URBAN HOUSING AND SENSATIONAL INTERPRETATION FOR EXPERIENCE

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ABSTRACT

This paper reviews residential user perception environmental satisfaction due to access to basic needs. The data challenges popular assumption that multistory housing is responsive to large residential population of high-density slum areas. However, residential location seems to affect household informal earning activities. For one, the small sizes and least functional and flexible tiny apartments mars poor householders quality of life. User perception of environmental satisfaction with access to basic needs could be assessed objectively and subjectively. Both are indicators of urban poverty as they portray citizen's well being. A measure of perception depends on residential satisfaction dataset. This comprises have economic as well as livelihood variables, leading to the estimation on the perception of the satisfaction of basic needs. It assesses real, physical world exists independently of human by challenging the truth determinants, and how is could be achieved. The energy of perception (physical electromagnetic) is worth considering. Psychological scientific investigation and user perception of sanitation provision, a model of perceived neighborhood quality. Sensational interpretation for experience views user perception in terms of stimulation process for inference; as well as philosophical epistemology. Here, user five senses are used to measure his attitude to his environment. Hence, residential satisfaction needs to measure the gap between one' expectation and actual achievement in his/her habitat or house. The model of perceived neighborhood quality is identical to the general satisfaction model in that resident's evaluation of specific neighborhood attributes mediates between actual levels of those attributes in the objective environment and overall perceived neighborhood quality, with respondent characteristics affecting how the attributes are evaluated. But the perceived neighborhood quality model differs from the general satisfaction model in several important ways.

Keywords; *residential, perception, user, neighborhood, environment, quality, model, population, epistemology, psychological, experience, environment, sanitation, habitat, housing, model, livelihood.*

Introduction

Perception is the process by which organisms interpret and organize sensation to produce a meaningful experience of the world. Sensation usually refers to the immediate, relatively unprocessed result of stimulation of sensory receptors in the eyes, ears, nose, tongue, or skin. Perception, on the other hand, better describes one's ultimate experience of the world and typically involves further processing of sensory input. In practice, sensation and perception are virtually impossible to separate, because they are part of one continuous process.

The role and status of informal housing and its improvement is wider than its representation in the built form. For example, De Soto (1989) sees the legitimization and legal acceptance of the completely informal economy as a progressive for economic and social development. In addition, Fernandez and Varley (1998) show that the qualities from illegality to tacit acceptance and then to inclusion in mainstream property rights is to be seen as the creation of law in development. Similarly, Kleihans (2004: 367) socially tested housing quality in terms of reputation, neighborhood-based social interactions, residential attitudes towards social mix, the role-model effect, and problem dilution. He concluded that the evidence base is substantial contrary to literature suggestions. Residential satisfaction studies relates to those focusing on human wellbeing. Wellbeing studies in developing economies could be of no use if we consider the studies already performed in the developed world. For instance, Easterlin (2001) points, the kind of things influencing happiness are for most people the same, probably because most people everywhere spend most of their lives doing the same types of things. However, when comes for urban environment in emerging economies, such as Jakarta, Indonesia, this assertion is in valid, as there obvious differences of the types of things that make happy people from developed economies. These are the urban poor's dimensions of happiness in Africa, Latin America and Africa cannot be equated to his counterpart in America or Europe. This stems from differentials in their commodities possessions, capabilities, livelihoods and the residential environments. A case study of perceived residential satisfaction due to access to basic needs in developing economies are vital in influencing policy formulation, in favor of the urban poor living in such vulnerable conditions. For instance, Graham and Pettinato (2001) compared happiness in Latin America with happiness in Russia and United States. Their conclusion is that the socio-demographics of happiness in Latin America are similar to those of the other two countries. However, those results are difficult to generalize in urban villages like Jakarta. In order to complete this gap, in this paper analyzes the perceived fulfillment of basic need of the households in Jakarta urban poor environs and its implications for poverty. Some works have estimated the contribution of the family background on the intrinsic wellbeing of the individual (Winkelman, 2005). Here we reshape the definition of wellbeing of the individual to the perceived satisfaction of the basic needs of the household, and check how social, economic and demographic aspects affect this perception.

This paper discusses concepts of urbanization and urban housing environment. It appraises global urban tribulations such as housing and urban development problems, as manifested in developing countries in general and informal settlements. Given the much-localized characteristics of developing countries, cities, settlements and communities, it is worth stressing that in the design of any intervention, a strongly situational approach is essential. However, squatter settlements predominate in South East Asia, hence a humane remedy to the urban poor housing plight is necessary. Alternative housing strategies in the past include public housing and slum upgrading.

Stimulation Process for Inference

Therefore, perception in humans describes the process whereby sensory stimulation is translated into organized experience. That experience, or percept, is the joint product of the stimulation and of the process itself. Relations found between various types of stimulation (e.g. light waves and sound waves) and their associated percepts suggest inferences that can be made about the properties of the perceptual process; theories of perceiving then can be developed on the basis of these inferences. Because the perceptual process is not itself public or directly observable (except to the perceiver himself, whose percepts are given directly in experience), the validity of perceptual theories can be checked only indirectly.

Philosophical Epistemology

Historically, systematic thought about perceiving was the province of philosophy. Philosophical interest in perception stems largely from questions about the sources and validity of what is called human knowledge (epistemology). Epistemologists ask whether a real, physical world exists independently of human experience and, if so, how its properties can be learned and how the truth or accuracy of that experience can be determined. They also ask whether there are innate ideas or whether all experience originates through contact with the physical world, mediated by the sense organs.

Psychological Scientific Investigation

Perception is a scientific enterprise of investigation, especially developed as part of the larger discipline of psychology. For the most part, psychology bypasses the questions about perceiving raised by philosophy in favor of problems that can be handled by its special methods. The remnants of such philosophical questions, however, do remain; researchers are still concerned, for example, with the relative contributions of innate and learned factors to the perceptual process. Such fundamental philosophical assertions as the existence of a physical world, however, are taken for granted among most scientific students of perceiving. Typically, researchers in perception simply accept the apparent physical world particularly as it is described in those branches of physics concerned with electromagnetic energy, optics, and mechanics. The problems they consider relate to the process whereby percepts are formed from the interaction of physical energy (for example, light) with the perceiving organism. Of further interest is the degree of correspondence between percepts and the physical objects to which they ordinarily relate. How accurately, for example, does the visually perceived size of an object match its physical size as measured (e.g. with a yardstick)?

User Perception of Sanitation Provision

Kampong Improvement Programme known as (KIP) water and sanitation provision in poor urban settlements of Jakarta though laudable, suffers insecurity of tenure, as KIP settlements are not spared from housing gentrification. Gentrification is a form of urban renewal in which old settlements are demolished to give way for other lucrative developments. This urban displacement of the poor by the rich seems to man to man exploitation by man, or urban democracy. Here, the urban poor perceive transient (transitory) housing delivery, as he/she is likely to loose the facility to other urban exigencies. Similarly, poor quality water and sanitation services in KIP neighborhoods lead higher public health risk. For instance, poisoning from contaminated water sources, a loss of trust in 'improved' water supply and a spontaneous reversion to non-improved sources are typical lifestyle in such habitats.

For Brentano (1874), perception begins with the image in the mind, which arises when something interests a person. This image requires a mental act to present that picture to the mind. Perception is composed of two other components as well. These are a judgment about the image, and a feeling towards it. Hence, the mental act that presents the image to the mind could be divided into three associated components acting simultaneously:

    i.   Image content

    ii.   Image judgment

    iii.   Personal feeling of pleasure or displeasure towards the image

Goldstone (2010) illustrated guide to ways that show how concepts influence

our perception as follows: -

    i.   Attention Weighting

    ii.   Categorical Perception

    iii.   Dimensions

    iv.   Unitization

    v.   Segmentation

vi.   Assimilation and Contrast

vii.   Differentiation

viii.   Idealization

ix.   Elaboration

According to Ian Heath (2003), perception occurs when a vague background transforms into a clear image, which can be called the 'foreground' image. Hence, it can be understood that when attention is stimulated and mental act takes place, mental imagery generates a clear foreground scene due to the stimulation of interest. The Subconscious Mind website (2010) explained that when judgment is formed after seeing the foreground content, then appropriate emotion is summoned to fit the judgment. After which emotional influence is used as a means of replaying expectations aspirations or desires: that is, the application of the content to summon up a habitual response. This overall response is the way that that everyday life usual situation is handled. For each situation, a person subconsciously creates a response, which becomes automatic and habitual. This study evaluates the mental judgment of KIP users to ascertain their overall responses of the KIP service delivery. User perception is applied is this research due its affective and cognitive dimensions. These parameters capture the researcher's concern for physical and social attributes of residential satisfaction.

Theoretical Rationale of Environmental Quality

Baum & Paulus (1987) discussed studies that examined the effects of open-plan office density on environmental satisfaction. There have been several theoretical approaches developed in an attempt to explain why a relationship between these variables might exist. Although not the main focus of the review relates to relevant theories and processes behind occupant reactions to density. Four of these approaches could be tested in housing neighborhood as described below, are applicable to both spatial and social density (Baum & Paulus, 1987):

i. Social Overload: High-density situations carry with them negative effects because people become overwhelmed by sensory inputs. In other words, as the amount of stimulation experienced in a dense situation exceeds our ability to deal with it, we begin to experience negative effects (Bell et al., 2001).

ii. Behavior Constraint: High-density situations lead to negative effects because they allow for few behavioral choices and more interference; thus, reducing one's behavioral freedom. Depending on what the individual would like to do will determine whether or not the high-density situation will lead to negative effects (Bell et al., 2001).

iii. Arousal: High-density situations may increase arousal (e.g. increases in heart rate, blood pressure, respiration rate, brain activity), which then leads the individual to attribute this arousing experience to various factors. For example, too many people in an open-plan office may lead to arousal. In turn this causes a negative state, which is then attributable to one's personal space being violated (Bell et al., 2001).

iv. Personal Control: The aspect of personal control is involved in the negative effects of high-density. Being in a high-density situation and feeling a loss of control would lead to more negative effects than if the perception of control were still there. Thus, in order to limit the negative effects in a high-density situation, one should introduce the aspect of control (Bell et al., 2001). These theories could be applied to examine why crowding and privacy might mediate the negative effects of density. For example, occupants of dense spaces within residential environment, or offices might perceive themselves as being crowded because they become highly aroused and overwhelmed by sensory inputs, which in turn leads to environmental dissatisfaction. Moreover, occupants of dense offices may perceive themselves as having less privacy because of few behavioral choices and more interference, which in turn leads to environmental dissatisfaction.

These theoretical approaches tend to complement one another. It is for this reason that Baum and Paulus (1987) suggest that an integrative model is needed in order to appreciate the effects of density. A complete perspective of density would involve combining the main elements of each approach. One theoretical approach that has some integrative potential is the Social Interference Perspective (Oldham et al., 1995). This perspective combines the elements obtained from the personal control, behavioral constraint, and social overload approaches and is applied to the office setting. The perspective suggests that employees will experience intrusions (unwanted or unexpected social interactions) when the office setting is characterized by certain features, including high density and little distance between work spaces and other employees. These intrusions negatively affect an employee's personal control and goal attainment.

Oldham et al. (1995) state that in dense situations, employees feel they have little personal control because the unwanted intrusions lead to an unpredictable environment. In turn, employees have a difficult time controlling their own and other's behavior. The negative effects of this state of overload are then experienced. Moreover, these intrusions make it difficult to

concentrate and complete tasks, which lead to a state of frustration. Finally, this frustration leads to negative work-related outcomes (which might include poor work performance, low satisfaction, withdrawal, absenteeism, and turnover). Although these outcomes are expected when unwanted intrusions persist, little empirical research has been conducted to confirm this theoretical perspective. Thus, future research is needed in order to systematically test the Social Interference Perspective. From a theoretical standpoint however, it does provide us with a helpful way of reviewing and directing research regarding density.

A Model of Perceived Neighborhood Quality

The model of perceived neighborhood quality is identical to the general satisfaction model in that resident's evaluation of specific neighborhood attributes mediates between actual levels of those attributes in the objective environment and overall perceived neighborhood quality, with respondent characteristics affecting how the attributes are evaluated. But the perceived neighborhood quality model differs from the general satisfaction model in several important ways. First, as already discussed, the perceived neighborhood quality model considers two measures of neighborhood quality: satisfaction and attachment. Social interaction is shown to contribute primarily to neighborhood attachment while evaluation of neighborhood attributes contributes primarily to neighborhood satisfaction. It is also hypothesized that social interaction will have an impact on evaluation of neighborhood attributes since it is presumed that people with friends living nearby are more likely to favorably rate their neighborhood on such attributes as friendliness of neighbors. A second modification of the general satisfaction model is that personal characteristics are conceptualized as having two components: general social status and local social status (Hunter, 1974). The former refers to one's status in mass society and includes race and social class. Given the economic and racial segregation that exists in most residential areas, class and race are expected to have a strong impact on one's evaluation of a neighborhood.

Simply put, the more income a person has the greater the chance he or she will live in a neighborhood that meets or surpasses most standards of aspiration. Consequently, it is theorized that measures of general social status is directly related to the evaluation of specific neighborhood characteristics and thereby indirectly related to general satisfaction with the neighborhood. In contrast, measures of local social status, such as length of residence, stage in the life cycle, or age, tell us more than general social status about one's position in the neighborhood. In particular, length of residence and life cycle stage has been shown to be strongly determinative of neighborhood social interaction (e.g. Kasarda and Janowitz, 1974; and therefore are expected to have an impact, through social interaction, on neighborhood attachment (Hunter, 1974). A direct impact on attachment is possible because even if length of residence, for example, doesn't lead to increased social interaction, it could still produce a sense of attachment to the neighborhood. In contrast, the diagram does not show a direct arrow between general social status and satisfaction since it is presumed, as previous research (Marans and Rodgers, 1975) has demonstrated, that the impact of the general status measures on satisfaction are indirectly channeled through evaluation of neighborhood attributes. Figure 5.2 therefore shows that the expected primary impact of general social status is on evaluation of neighborhood attributes and satisfaction while local social status primarily affects social interaction and neighborhood attachment.

A third variation from the general satisfaction model is the addition of a measure of perceived homogeneity in the neighborhood. Based on past research into neighborhood social relations and quality (Gans, 1968), it is assumed that social homogeneity has an impact on both social interaction and the evaluation of attributes relating to the people living in a neighborhood. It is therefore assumed that social homogeneity will have an indirect impact on satisfaction and attachment through both social interaction and the evaluation of neighborhood attributes. A direct impact on perceived neighborhood quality is also conceivable because perceived homogeneity may directly enhance a person's sense of comfort in knowing that his or her neighbors share similar values and characteristics.

REVIEW OF HOUSING SATISFACTION CASE STUDY

Review residential satisfaction researches attempts to identify basic problems typical of such studies; methodologies applied; research outcomes; and the relevance of those to this thesis. Apparent approaches include user perception of satisfaction or PREQ; RESS – A methodological Tool; P-E or Person Environment Congruence, Housing modification – HoMi and QoL – Quality of Life Assessment.

Quality of Life(QoL) Assessment of Formal Housing

User satisfaction of newly designed public low-cost housing (Mohit, et al., 2010) uses constructs of dwelling unit features, dwelling unit support services, public facilities, social environment, and neighborhood facilities to assess. Others like Sulaiman and Yahaya (1987) evaluated the relationship between housing provision and satisfaction of low-income households in Kuala Lumpur. Both researches focus on low cost housing in Kuala Lumpur Malaysia, but from different perspectives. For one, Mohit et al. (2010) core variables assume social climate and physical (access to facilities) dimensions. Although both studies tested Maslow's theory of basic needs, but Sulaiman & Yahaya (1987) examined satisfaction in terms of: -

- Housing Deficit - Objective Measurement
- Overall Satisfaction with Housing & its Environment
- Stage in Family Life-Cycle = Demographic characteristic

Perception of Satisfaction (PREQ)

PREQ involves testing of a path model of residential satisfaction. This is measured as the user perception of his or her residential environment, specifically, neighborhood attachment. It employs quantitative research approach as follows: -

iv. Uses structural equation analysis

v. Multidimensional questionnaire

vi. Measures PREQ;

vii.   Socio-demographic variables (age, sex, income); Length of Residence

viii.   Uni-dimensional scale of neighborhood attachment,

ix. Sample Size = 497 inhabitants from 20 diff neighborhoods

x. PREQ Questionnaire covers four areas:

Architecture & planning features;

- Social relations features;
- Punctual & in-network services
- Context features

The research outcome shows that Perceived Residential Environmental Quality (PREQ) is Directly Related to Neighborhood Attachment:

xi. Arch & planning features

xii.   Social Relations Features

xiii.   Punctual & in-network services

xiv.   Context features

Perceived Residential Environmental Quality leads to Neighborhood Attachment

- o Social Relations Features depends upon Neighborhood Attachment
- o Social Relations Features increases with Social Relationships
- o Social Relations Features Decreases with Threats to People

Architecture & planning approach to residential satisfaction research shows   that Neighborhood attachment is tied to:

- Building Aesthetic Delight
- Spatial Order
- External Connections
- Presence of Greenery

Residential Environmental Satisfaction Scale (RESS)

RESS introduces an integrative and more comprehensive approach to the measurement of residential environmental satisfaction. It involves quantitative data collection and multivariate analysis. Secondary data set form national housing survey enables a nationwide appraisal to be conducted. Here, quantitative approach involving multivariate analysis of a select sample of large sample respondents of a specific country was applied. The findings of such a research were (Adriaanse, 2007):-

- a. The outcome of exploratory factor analysis supports the use of the 3- component model of residential environmental satisfaction (neighborhood, house, and neighbors).
- b. Multi-group analysis supports the assumption of similarity of perceived quality of the living conditions at different scales.
- c. Reliability and validity tests confirm that the RESS-DLV is an adequate instrument for measuring residential satisfaction.

d. Satisfaction severity of groups indicates the priority of 'residential social climate' component of overall residential satisfaction.

The relevance of RESS in this research is in the adoption of the theoretical three-component model of neighborhood, house and neighbors. More over the priority of the social climate in vulnerable groups is worthy of testing.

Person Environment Congruence (PEC)

Review of Previous PEC Works;

- Popenoe (1977) – Focusing on Environmental Sociology/No design suggestions for micro-scale development.
- Kahana (2003) – focusing on elderly residence, people with lower level of competence.
- Holland (1985) – focusing on vocational psychology
- Jusan (2007, 2010) – Focusing on mass housing – Using Means-End Chain Model to measure PEC in personalized or modified houses. This approach involves:
  - MEC is able to explain the achievement of PEC in housing
  - User participation is essential in order to achieve PEC
  - Flexible design is able to facilitate the achievement of PEC
  - The MEC results show attributes emphasized in house design

Most of the studies on person environment congruence are able to explain behavior, but are not directly usable in residential design aimed at enhancing user satisfaction (Jusan, 2010).

Housing Modification Phenomenology

Phenomenology refers to logical investigation, involving careful connection to the philosophy existentiality. The phenomenon of effecting changes to housing by users could be associated with changing needs due social, physical and economic dimensions. These may emanate from (Marans et al 1989):

- Project Management, Specifically Design and Construction
- Occupant Socio-Cultural Characteristics
- Housing Conditions and Ranking
- Residential Satisfaction

Philosophy of Phenomenology

Sartre and Merleau-Ponty (1962) saw phenomenology as a means of broadening the narrow empiricist, psychological assumptions about human existence, widening the scope of philosophy, to capture life as it is lived. Thus, Sartre's encounter with phenomenology through Raymond Aron allowed one to philosophize about a wineglass (Maran, 2002: 4).

Sartre sees phenomenology as a means of carefully to delineating one's own affective, emotional, and imaginative life. It is a set of non-static objective assessment as obtained in psychology, but appreciated in its meaningful real life situation. Nietzsche especially emphasized the connection of phenomenology with existentialism. Phenomenology is a mode of doing philosophy which should first be appreciated in its own terms understanding of Continental philosophy as an analytic tool for teaching. Hence, phenomenology of housing modification needs to capture its physical (e.g. location, size, spatial order), social (such as user social status, income, cultural orientation), and psychological (e.g. needs, desires). It offers a set of non-static objective assessment that combines as obtained in psychological architectural dimensions of housing. This is to enhance the congruity between user life style and his residential environment. Consequently, Nietzsche emphasis of the connection of housing modification phenomenology with existentialism is achieved (Moran, 2002: 4).

Theories of Housing Modification for Satisfaction

Various authors have advanced a number of theoretical explanations as to the motivations behind housing modification behaviors. One widely held belief is that housing personalization is an expression of a resident's personality, taste, interested, values, lifestyle and social status (e.g. Rapoport, 1969, 1981, 1989); Nasar, 1989: Sadalla, Vershure & Burroughs, 1987). These aspects can generally be spilt into those communications self, or personal identity, and aspects communicating social identity and real or aspired group memberships and economic status.

Housing analysts have identified a general tendency to underestimate and under-provide for low income housing in new settlements, especially new capitals. A speculative reason for this is the elites' image of the desirable city. Doebele (1987: 9) observed that urban elites frequently regard cities (particularly capitals) as fortress of high culture and bastions of civilization to be protected from the general crudity that is believed to prevail in the countryside. Jakarta, the Indonesia's capital like its

contemporaries shared the "ideal city vision" of these earlier new capitals, as revealed in the development plan. This coincides with assertion on the failure of public housing delivery system in Nigeria (Ikejiofor, 1995 in Ikejiofor, 1998: 429). The strategies adopted in a situation of housing shortage in state headquarters reflect the particular circumstances of the cities and differ from those of other new capitals in some respects. Unregulated settlements have occurred, but land ownership and effective development control within the cities have displaced them to outlying settlements. Housing production process and the dwellings produced illustrate that the small scale private sector is able to produce dwellings at affordable by urban poor (Ikejiofor, 1988: 435). Due to the inability to make large initial investment on housing and due to the insecurity of tenure, low income households build temporary and small housing units which should, with changing family structure and tenure form be transformed. A household first obtains a plot of land and the material to construct a shack. One or two rooms are then added and developed incrementally in a number of stages. Once it secures legal tenure or is reasonably certain that it will not be evicted, further constructions and improvements take place using better materials. Along with this, a consistent pattern emerges throughout much of the developing countries.

Conclusion and Discussion

This paper reviews user perception environmental satisfaction due to access to basic needs. The data challenges popular assumption that multistory housing is responsive large residential population of high-density slum areas. However, residential location seems to affect household informal earning activities. For one, the small sizes and least functional and flexible tiny apartments mars poor householders quality of life. User perception of environmental satisfaction with access to basic needs could be assessed objectively and subjectively. Both are indicators of urban poverty as they portray citizen's well being. A measure of perception depends on residential satisfaction dataset. These comprise have economic as well as livelihood variables, leading to the estimation on the perception of the satisfaction of basic needs.

A review of literature shows that the perception of poverty is linked to people's access to safe water. Accessibility to water may be determined by contextual factors like gender and economic environment. A social use of water is basically for human and environmental sanitation. It is commonly associated with women, the main managers of water for domestic purposes, such as drinking, washing, cleaning, bathing, and cooking, as well as for some subsistence. Safety of water is a key determinant of public health.

Sensational interpretation for experience views user perception in terms of stimulation process for inference; as well as philosophical epistemology. Here, user five senses are used to measure his attitude to his environment. Hence, residential satisfaction needs to measure the gap between one' expectation and actual achievement in his/her habitat or house. It assesses real, physical world exists independently of human by challenging the truth determinants, and how is could be achieved. The energy of perception (physical electromagnetic) is worth considering. Psychological scientific investigation and user perception of sanitation provision, a model of perceived neighborhood quality

Focuses on the degree of correspondence between percepts and the physical objects to which they ordinarily relate. It seeks to accurately determines the discrepancy between the visually perception of an object's size and its actual size, using a measuring tape. Built environment application of this phenomenon is perspective drawing, where an object is believed to diminish in size as the observer moves away from it. These and others give rise to environmental theories of behavior constraint, arousal and personal control (e.g. Baum and Paulus, 1987).

Physical and social determinants of residential satisfaction manifest in a review of international agencies' water and sanitation evaluation approaches. These include human development such as insecurity; social vulnerability, state weakness, water poverty, housing poverty, and quality of life. Residential satisfaction case study approaches assume user perception of satisfaction or (PREQ); Residential Environmental Satisfaction Scale (RESS), – a methodological tool; Person Environment Congruence (PEC); Housing Modification (HoMi) and Quality of Life (QoL) assessment. Quality of life (QoL) Index Variables are material wellbeing; life expectancy, political stability and security, family life, divorce rate; converted into index of 1 (lowest divorce rates) to 5 (highest), community life: dummy variable, climate and geography: latitude (warmer and colder climes); job security (unemployment rate); and political freedom gender equality.

This paper investigated user residential satisfaction due access to basic needs like safe water and sanitation. First these parameters are deemed to have roles in the user satisfaction and more especially 'housing quality'. Secondly, it investigated the relationship between housing physical and social environments in ensuring user satisfaction. Vital number of issues emerging in this research includes:-

- The traditional hierarchy should not be emphasized for the management of municipal solid waste under low-economic conditions;
- The implication of privatization of solid waste services on the hierarchy should be considered;
- The management of industrial wastes should include cleaner production;
- Scavengers or informal waste pickers should be incorporated into the formal sector and be provided with sanitary working conditions; - and in the event that waste reduction and recycling activities are implemented, they should be promptly rewarded.

The research identified core residential satisfaction themes as access to portable water, waste management, residents' social status, and social attachment. These affect household affordability of complementary water supply and sanitation access. Water and sanitation condition of cities of developing countries is effected physical and social environments, thus, determining user satisfaction. A review residential satisfaction literature suggests determinants the user satisfaction as building and Environmental Management: management, location, value and physical concept. Others are psychological Factors: convenience, safety, need for social contact, freedom, activity, work and presence, beauty, meaning, value and social approval (need for social status). Here, psychological dimension is operationalized. This led to the development of satisfaction measures. These include frequency of water supply from mains; cost of vended water; access refuse dump; estate management; social attachment; residents' length of and residents' social profile.

The application regression shows specific factor groups that enhance user level of residential satisfaction in housing and environmental quality. Focusing on access to safe water and sanitation within low-income housing environment, the core determinants of factor groups are physical and social environmental variables. Social factors of neighbor relations (or social attachment) and neighborhood security highly influence residential satisfaction. Contrary to initial assumptions, social environment accounts for higher residential satisfaction than physical setting. Perception of social attachment is linked to factors of social interaction. Quantitative data analysis of user residential satisfaction sampled KIP neighborhoods establishes the correlation between their respective physical environment and social settings. The research systematically identified relevant macro and microscopic residential determinants of user perception of satisfaction. These have been limited to water supply and sanitation, on one hand; and social (user status in society and behavior), and economic (cost, willingness to pay, and management) variables, on the other.

This paper deems it appropriate to support Mumtaz's (2001) position to minimize confrontation and rigid development control of urban settlements. Instead, collaboration, respect for nature and facilitation of access to descent housing fitted the basic needs such as portable water and effective environmental sanitation should be promoted. Settlement improvement programs are known to environmental upgrade environmental quality, through self-help infrastructure provision, hence enhancing access to services. The authorities should recognize private water providers; as well as small scale refuse collectors. The trio of government, service providers, and community acting as enabler, vendors and beneficiaries respectively in a public private partnership is hereby advocated. The providers - small scale water and refuse vendors could collaborate by assigning e.g. refuse collection (at dump sites), refuse sorting (for carting away and recycling) and disposal (to land fill) be judiciously sharing among stakeholders. Each task must be set with key performance indicators with definite targets. Efforts should also be made to recognize the environmental and social needs of inhabitants of these enclaves. Thereafter, make good use of their energy, drive, enthusiasm and willingness to make a new and better life for themselves, thereby uplifting their neighborhoods in-situ. The western style of housing satisfaction has proven to be inconsistent with the reality of developing economies like Indonesia. Here, people's physical and social environmental needs are tied to economic opportunities and access to the basics of life. Consequently, access communal basic facilities still remain viable alternatives to private water connection (at home). Conversely, water dependent sanitary system should be limited to aqua privies or ventilated improved pit latrine. To this end, it is imperative for policy makers to respond positively to the potentials of such a system, in order to deal decisively with current sanitary system's shortcomings.

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