between the two samples. As shown in Fig.2, Northern women had a higher mean score for the achieved privacy ($M = 1.98, S.D. = 0.91$), but a lower mean score for the desired privacy ($M = 2.24, S.D. = 0.71$) than Kurdish women ($M = 1.30, S.D. = 0.58$ and $M = 2.68, S.D. = 0.99$).

Relationships between Desired and Achieved Levels of Privacy and Crowding

Pearson Correlation coefficient was run to examine the relationships between desired and achieved levels of privacy and crowding scores for Northern and Kurdish women separately. For the two groups of Northern and Kurdish women ($N = 600$), the results indicate a positive correlation between the desired privacy and the crowding scores ($r = 0.53, p = 0.00$ and $r = 0.85, p = 0.00$), but a negative correlation was found between the achieved privacy and the crowding scores ($r = -0.72, p = 0.00$ and $r = -0.88, p = 0.00$) for the Northern and Kurdish samples. The results further revealed that when a woman’s achieved level of privacy increased, the crowding decreased. Also, when desired privacy increased, the crowding in the park increased.

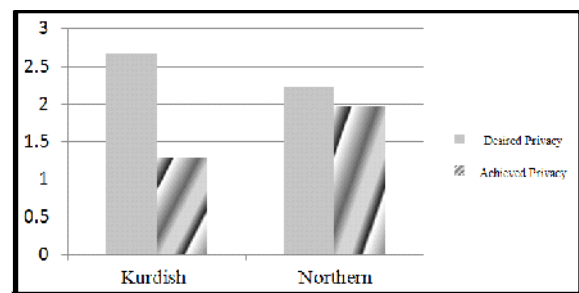


Fig. 2. Desired and Achieved mean scores for Northern and Kurdish women

Table 1. Mean and standard deviations of the desired and achieved privacy levels for Northern and Kurdish women

Culture	Number	Desired privacy		Achieved privacy	
		Mean	Std.deviation	Mean	Std.deviation
Northern	300	2.24	0.71	1.98	0.91
Kurdish	300	2.68	0.99	1.30	0.58

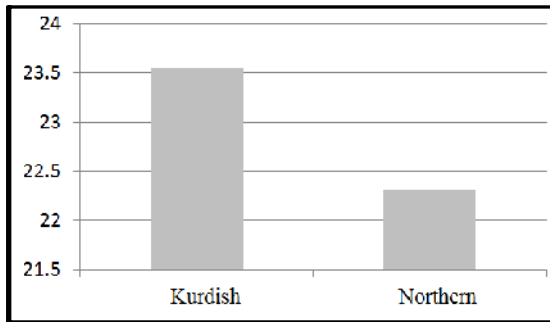


Fig. 3. Crowding mean scores for Northern and Kurdish women

Differences in the Experience of Crowding

In order to make a comparison, the interviewed were divided into three groups based on their discrepancy scores between the achieved and desired privacy levels (Altman, 1975). The discrepancy scores could range from -1 to -5 (crowded), from +1 to +5 (isolated) or could be 0 (optimum). For example, if a woman's achieved privacy score was 2 and her desired privacy score was 4, then the discrepancy score would be -2, indicating an inadequacy in the individual's privacy level (crowded). Second, if the achieved privacy score was 3 and desired privacy score was 1, then the discrepancy score would be +2, indicating an excessive level of privacy (isolated). Third, if the achieved privacy level equaled the desired level, the discrepancy score would be 0, indicating an optimum level. The Chi Squared Test was used in order to study the difference between the discrepancy scores in the Kurdish and Northern samples. The results show [$\chi^2(2, N = 600) = 7.28, P = 0.02$], and so there is significant differences among the discrepancy scores in the two groups.

Tukey's test for post-hoc was used to investigate the differences between the crowding scores among three groups. The results indicate a significant difference in crowding scores of the crowded women and the isolated women and the optimum women ($p = 0.00$). The crowded women have a higher mean of crowding score than isolated than the optimum women. Moreover, Kurdish women perceive the city park as more crowded than Northern women ($M = 23.54, S.D. = 2.90$ and $M = 22.30, S.D. = 0.43$).

CONCLUSION

The primary goal of this study was to examine the differences in privacy regulation and crowding experience between Kurdish and Northern women in parks. Consistent with Altman's privacy regulation model, the results indicate that Kurdish and Northern women significantly differ in their desired privacy levels. Kurdish women have higher needs for privacy (desired privacy) in the public spaces than Northern women. However, Northern women's achieved privacy level is higher than Kurdish women.

On the other hand, the results show that Kurdish women perceive the city park as more crowded than Northern women. Moreover, the crowded women (for both groups) have a higher mean of crowding score than the isolated and the optimum women.

The research also accepts Altman's studies: individual's desired and achieved levels have associations with the level of perceived crowding in physical environments. For both groups of women (Kurdish and Northern), the results indicate a significant relationship between the achieved and the desired levels of privacy and the perception of crowding. Therefore, when a woman's desired level of privacy increased, the crowding increased. Also, when a woman's achieved level of privacy increased, the crowding decreased. Regardless of one's culture, women whose needs for privacy are not met feel more crowded than either women whose levels of social interaction are less than what they desired or those whose privacy is optimized (i.e. desired privacy = achieved privacy). Even in one country, one may find different treatment of the subject which can be linked to the socio-cultural and environmental circumstances developed within that society. Both groups of women were recognized more liberal than other contexts within Iran in surrounding notions related to the women's presence in public realms out of kin groups. Kurdish and Northern women usually socialized with men and they are quite free and confident. However, the results indicate that Kurdish and Northern women significantly differ in their desired privacy levels.

Finally, due to numerous sub-cultures in Iran and a shortage of studies on these sub-cultures, researchers must conduct other cultural studies to create a quality urban environment based on them. It is essential for future studies to utilize other personality indicators such as introversion, maladjustment and anxiety.

ACKNOWLEDGMENT

The present study is based on Ph.D. dissertation of Fatemeh Mohammad Niy Gharaei supervised by associate professor Dr Mojtaba Rafieian in Islamic Azad University, Science and Research branch. Dissertation topic is: "Interpretation of women's perceptual and behavioral patterns in urban environment with emphasis on Islamic and Iranian culture".

REFERENCES

- Altman, I. (1975). *The environment and social behaviour*. Monterey, CA: Brooks/Cole.
- Altman, I., & Chemers, M. (1980). *Culture and Environment*. Cambridge: Cambridge university press.
- Amerian, H., & Shiva, O. (2011). *Cognition of Iranian culture and races*. Tehran: Jahad Daneshgahi.
- Engbretson, D., & Fullmer, D. (c). Cross-cultural differences in territoriality: Interaction distances of native Japanese, Hawaii-Japanese, and American Caucasians. *Journal of Cross-Cultural Psychology*, 1(3), 261-269.
- Evans, G. W., & Howard, R. B. (1973). Personal space. *Psychological Bulletin*, 80(4), 334-344.
- Evans, G. W., Lepore, S. J., & Allen, K. M. (2000). Cross-cultural differences in tolerance for crowding: Fact or fiction?. *Journal of Personality and Social Psychology*, 79(2), Aug 2000, 204-210.
- Forston, R. L., & Larson, C. U. (1968). The dynamics of space. *Journal of Communication*, 18, 109-116.
- Gifford, R. (2002). *Environmental psychology: Principles and practice*. Colville, WA: Optimal Books.

- Hall, E. T. (1966). *The hidden dimension*. New York: Doubleday.
- Hayduk, L. A. (1994). Personal space: Understanding the simplex model. *Journal of Nonverbal Behaviour*, 18, 245–260.
- Little, K. B., & Henderson, C. (1968). Value congruence and interaction distance. *Journal of social psychology*, 113, 41-51.
- Marsall, N. J. (1974). Dimensions of privacy preferences. *Multivariate Behavioural Research*, 9, 255-272.
- Pedersen, D. M. (1979). Dimensions of privacy. *Perceptual and Motor Skills*, 48, 1291-1297.
- Remland, M. S., Jones, T. S., & Brinkman, H. (1995). Interpersonal distance, body orientation, and touch. *Journal of Social Psychology*, 135, 281–297.
- Rustemli, A., & Kokdemir, D. (1993). Privacy Dimensions and Preferences Among Turkish Students. *The Journal of Social Psychology*, 133(6), 807-814.
- Sanders, J. L., Hakky, V. M., & Brizzolara, M. M (1985). Personal space amongst Arabs and Americans. *International Journal of Psychology*, 20, 13-17.
- Sommer, R. (1968). Intimacy ratings in five countries. *International Journal of Psychology*, 109-114.
- Stokols, D. (1972). On the distinction between density and crowding: Some implications for future research. *Psychological Review*, 79(3), 275-278.
- Watson, O. M., & Graves, T. D. (1966). Quantitative research in proxemics behaviour, *American Anthropologist*, Vol. 74, 68, 83-90.
- Westin, A. (1970). *Privacy and freedom*. New York: Atheneum.
- Ziller, RC., Long, B. H., Ramana, K. V., & Reddy, V. E. (1968). Self-other orientations of Indian and American adolescents. *Journal of Personality*, 36, 315-330.