



The Relation between Housing Needs and Housing Function according to the Maslow's Theory of Needs

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ABSTRACT

Purpose: The most important thing is to know exactly what needs users have when planning a housing. People have their own criteria that directly influence purchasing decisions when choosing a house to live in. And they select the house with the largest number of elements satisfying these criteria. This days most consumers are mostly satisfied with their material needs. And now people thinking more important motive than simply pursuing material gains. It is the most essential role in they consume consciously or unconsciously that meeting the needs of which step. And now days housing space has become a merchandise, this study check the related function of the residential space and human needs. **Method:** First, this study wanted to understand the housing needs, which is needs related to housing in basic needs that humans have. Second, this study wanted to understand what the requirements and the criteria for choosing housing of actual resident, who want to have changed housing. Third, This study check how to set up the direction of development in housing planning, through the comparison of the housing needs and the residential function defined above. **Result:** Henceforth housing should consider meet the Esteem Needs and Self-Actualization Needs, among the type of Grow-based Motivation. The functions for this are convenience, independence, economics, sociality, relaxation, and expressivity. In addition, it should be able to express oneself and recognize the value of oneself through leisure activities and interaction with neighbors. And, it should be able to move toward the direction to express that hobby activities for individual talent development in separate space

KEYWORD

욕구
주거욕구
주거선택요인
주거기능

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1. Introduction

1.1. Background and Purpose of Study

Housing can be regarded as a typical style indicator that can represent the society and culture of the time. The consciousness and behavior style related to residence is different in time and geography. In the past, housing simply played a role as a space for residence. In modern society, however, housing has also played a role as a means to satisfy residents' needs as well as convenience of residence.

The most important consideration in planning residential facility is to pinpoint the user's requirements. As the age changes, people's demands are becoming more diverse and more fragmented. Although there may be differences in the form and composition of requirements depending on the value and culture that individuals pursue, planning the residential space that meets the basic needs of human beings that occurs in living in a residential facility is an important part that directly or indirectly influences the quality of life of individual.

On the other hand, people have their own evaluation standards that can directly influence the decision to purchase in choosing a house to live in, and choose the house that contains the most elements that satisfy these standards. In addition, as the interest in the surrounding living environment and the function of housing increases, the selection and moving process of housing are diversified. This phenomenon reflects the high needs for moving to the house with more pleasant living environment, escaping from the absolute lack of housing.

In recent years, most material needs of the residents have been met, and the needs for expressing their personality inside the house, which is the basis of life, is getting bigger. Predicting future direction of change of living environment, it will move toward emphasizing the value of residents and the self-actualization needs by making creative and individual changes with an emphasis on motivation rather than merely pursuing material gains.

Satisfying any need plays the most essential role in consciously or unconsciously consuming it, and now that housing space is also a commodity, we will examine how the functions of residential space are related to human needs.

1.2. Scope and Method of Study

In this study, we could confirm the residential function according to the housing needs through the following process and obtain the hints about the development direction set of housing plan in the future.

First, we wanted to understand housing needs that are related to housing among the basic needs of human beings. For this purpose, we reviewed the opinions of various scholars who have mentioned the housing needs, and classified and defined stages of housing needs based on Abraham H. Maslow's Needs Hierarchy Theory .

Second, we wanted to understand what the requirements of real users who want to move residence and the standards for choosing housing are and how they have changed. For this purpose, we analyzed

examined the process of changing of housing selection factors and residential function through analysis of precedent studies related to housing selection factors and residential function, and could define them as the standards suggested in this study.

Third, we confirmed how to set up the future development direction in planning housing through the comparison of the housing needs and the housing standards defined above.

2. Maslow's Needs Hierarchy Theory and Housing Needs

2.1. Maslow's Needs Hierarchy Theory

Abraham H. Maslow, a psychologist in the United States, founded humanistic psychology completely different from existing psychology field led by scientific activists and psycho-analysts. Maslow, through A Theory of Human Motivation (1943), argued Needs Hierarchy Theory that humans needs has a hierarchy starting from the basic physiological needs to safety, society, esteem and finally self-actualization.

Table 1. Maslow's Hierarchy of Needs Theory

Level	Needs	Definition
1	Physiological Needs	Fill up the minimum needs of physical and physiological conditions necessary for survival
2	Safety Needs	Avoidance from physical, economic, and emotional anxiety
3	Social Needs	Human relations with affection, sense of belonging, companionship, friendship, etc.
4	Esteem Needs	The inner respect of achievement, pride, etc. The external respect of recognition, interest, etc.
5	Self-Actualization Needs	Realization of talent, ability, potential,

According to his Needs Hierarchy Theory, human beings have many basic needs, and they does not have a horizontal equal hierarchy, but a hierarchy that grows from the low level to the high level.

That is, some needs need to have priority over other needs, and the hierarchical hierarchy of these needs is not fixed but relative, he thought that if the low-level needs are not met more than a certain amount, it does not lead to behavior even if the next-level needs occurs.

1) Physiological Needs

The lowest level of Needs Hierarchy Theory is the physiological needs about clothing, food and shelter, which are the most basic things in life. This includes, for example, the need for clean clothing, a good night's sleep at a comfortable bed, and the need to consume full food. In other words, because they are the most basic and strong needs for the minimum physiological condition necessary for human survival, they must be satisfied before any other needs.

2) Safety Needs

If physiological needs are fulfilled to some extent, safety needs, needs which are needs to avoid physical, economic, and emotional anxiety, appear. Safety needs are needs to maintain normalcy and stable order, away from anxiety, fear and confusion, and one of the basic needs of human beings related to protection from the external environment and guarantee for the future.

3) Social Needs

When physiological needs and safety needs are satisfied, social needs such as affection, favors, and sense of belonging appear when forming interpersonal relationships. Social needs are the needs that form and belong to a social organization regardless of the size of society, and the needs to maintain smooth human relations through social interaction and to be accepted by others.

4) Esteem Needs

Most people in our society have needs to be respected by others. People want to get recognition from others by doing some good work or doing something good. These activities represent the typical needs of humans to gain a sense of being worthy of others or to get satisfaction contributing to something.

Maslow mentioned two kinds of esteems: "low level" needs to be respected by others, and "high level" needs to respect for oneself. 'Low level' esteem is the externally formed esteem and aims to gain the value such as social status, recognition of others, reputation, etc. 'High level' esteem is the internally formed esteem and aims to gain the value such as external and internal strength, self-competitiveness, self-confidence, independence, etc.

The two aspects of these low-level needs and high-level needs must be combined to meet the esteem needs. In other words, when one not only recognizes his own importance but also is acknowledged by others, it can be said that the true esteem needs are satisfied.

5) Self-Actualization Needs

Maslow's Self-Actualization Needs at the top of the needs pyramid are needs to exert the maximum potential of self by growing up to the level of creating something, hoping to maximize the capacity, and accomplishing oneself.

Self-Actualization Needs are different for each person. For example, some people think that self-actualization is achieved by becoming a popular broadcaster on TV, and others become painters who draw pictures, and writers who write poetry and novels.

However, what is more important is that the direction set by self-actualization must be centered on internal motivation based on self-experience. Therefore, self-actualization is not the achievement of a simple goal, but sometimes encounter limitations but overcome them and it builds up its own experience by making more efforts.

6) Motives

Maslow maintained that while low-level needs come from motivations that act in direction of resolving the needs to relieve tension that arise when they are not met, high-level needs do not start from deficiency state, but rather from motivations that act in a positive direction for personal growth. In this regard, he argued that the needs at the top were desirable and mature motives, and considered them as the most human needs.

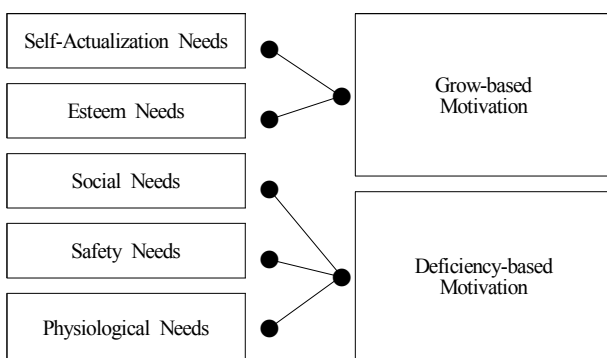


Fig 1. Deficiency-based Motivation and Grow-based Motivation

Maslow's Five Steps Needs can be divided into low motivation, deficiency motive and high-motivation, growth motive.

Low motivation occurs due to lack, that is, deficiency. 'Physiological Needs' are the most basic and has a high priority. However, they are not all indispensable, but when satisfied to some

extent, 'Safety Needs' emerge and then 'Social Needs' emerge. There is no more than the meaning that they are out of an unpleasant state.

High motivation, however, is a need for natural value of human, and is a need for growth that can do more to expand human experience and enrich life, and realize the infinite potential. The needs for pride or respect, that is, 'Esteem Needs' appears, and on top of that, 'Self-Actualization Needs' 1)

2.2. Housing Needs

People are motivated by the needs that they basically have in the process of feeling, thinking and acting, and this usually leads to behavior. In this process, people use the surrounding environment and influence it.

The most basic needs of human life are clothing, food, and shelter. Among them, the shelter life of man is the most basic living space, and when the perfect harmony is made between the active act of life and the physical space between things to make it convenient, the residence fully exercises its function. 2) In addition, the shelter life is always fluid based on the basic needs of humans, and the spatial factors change due to social influences and internal changes of family members. 3)

Therefore, it is very important to understand housing needs among the basic needs of human beings in order to establish the standard of living space suitable for residents' habits and to plan residential facilities.

Many scholars mentioned housing needs that humans have. Montgomery divided into ① Needs to protect from human beings and nature ② Needs for space or base, ③ Needs for total self-concept ④ Needs to maintain relationships with others ⑤ Needs for social and psychological stimulation ⑥ Needs to be creative and supernatural ⑦ Needs to meet values.

Cooper stated ① Hiding Place and Stability Needs ② Physiological Needs ③ Social Needs ④ Needs to maintain relationships with others ⑤ Esthetics Needs, and the hierarchy of needs that the next step needs occur when the first step needs should be satisfied. 4)

Meeks divided housing needs in order of ① Physiological Needs ② Stability Needs ③ Independence Needs ④ Individuals Needs.

Maslow maintained 'Needs 5 Steps Theory', suggesting the

1) Lee, Lim-Jung, The study of human needs and behavior according to understanding of , Journal of Korea Association of Business Education, Vol.55, 2009 p.227
 2) Park, Seon Young, A Study on Spatial Characteristics of Brand Apartment Based on Maslow's Needs of Hierarchy Theory, Journal of Korean Society of Basic Design & Art Vol.14, No.4, 2013, pp.209-211
 3) Kim, Yang Hee, A Study on Housing Needs According to Types of Lifestyle, The Graduate School of Yonsei University, 2006, p.25
 4) Ibid p.19

needs system that the hierarchy exists in human needs in order of basically ① Physiological Needs, ② Safety Needs, ③ Social Needs, ④ Esteem Needs, And Finally ⑤ Self- Actualization Needs.

Kwak In-Sook summarized that housing needs occurs in order of ① Survival Needs ② Safety Needs ③ Comfort & Convenience Needs ④ Social Relations Needs ⑤ Self-Actualization & Aesthetic Needs.⁵⁾

Table 2. The Theory of Housing Needs by Scholars

Maslow	Cooper	Meeks	Kwak
Physiological needs	Hiding place	Physiological needs	Survival needs
Safety needs	Stability	Stability needs	Safety needs
Social needs	Comfortable	Independence needs	comfortable and convenience needs
Esteem needs	Socialization and self-expression	individuation needs	Maintain social interrelation needs
Self-actualization needs	Esthetics		Self-actualization and esthetics needs

Among the theories of the above scholars, it is considered that Maslow's "Needs 5 Steps Theory" can be an analytical framework to define the basic human needs of housing and to discuss the interrelationship among these needs. Based on this, we classified and defined the steps of Housing Needs as shown in the following (Table 3).

Table 3. The Define of Housing Needs by Hierarchy

Housing Needs	Definition
Physiological Needs	The step of expect to warm, cool, light, and air in the house for the survive activity such as sleep, meals, and respiration
Safety Needs	The housing function as a refuge is expect to provide physical and social protection services because of the need to protect themselves and their property from external threats
Social Needs	The step of expect to residential environment that efficient and convenient for maintain human relationships through interaction
Esteem Needs	The step of expect to find existence value and be a place of self-expression, through residential environment and housing suitable for socialization and education
Self-Actualization Needs	The step of expect to housing meet the self-actualization needs and beautiful

The contents by step of housing needs that are defined based on Maslow's Needs Stage Theory are as follows: First, Physiological Needs step is a step to expect environmental conditions such as

light, temperature, and ventilation to provide comfort in performing actions for survival. Second, Safety Needs step is a step to expect a role as a refuge to protect themselves, family and property from external threats. Third, Social Needs step is a step to expect an efficient and convenient environment that can maintain human relations through interaction and enhance the bond feeling. Fourth, Esteem Needs step is a step to expect to recognize the value of existence through the residential environment and housing, and to enhance the dignity by expressing oneself. Fifth, Self-Actualization Needs step is a step to expect the house to satisfy self-actualization needs by symbolizing oneself or expressing personality and to be beautiful.

3. Housing Choice Factor and Residential Function

3.1. Housing Choice Factor

In general, residential movements begin when people are dissatisfied with the social and physical environment of their residential areas. Householders set various standards for housing choice and search for housing based on them.

The dissatisfaction factor felt by the family members in the current residence will be satisfied in the new housing, and the satisfaction factor will be strengthened. As a result, housing choice is made to maximize the utility of family members under various conditions.

These residential movements are increasingly recognized as the process of selecting a residential environment that includes functional, socio-economic and cultural elements, not merely improvement of physical space, such as expansion of residential space. In other words, choosing housing through residential mobility can be said to purchase and consume a house according to individual lifestyle and needs such as the lifestyle, changing values, customs, aesthetics, community, etc.

The factors for housing choice are largely determined by social and economic characteristics, culture, and customs of the evaluation area, but there are no clear standards for the housing choice because it includes the subjective contents of family members. Therefore, this study tried to grasp the housing choice factors which were generally applicable in Korea by analyzing the previous studies so far.

5) Kwak, In-Suk, The Effects of Residential Stressors on the Housing Management Behavior, The Graduate School of Ewha Womans University, 1992, p.9

Table 4. Preceding Research Analysis of Housing Choice Factor

Scholar	Housing Choice Factor
Park Yeonggi (1984)	satisfaction, intimacy, function, ambience, dignity
Yeom Jaeseon (1989)	neighborship, size and number of rooms, repair and maintenance, a house facing, lighting and ventilation, condition of education, privacy, internal facilities
Cho Seonghui (2000)	comfort, stability, traffic environment, education environment
Kim Chunsu (2003)	material, equipment, green space, educational facilities, cultural facilities, convenient facilities, sense of openness, safety, territoriality, scenery, community spirit, privacy, traffic environment, neighborship, investment value, maintenance cost, heating cost, repair and maintenance cost
Lim Mantaek (2003)	private living space, family living space, housekeeping service space, sanitary space, receptionist space
Joo Jeongsu (2003)	education environment, natural environment, natural scenery, neighborship, traffic environment, dwelling scale, dwelling structure, subsidiary facility, parking space, distance to work
Lee Sangho (2004)	sanitary facilities, washing and laundering facilities, cooking facilities, dwelling scale, living room, ventilation, noise, neighborship, traffic environment, education environment, safety and clean
Cho Hyeonju (2005)	education environment, material, equipment, system, green space, view
Korea Housing Institute (2007)	convenience of use of commercial facilities, convenience of access to public facilities, eco-friendliness, convenience of living
Lee Yeonghaeng (2009)	comfort, safety, convenience, economic, sociality, esthetic

As a result of identifying housing choice factors through previous studies, in the beginning, the factors such as the function and maintenance status of the residence, the relationship with the neighbors, the surrounding traffic and the educational environment were considered important, but in recent years, it is noteworthy that not only the basic factors of the early days but also the factors for the rest of the family members and the pursuit of individual values and personal values are important. This shows moving toward pursuing high-motivation for growth motivation that is gradually shifting away from the low-motivation of lacking motivation in the past.

On the other hand, the housing choice factors identified in the previous study can be classified into three characteristics as resident characteristics, contextual characteristics, and housing characteristics as follows (Table 5).

Table 5. The Housing Choice Factor

Characteristics	Factor	Content
Resident Characteristics	society economic factor	social stratum, income, job
	cultural factor	identity, symbolism
	family relations	life cycle, age, family composition
	housing experiences	residence period, residential living experience
	individual factors	self -formation, creative desire, residents' a view of the world
Contextual Characteristics	human factor	generous, neighborship
	urban factor	accessibility, neighborhood facilities
	environment factors	noise, density, urban characteristic
Housing Characteristics	residential type	possession type, housing type, construction Year
	residential scale	site area , housing area, size and number of rooms
	residential function	safety, beauty, management, facilities, environment

Resident Characteristics are characteristics related to the person who selects housing, including social and economic factors, cultural factors, family relations, home life experiences, individual factors, Contextual Characteristics are external factor of housing, including human factor, urban factor, environment factors, and Housing Characteristics are basic factors comprising housing, including residential type, residential scale, and residential function factor.

3.2. Residential Function

This study examined focusing on the residential function which can be presented as the general applicable standard among various housing choice factors that have no clear standards according to personal experience and needs.

Human home life is the use of the physical space divided by the structure called housing as a living space. Only when the perfect harmony between the living activity and the physical space is achieved, the housing fully exercise its functions.

When comparing Korea and Japan, Japan was dealing with the functions of housing more than 15 years ago than Korea and classified residential function into safety, comfort, recreation, child care, and family combination. Until 1980s, Korea classified residential function similar to Japan, but from the 1990s, it was found that functions such as economy, expressiveness, and sociality were added. This is because it deals with housing economy, housing and society in the American residential book, but it was judged that the increase in the GNP caused the demand for this aspect in our society.⁶⁾

Table 6. Preceding Research Analysis of Residential Function

Scholar	Residential Function
Cho Seonghui (1976)	Safety, clean and healthy environment, rest and enjoying, efficient housekeeping, harmonious and independence, contributing individual's personality, and economical house
Yoon Jangseop (1982)	Protecting and maintaining family life, family's unity, married life, nurturing and human formation, family's health, rest, and reproduction, base of housework
Park Byeongjeon (1986)	Married life and rearing children, family members' emotional stability
Shin Gyeongju (1987)	Protecting family from external negative things, occupation of place, family's unity, family's education, married life and children's' education place, having rest with family and function of protection, place for doing housework for family.
Yoon Jeongsuk (1995)	Safety, health, convenience, and comfort
Yoon Bokja (1997)	Shelter, safety place, privacy, social interaction, family's unity, self-expression, creativity and beauty, respect, and self-realization
Kang Sunju (1997)	Desire of physiological, Protection and desire of safety, desire of social, and desire of self-respect
Shin Gyeongju (2005)	Comfort, safety, convenience, and expressivity
Yoon Jeongsuk (2011)	Safety, health, convenience, comfort, economics, and sociability

In sum, the basic functions such as protection and safety, marital life and child care and education, family bonding, happy home were important in the early stage of housing function, but in recent years, not only basic safety but also the functions such as comfort, convenience, and self-actualization, self-expression, have also been important. It can be seen to be moving toward pursuing growth motivation which is high motivation, getting away from what matters only to lack motivation which is low motivation.

The eight functions of Safety, Comfort, Convenience, Independence, Economy, Sociality, Relaxation, And Expressiveness were derived as residential functions, and the contents of each are shown in the following (Table 7).

Table 7. The Residential Function

Residential Function	Content
Safety	Function that can be protect from climate risk such as rain, snow, and earthquake and social risk such as crime and theft
Comfort	Function that can help human stay healthy and feel comfortable by satisfying environmental conditions (warm, air, sound, light, etc.)
Convenience	Function that can increase proper traffic plan, rationalization of life, and the efficiency of house work

6) Park, Jong-Hye, A Study on the Future Dwelling Functions through Domestic Future House Pavilions, Korean institute of interior design journal, Vol.21 No.2, 2012, p.4

Independence	Function that can secure privacy by planning plan and plan of proper function space of residential space
Economic	Function that can save energy such as electricity, heating, water, gas, hot water in the maintenance of housing
Sociality	Function that interact between family or neighbors
Relaxation	Function for use of personal leisure time that the support system or separate room
Expressivity	Function that express my preference and taste by controlling color and formativeness and represent a sense of belonging as my home

4. Housing Needs & Residential Function

We examined the correlation between housing needs defined based on Maslow's Needs Hierarchy Theory and residential function that can be a standard in human selection of housing.

To satisfy Physiological Needs among housing needs, it is necessary to have functions for the comfort of space for light, temperature, ventilation and sanitary environmental conditions, to satisfy Safety Needs, it is necessary to have the functions of storing food or possessing things and protecting them from outside or danger, and to satisfy Social Needs, it is necessary to have the function as a place to promote the bond for the human relationship through interaction.

Also, to satisfy Esteem Needs, it is necessary to have the function of raising level of self-esteem through housing and the function as more convenient and convenient housing, to meet Self-Actualization Needs, it is necessary to have the function as the place to symbolize oneself, to express personality, and to perform activities for self-actualization.

In summary, it be comprehensively represented the residential function associated with each housing need as follows (Fig. 2).

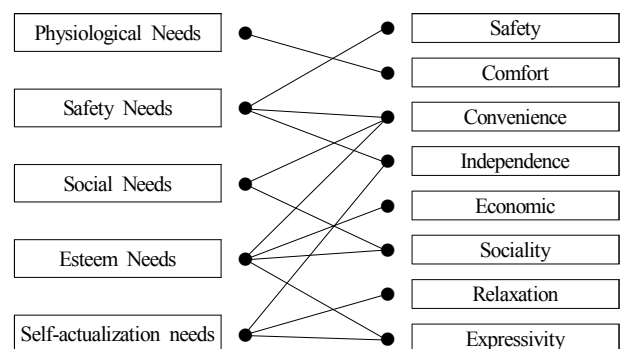


Fig 2. The Correlation of Housing Needs and Residential Function

The residential function to meet Physiological Needs should have comfortable environment and facilities and be suitable for human activity.

The residential function to meet Safety Needs should be

equipped with the security devices and system to be safeguarded safely, convenience, independence from the surrounding various risks independently.

The housing function to meet Social Needs should not feel uncomfortable in the interactions between the family and the neighbors such as living room, reception room, and common facilities in the complex due to convenience and sociality.

The residential function to meet Esteem Needs should be able to express oneself and recognize the value of their existence through leisure activities of individual and interaction with neighbors such as convenience facilities, brand, etc. with convenience, economics, sociality and expressiveness.

The residential function to meet Self-Actualization Needs should exist separate space such as hobby room, study space, with independence, relaxation, expressiveness, and should be done and expressed hobby activities for individual talent development.

5. Conclusion

In this study, unlike the previous studies focusing on the housing needs and the residential functions each, we wanted to investigate the future direction of residential facilities by identifying the changing process of housing needs in the age of housing needs and by linking them with the residential function that can directly affect the decision-making of people to choose a house.

In recent years, the needs for residents who want to express their own personality in the residential environment, which can be called the basis of living, among housing needs, has been increasing more and more, and it is expected that the creative and individual values will be respected and the needs for self-actualization will be emphasized.

In addition, the present residential environment is the situation in which housing needs, which is deficiency motivation in Maslow's Needs Hierarchy Theory, are mostly met, and it will move toward meeting the housing needs, which is growth motivation.

Therefore, housing in the future should be focused on convenience, independence, economy, sociality, relaxation, expressiveness, etc. to meet esteem needs and self-actualization needs, express oneself through individual leisure activities and interaction with neighbors, recognize their own existence value, and make hobby activities for personal talent development with the presence of separate independent space, and move in the direction of expressing it.

So, it would be difficult for users to be interested in uniform design and indiscreet fashion without consideration of changes in residents' needs, and as suggested in this study, it is thought that the

residential space designed considering the housing needs will provide more satisfaction and comfort to the residents.

Reference

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