



Responsive urban space to special need groups (women), case study: Chizar neighborhood space, Tehran, Iran

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Abstract

Based on a gender equity perspective and within a pluralistic civil society, women should have equal rights for presence in and use of urban open spaces. Despite this, various factors decrease their presence including inappropriate design of space, as well as socio-cultural obstacles.

Since women's major place of presence and activity has traditionally been in or near home, neighborhood open space is chosen as a relevant case study. Through a questionnaire survey of 180 subjects, 90 male and 90 female, of both marital status the criteria affecting their presence are investigated. Results show that environmental quality factors are more effective than socio-cultural factors on presence of women in urban open spaces.

Keywords: Women, Presence, Neighborhood space, Environmental quality, Socio-cultural factors.

1. Introduction

Traditionally and prior to initiation of gender equity approach in urban space design and planning, cities and spaces were made as places for men's presence. This approach induced as "gendered space" which considers needs of "man" in space planning only. Hence, space planning and design was involved in a way with "gender blindness" [1].

The significance of women's presence in urban spaces is accepted in terms of citizenship rights within a pluralistic society concept which believes in the equality of rights for both women and men. Due to the fact that urban spaces are the realm of necessary, optional and social activities, all groups disregarding age, gender and occupation should have equal opportunity in using them, but these places become a realm for men's presence and presence of women are limited only to their necessary activities. This is while at least women's needs for social encounter in space show the importance of their presence.

The specific goal of this research is to study the rationale for women's presence in space through a theoretical overview and then study the factors which influence on level of women's presence and their types of activities in neighborhood spaces of Iran, through a case

study in a Chizar neighborhood space in Tehran.

Therefore, first, a literature review is conducted concerning women and urban space, gender equity approach and ethics of care, and then on the basis of this theoretical framework, research hypothesis are developed. The research emphasizes on socio-cultural and behavioral factors.

2. Urban Space, Presence and Participation, Hierarchy and Neighborhood Space

Space is a general phenomenon. It fulfills the world and encompasses our lives. Sometimes it is so thin and spread that is not felt, and sometimes it is so three dimensional to which gives meaning to anything around it. Space gives meaning; comfort and security to our living environ and is a major element in urban design [2]. In fact a major task of urban design is shaping the urban space for various users and activities.

Urban spaces encompass a wide range from public to private. Public spaces are those in which the social life of people are fulfilled and hence contribute to the overall satisfaction of cities. Public spaces are needed by all groups and their presence in public space reminds them of their roles as citizens within the community, however different cultures have different attitudes towards public space.

Also there is a hierarchy of public spaces from urban space to district level space and to neighborhood space. Neighborhood spaces have a very significant role in providing place for many social activities at neighborhood level and contributing to its identity. Lang Den (1994)

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refers to neighborhood space as the social hub. In fact the necessity of social activities and communications requires their existence. Since neighborhood spaces are in the lower hierarchy of urban spaces and considering their cultural and historical precedence as a female controlled space, this research is considering strategies to increase women's presence in urban space in order to attain gender equity at least at presence in neighborhood spaces.

3. Significance of Women's Presence in Urban Space

There are different attitudes considering women's presence in urban spaces which could be categorized into two sets of inclusionary and exclusionary approaches.

Analysis has revealed the power of symbolic hierarchical dichotomies of public/private, male/female, and work/home in the planning and designs of built environments, which are intended to reproduce these dichotomies [3] and so emphasize on women's exclusion in urban spaces. Feminist scholars' studies on women and their needs have proved the importance of women's presence in urban spaces which is referred to as "inclusionary approach".

In this research the significance of women presence is investigated through main approaches: gender equity, pluralistic citizenship, ethic of care as a behavioral approach and Islam's attitude toward women's presence in spaces.

4. Gendered Space and Significance of Women's Presence from Gender Equity Approach

The use and appropriation of public space is a fundamental issue that has to be considered in any study of daily life of men and women living in cities. But it is an experience that is not the same for everybody, since age, sex and social class affect the way in which urban life is lived and perceived [4].

Studies in urban planning indicate that design of public spaces has greater impact on the daily lives of women than men. This is due to the fact that women have much closer relationship with their immediate urban environment and spend more time outdoors carrying out tasks [4]. But feminist scholars have pointed out the male bias of many of the approaches to urban planning and public space design [5]. Historically architecture and urban planning have been male-dominated professions and un-gendered, as if men's needs and interests are universal [6 & 7]. In spite of the fact that, men's needs don't include everybody's needs.

Until 1970s, urban planning has involved with gender-blindness [1]. In 1970s, several agreements and movements have been established and as a result, consideration in gender approaches and gender equity has been started. Therefore women make right claims as gendered subjects who demand spatial temporal space that support everyday life. They argue that their standpoint and gendered experience have been banned and denied by decision makers and politicians [7].

Equity is a prerequisite for any action aimed at improving people's quality of life which itself is a comparative issue. Gender equity is not only a question of fundamental human rights and social justice, but are also instrumental and precondition for environmental consideration and human security [8].

Thus considering equity in design and planning urban spaces, which provide equity in accessibility and women's needs is an essential issue. Although public spaces have to provide social equity, disregarding it in planning and design may result in deepening social inequity.

5. Civil Society and Significance of Women's Presence

Civil society is defined in various ways, which is due to differences in definitions within time and geographic space. In other words, civil society is a concept which in due time and space has different definitions. Political theoretician such as Majnosian and Friedmann [7] believe that we are experiencing a new civil society. This civil society is defined for example by Majnoosian as a place for productive public activity, a place away from supply and demand. Friedmann [7] recognizes civil society as a social institution, which is far from the direct control and preservation of governments. Lacló and Moufét envision civil society as a space for social mobility. Women due to global economic conditions must bear heavy responsibilities for providing human needs. Due to their active position in reconstruction of civil society and new paradigms of relations of citizenship in urban, national and global levels, the role of women is not deniable [7].

The main character of civil society is its pluralism. This meaning of civil society shows the significance of encompassing different attitudes, which may even oppose each other, and to find an approach to achieve consensus. Pluralism is the result of social democracy through modern thought which brings about development of freedom [9].

The concept of pluralism requires inclusion of all groups despite their age, gender, race, to attain citizenship rights. It recommends considering approaches which concentrates on diverse women's demands. Nowadays the citizenship concept is farther than just inclusion of social citizenship rights, but includes such issues as participation, women's rights in diverse public realm and political institutions and social movements.

Pluralistic citizenship is defined as the rights which related to different goals and have diverse forms. For example it can be considered as material demands for primary needs, as well as demands for higher levels of participation, in the structures of civil governance [7]. Therefore the pluralistic citizenship concept defines rights of citizenship for all groups. In this concept citizenship right includes all political, social and human rights. Among these the primary human rights such as housing, food, and employment, and social rights such as participation in decision making, as well as presence in urban spaces are included.

6. Ethic of Care, Women's Behavioral Approach in Environment

The feminist theory "the Ethic of Care" is an approach, which studies women's experience in public spaces. The ethic of care is a moral development in which the highest moral imperative requires taking care of needs and sustaining relationships. Kristen Day (2000) examined how this theory creates constraints for women's use in public spaces [10].

The ethic of care is adopted as a framework for examining women's experience in urban space. Women's constraints of presence in urban space comprise of factors that intervene between women's public space experience and activities, and their satisfaction with use of public spaces (including enjoyment, preference, participation and meaning). In fact women often prefer others' needs and preferences, which make them dependent to home and to other members of the family.

The constraints imposed on women's experiences in urban space is categorized into constrained resources (limited time/ limited money), constrained emotions (stress/fear) [11], constraining responsibilities (childcare, housework,...) and constraining social norms and conditions (oppressive social and gender norms, oppressive and inequitable social conditions,...) [10]. Besides these constraints the ethic of care is defined as a source of possibilities for women's use of public spaces. In other words through women's use of public space, possibilities arise for exercising and experiencing care and for sustaining various relationships [12]. Caring for and from friends and family, caring for and from strangers, caring for self and caring for and from public spaces,... are examples of such possibilities [10]. In this approach women's presence is mainly affected by others and for as socio and cultural norms decree.

7. Women in Islamic Culture: Their Rights and Responsibilities

In Islam, sexuality is a biological phenomenon, while human spiritual identity is unique and one. The religion itself emphasizes on sexual equity and human rights are equal in this viewpoint. There are many verses in Quran emphasizing these facts.

Women have a very important role in family. From the old times, women had responsibilities at home and in gendered task distribution, had been responsible for non-paid house works. In Islamic countries there is still cultural emphasize on the role of women in house and their influence on family as the smallest social unit in society.

While in western culture individualism is the most important factor and the aim of the civil movements to obtain individual's rights, in Islamic culture, it is the family as a whole which has identity and must be saved. Family is a social unit in which woman, is only one individual and an important one as a spouse and a mother to take care of her and others. Ethics of care well applies in here and is in congruity with both the culture and the ideology. It is believed that without family the culture is destroyed [13].

Since the role of women in family is very important for the continuity of family life, creation of a suitable environment to enhance the social and mental health of women is also of major importance. Creation of an urban environment in which women despite socio-cultural norms could be present and be active and socialize is of utter importance. Unfortunately the imposed constraints on women not only constrain them, but also the groups under their support.

8. Women in Iranian Urban Life: New Roles New Expectations

In contemporary Iranian city, women are present at various domains and have shown that they want to change their lives. Their physical presence at urban spaces is a manifestation of this will. Iranian-Islamic culture is different than more traditional Islamic societies and emphasizes on the right of women for presence and activity in urban spaces. However there are still not equal opportunities for them to participate in urban active life.

However it must be noted that provision of facilities for presence of women in urban spaces is a way for their participation in optional and social activities and not just necessary activities. The suitability and responsiveness of space to women's needs must be considered by urban planners and urban designers.

9. Neighborhood Space and Women Presence

Urban space should be the place for use and presence of all users. Despite the goal of urban design in creating spaces for social encounter, before 1970s planning and designing of space was negligible about women's needs. Therefore women's opportunity for presence in urban space was decreased in comparison to men. So providing women's presence in hierarchy of space is the main direction of this research.

Since women's place of presence has traditionally been in or near home, it seems that neighborhood open spaces are in close relation with their daily life [3]. Especially in Iranian culture, neighborhood spaces have been in deep relation with women's needs. As a result examining women's needs as well as other members of family especially children and elderly people should be considered, since their behavior in the environment is on the basis of the ethic of care, which is caring for these dependents, the children, elderly and patients. Different experiences have been implemented with emphasis on providing social needs of women. Several projects named as co-housing developments and intermediate spaces have been implemented in order to create appropriate neighborhood spaces [5].

Concerning the old fabric of Iranian cities, the public open spaces follow a hierarchy of public and private spaces according to the structural hierarchy of the city. Such a hierarchy is still recognizable in old fabric of Iranian cities like Yazd, Kashan, Isfahan and Ardestan. In such spatial hierarchy of public spaces, there were places for presence of women and children with defined territory

adjacent to homes. Thus women were present in such spaces without any fear, stress or tension (Despite this, the mentioned factors are now the main constraints for women's presence in urban spaces in Iran). These spaces were blended with Iranian-Islamic culture. Therefore these women-friendly spaces provided equity within the hierarchy of spaces. However, there was a general decline in the quality of many of these spaces during the last few decades and a disruption and in many cases disappearance of the hierarchy.

The goal of the research is defining principles for designing responsive neighborhood spaces to women's needs. For this purpose, it is needed first to acknowledge women's role and importance of their presence in creating and preserving urban space as well as examining their needs and desires. Next is studying and evaluating neighborhood open spaces regarding the ethic of care, which provides space for social life of women.

10. Goals, Research Questions and Hypotheses

Considering the theoretical framework on the necessity of women's presence in urban spaces and the equity approach of Islam on women, a cultural manifestation of this in urban spaces is investigated here. Considering the role of women in the family and the importance of family in Islam as well as the ethics of care which explains women's behavior, urban neighborhood open space was selected as the case for study. These spaces within the hierarchy of urban spaces are the closest to the main women related spaces, the house.

Since women's presence in urban spaces requires appropriate physical, social and cultural context, here the social and behavioral factors which affect women's presence in neighborhood spaces are examined. Also since socio-cultural condition also reduces presence of women in space, these are considered to determine the extent of their effect on women's presence.

Identification of the gender differences in perceiving, experiencing and relation with environment are the first goal of this research. Examining and evaluating neighborhood open space is the tool of achieving this goal. Therefore specific goal of this research is as follows:

- Defining behavioral and socio-cultural factors of neighborhood open space from women's viewpoint which increase the potential of women's presence.

The main question of this research contains relationship between constraining factors of women's presence and cultural and social characteristics. It also considers the question of how a responsive neighborhood space which is compatible with women's needs would be provided for increasing women's presence and activities in urban spaces.

There are 3 theories about influence of environment on human behavior: determinism, probabilism, and possibilism [14]. The research hypotheses here are based on the probability theory which behavioral factors, some designs and environmental qualities could increase the "rate of presence and activities" of users. Two hypotheses

are defined in order to response to research questions.

- Socio-cultural norms have relation with women's presence.
- Women's behavior in environment –the ethic of care- has relation with their presence.

11. Methodology

The present research is an applied research which aims to determine solutions towards a gender equity approach in using neighborhood spaces. It also is a descriptive research in finding the socio-functional factors influencing the presence of women in urban space. The research uses correlation study and studies the relation between the independent variables of social, cultural and physical environments with the dependent variable of women's presence.

In correlation analysis here, spearman test, and also Chi squares were conducted on field data of Chizar square. Correlation study helps researchers defining the relation between these variables and predicts relation between socio-functional factors and environmental behavior. (Table 1) Hypotheses measures, dependent and independent variables specified in literature review.

Variables		Factors
Independent variables	Presence in space	Rate of presence, times of presence, rate of different activities
	Socio-cultural norms	Separation of women and men's realm, citizenship rights, presence constraints by family,...
Dependent variables	Ethic of care factors	Number of children, responsibilities, environmental responsiveness to children and elderly,...

The structured questionnaire contained the following items:

- Individual characteristics
- Presence specification
- Socio-cultural norms
- Ethic of care factors
- Necessary, optional and social activities

"Gender" and "marital status" are two influential variables of analyzing questions. Since comparing women and men's presence is considered, gender is the main variable for analyzing and evaluating the data. Marital status is considered for comparing single and married presence in urban space and examining the effects of "the ethic of care" as well.

12. Validity and Reliability

In order to create data generalization, validity and reliability of questionnaire data was examined. In order to

specify visual and contextual validity, questionnaire form was shown to several urban design and statistics experts and was revised as suggested.

For defining reliability of the questionnaire “internal consistency methods” is used. Examining the data through “coefficient alpha” which showed a value larger than 0.7, proved that the test has an appropriate reliability.

13. Case Study, Chizar Square

Case study of this research for testing hypotheses is Chizar neighborhood space. Chizar district is located in north of Tehran (Fig.1). This district is a sample of a neighborhood with moderate socio-economic status.

Since social structure of Chizar, provides various social and economic class users, this district was chosen as an appropriate case which was compatible with the research goals.

However, specific characteristics of this neighborhood and the presence of Emamzadeh Ali Akbar as the religious center point for it has had an effect on the behavior and socio-cultural norms of the residents. This has resulted in the presence of an affluent class in the Chizar neighborhood, and brought together a variety of users, with different behavioral patterns.

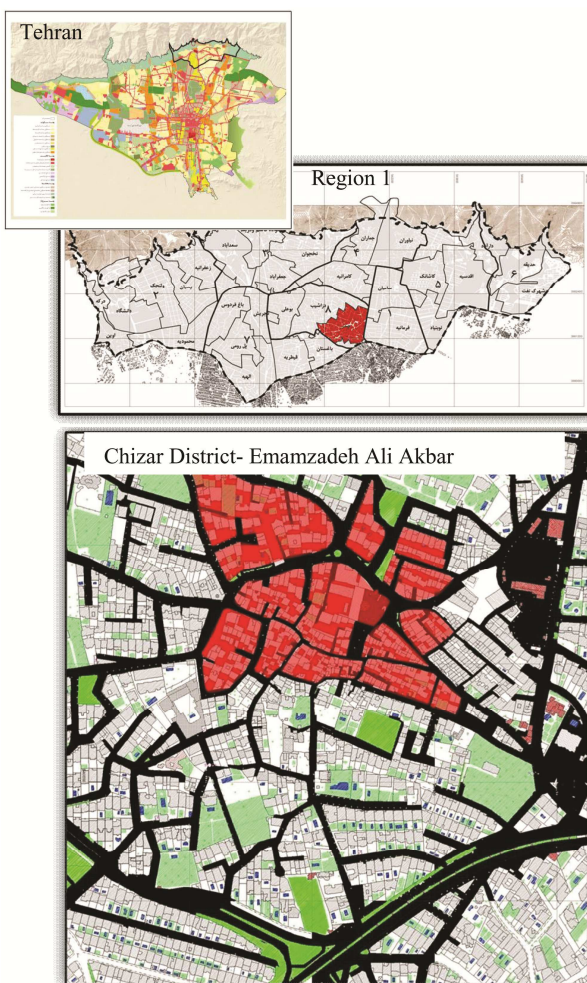


Fig. 1. Chizar location in Tehran

Emamzadeh Ali Akbar Square is a physical and functional center of Chizar. This square has an appropriate physical and functional variety. Land use and various function of square make this square as a place for presence of residences and non residences. Emamzadeh Ali Akbar square is a space for presence of different groups especially on Thursdays and Fridays for religious and funeral ceremonies. Despite appropriate and high level function, the physical quality of space is inappropriate and does not fit its social status [15].

So reasons of selecting Emamzadeh Ali Akbar square are as below:

- Various land use and functions of space
- Various types of users
- Presence of various socio-economic groups in the neighborhood
- Physical problems of square

14. Sample Size

Based on the formula below and considering the 5000 family residents in the Chizar area, next to Emamzadeh Ali Akbar Square, an appropriate sample size of 161 subjects was determined. This would provide a sample size with a 0.95 and significance level of 0.05. Finally a sample size of 180 was chosen to conduct the main research.

$$n = \frac{N * z^2_{\alpha/2} * \sigma^2}{\epsilon^2 (N - 1) + Z^2_{\alpha/2} * \sigma^2} \quad (1)$$

Before conducting the main survey, a pilot study using 30 questionnaires which was distributed among equal numbers of women and men was conducted. The analysis of the data resulted in some revision of the questionnaire and deletion of some of the questions. The final questionnaires were distributed among 180 equally male and female subjects.

15. Hypotheses Test

Before testing research hypotheses, several general relations were examined. For investigating the difference between mean of “rate and times of presence in space” among men and women, “equality of two means test” is used. It must be noted that the duration of presence in neighborhood space, using an appropriate scaling, is transformed into parametric data.

Fig.3 shows the significance level of “equality mean test” is lower than 0.05, so there is different significance between “rate and times of presence in space” of men and women in Emamzadeh Ali Akbar square. Therefore it can be concluded that “gender” as independent variables have influence on “rate and times of presence in space” as dependent variables. Since lower and upper ranges are positive, the mean of “rate and times of presence in space” among men in Emamzadeh Ali Akbar Square is higher than women’s presence.

Similar test about significant difference in mean of

“rate and times of presence in space” between single and married specified the previous result. It means that the

mean rate of presence of “singles” in space is higher than “married” presence in space, regardless of their gender.

Table 2 Examining difference between mean presence of men and women in neighborhood space

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
		Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower
how long do you stay in Chizar square	Equal variances assumed	26.911	.000	3.360	173	.001	.5277	.1570	.2177	.8377
	Equal variances not assumed			3.376	163.717	.001	.5277	.1563	.2191	.8363
time of presence in a week	Equal variances assumed	8.267	.005	2.880	175	.004	.769	.267	.242	1.295
	Equal variances not assumed			2.874	170.697	.005	.769	.267	.241	1.296

Hypothesis 1: Socio-cultural norms have relation with women’s presence.

The theoretical framework points at the influence of socio-cultural norms on women's presence and types of activities in neighborhood spaces. This is examined here, first by defining some of the constraining socio-cultural norms on women, questioning its importance to them and comparing the results with the presence and type of activities of women. Comparing constraining socio-cultural norms for men and women and the present of the opposite sex in space on presences also examined. Also the effect of care taking also is tested.

Results of spearman correlation test showed there are not significant correlations between socio-cultural norms as independent variables with presence of women in space as dependent variables. Hence this hypothesis is rejected (Table 3).

While the socio-cultural norms and the level of presence in the Chizar neighborhood doesn’t have a significant correlation. The results of the correlation test between socio-cultural norms and types of activities shows are correlated. Therefore the results of the study show that the gender domain separation in Chizar neighborhood space would decrease the activity level (Fig.2).

Table 3. Exploring the correlation between Socio-cultural factors and different activities in Chizar Neighborhood

Independent variables	Dependent variables				
	Necessary activities	Optional activities	Social activities	investigating the effect of Gender and marital status on correlation test	
				Gender	Marital status
Men are present more than women in space	x	x	x	x	x
If you are women: Men’s presence limit women’s presence	x	x	x	x	✓
If you are men: women’s presence limit men’s presence	x	x	x	x	x
Presence limitation caused by family members (husband, Children, Brother)	x	x	x	x	x
Separation of women and men’s realm Presence in space as a civil right	x	0.07	x	x	x
	x	0.05	x	x	✓

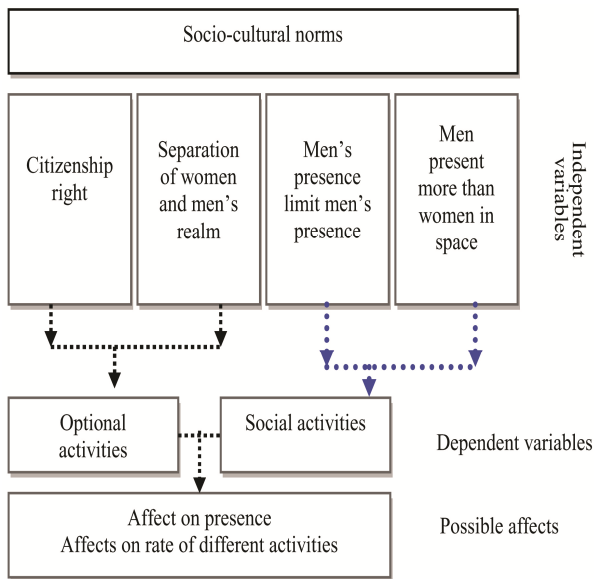


Fig. 2. Final Model of correlation between dependent and independent variables

Result interpretation of Spearman correlation test between dependent and independent variables are as below:

- Men's presence decrease social activities of single women
- Men's optional activities decrease in response to separation of women and men's realm.
- In mixed realm, single women's activities decrease.
- Women's constraints in comparison to men's presence in urban space decrease rate of optional activities of single women.
- Women's constraints because of men's presence in spaces decrease rate of social activities of single women in neighborhood spaces.
- Women's constraints because of family members decrease in social activities of single women.
- Separation of women and men's realm decrease the quantity of optional activities of men.

Hypothesis 2: Women's behavior in environment –the ethic of care- has relation with their presence.

Considering the Ethics of care the effect of the indices governing the behavior in environment and its frequency and duration has been examined. Here the personal characteristics, including marital status and number of

children, also the responsibilities, as well as the responsiveness of physical environment are examined as independent factors. The results show that according to ethics of care women's presence in neighborhood space is mainly for necessary activities.

This hypothesis is examined to find out significant correlation between "the ethic of care" approach and "rate and times of presence in space". Results showed there are significant relations between "individual characteristics", "responsibilities" and "environmental responsiveness" (independent variables) and "rate and times of presence in space" (dependent variables) (Fig.3). The detailed results are as follows.

- Having children have positive effects on necessary and optional activities of women and increase their activities.
- Increasing in quantity of free time, increase necessary activities of single women but not optional or social activities of them.
- Responsibility of space to children needs, have an effect on optional activities of women and increase the rate of it.
- Outdoor Responsibility has a positive effect on times of presence of single and married and increases it.
- Daily shopping responsibility decrease married presence in neighborhood spaces.
- Home responsibility decrease married presence in spaces.
- Inappropriate space for children needs, decrease necessary activities of women.
- Increasing in the quantity of outdoor responsibilities, decrease necessary presence of single women in space.
- Daily shopping responsibility has a positive effect on married necessary activities and increased it.
- Daily shopping responsibility increases rate of men and women's activities.
- Responsibility of caring children has a positive effect in women's necessary activities.
- Responsibility of caring children increase married necessary activities.
- Responsibility of caring children has a positive effect on optional activities of singles.

Home responsibilities increase rate of necessary activities of married in neighborhood space.

Table 4 Exploring the correlation between ethic of care factors and presence in Chizar Neighborhood

Independent variables		Dependent variables			
		Rate of presence	Time of presence	investigating the effect of Gender and marital status on correlation test	
				Gender	Marital status
Individual characteristics	Having children	x	x	x	x
	Availability of free time	x	x	x	x
Imposed responsibilities	Outdoor responsibilities	0.000	0.050	✓	✓
	Shopping responsibilities	0.000	0.049	✓	✓
	Responsibility for taking care of children	0.004	x	✓	✓
	Responsibility of taking care of elderly	x	x	x	x
	Home responsibilities	0.007	x	x	✓
Environmental responsiveness factors	Environmental responsiveness to children's needs	x	x	x	x
	Environmental responsiveness to elder's needs	x	x	x	x

Table 5 Exploring the correlation between ethic of care factors and different activities in Chizar Neighborhood

Independent variables		Dependent variables			
		Optional activities	Social activities	investigating the effect of Gender and marital status on correlation test	
				Gender	Marital status
Individual characteristics	Having children	0.000	0.01	✓	x
	Availability of free time	x	0.016	✓	✓
Imposed responsibilities	Outdoor responsibilities	0.000	x	✓	✓
	Shopping responsibilities	0.000	x	✓	✓
	Responsibility for taking care of children	0.000	x	✓	x
	Responsibility of taking care of elderly	x	x	✓	x
	Home responsibilities	0.000	x	✓	✓
Environmental responsiveness factors	Environmental responsiveness to children's needs	x	x	✓	✓
	Environmental responsiveness to elder's needs	x	x	✓	✓

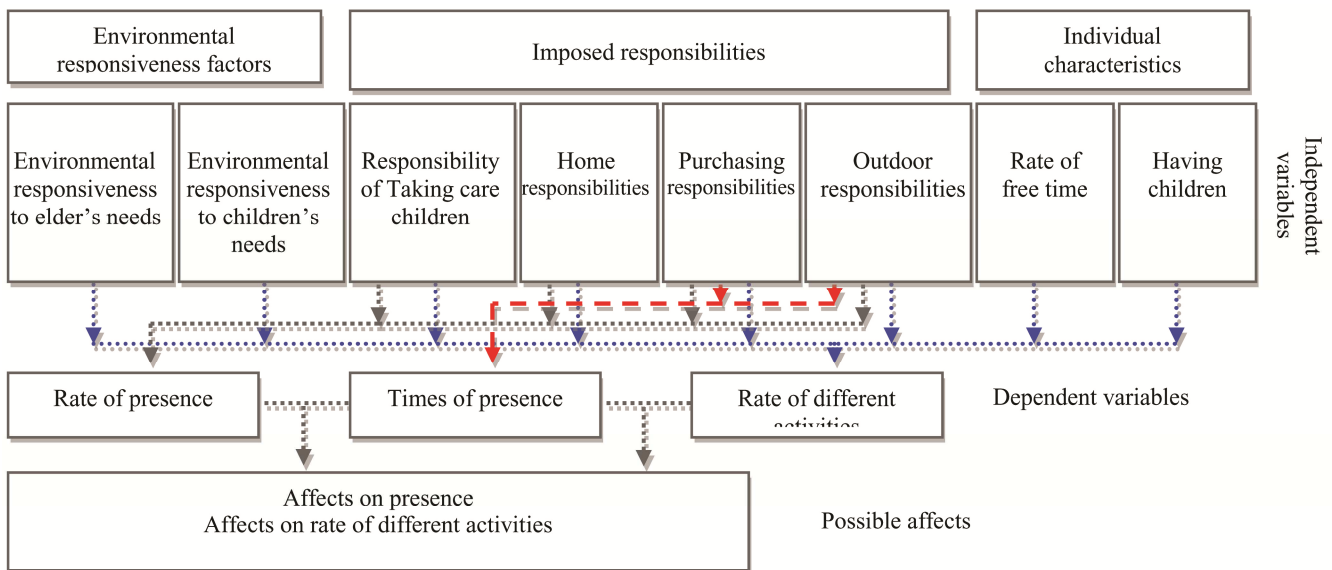


Fig. 3. Final Model of correlation between dependent and independent variables

16. Hypotheses Test Results

Designing and planning appropriate and responsive neighborhood space which became the place of daily activities of residence would be possible according to the test results. Direct results of this space are increasing rate and times of presence in space and different activities. Besides, direct results of planning and designing space with this approach, these spaces could have influence on spiritual and physical health of women and could increase their sense of belonging and sense of place.

Main results of this research are as below:

- From the viewpoint of women who have a sense of taking care of others, men's behavior is not a matter of importance. In this condition the important issue for women is how space could help them to take care of themselves and their dependents. Investigations showed socio-cultural norms as constraining factors did not have relation with women's presence in Chizar district. Since these norms are place-bound, the possibility of relation of these factors and "presence" is expected in smaller communities with a traditional culture. Results show that there are significant relation between socio-cultural factors and rate of various activities, for example territorial separation of men and women, decrease optional activity of single men and/or men's presence decrease social activities of single women.

- Women are mainly present in space for necessary activities; however men's presence is mainly for optional and social ones due to imposed responsibilities and socio-cultural constraints.

- Results proved the difference between women and men's behavior in environment have significance correlation with their presence and type of activities. For example, women's behaviors approach in environment - the ethic of care- decrease their social and optional activities in space.

- Not only women consider their needs in neighborhood space but also consider children and elderly

needs. For instance environmental responsiveness to children and elderly needs have relation with their presence. So the ethic of care as dominant norms affects their presence, behavior and activities.

- There is a considerable difference between activity patterns of single and married in neighborhood open space. This result emphasis the influence of "ethic of care". As an example, there is a significant correlation between married responsibilities and their presence.

17. Conclusion

Considering the results of the study as listed above, it is concluded that the "ethic of care" has an influential effect on women's presence. Therefore in an Islamic culture also the responsibilities of women towards others are a constraint for their use of urban open spaces, especially for optional and social activities.

On the other hand "socio-cultural" norms, which is the expectations of others from women, is not affecting women's presence. This must be considered that these norms are much place-bound and hence is valid only in the case under study, which is a dynamic social environment. However it could be concluded that in Tehran, and perhaps other large metropolitan areas of Iran the socio-cultural norms are not constraining women's presence in space, but conducting a similar study in smaller communities in Iran would show different results.

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