

SOCIAL SUSTAINABILITY OF URBAN HIGH-RISE COMMUNITY

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Specially dedicated to my beloved family and friends.

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ABSTRACT

Since recent years, the issue of social sustainability in urban high-rise housing developments has become one of the major concerns in the field of urban studies, psychology and architecture. The failure to address the social sustainability in dense living conditions not only causes negative emotions in the individual; but the lack of social sustainability has caused a social deficit in the urban community. This social issue has resulted in living conditions that mimic living in pigeon holes. Eventually, this phenomenon could lead to the formation of a generation conditioned to isolation. Hence, the purpose of this dissertation is to identify strategies to promote social interactions in urban high-rise housing. This study is conducted through literature review of other related studies, and by conducting a critical analysis of architectural solutions that contribute in enhancing social sustainability in high rise residences. Several studies have shown the inclusion of social spaces in high-rise housing could improve social sustainability in community living. However, the success of this inclusion does not only depend on the layout design of social spaces. It also involves the sense of belonging to a home boundary based on the social setting. A field observation of a squatter settlement in Kampung Pengkalan Rinting, Tampoi, Johor Bahru was conducted to identify the sense of belonging that is based on social settings. The study has shown that the design of transitional spaces near the dwelling's doorstep has positive contributions to the social setting of the community such as in providing a social platform for interaction with neighbours. Beside this, the maintenance of social spaces and community strategies are one of the deciding concerns for the success of social spaces included in high-rise residences. At the end of this study, a set of architectural-based guidelines is proposed that are supported by relevant arguments for the inclusion of social spaces in high-rise dwellings.

ABSTRAK

Sejak beberapa tahun yang lalu, kemampanan sosial di kalangan komuniti yang tinggal di rumah bertingkat tinggi telah menjadi salah satu isu yang hangat dibicarakan di bidang kajian bandar, psikologi dan seni bina. Kegagalan untuk menangani isu kemampanan sosial di kalangan komuniti bukan sahaja menghasilkan emosi negatif seseorang, malah ia juga melahirkan defisit sosial di kalangan komuniti yang tinggal di bandar. Kejadian ini mendorong kepada kesepian hidup yang terkongkong di dalam rumah yang padat bagi individu. Lama-kelamaannya, ianya mendorong kepada pengasingan daripada komuniti. Oleh sebab itu, kajian ini bertujuan untuk mengenalpasti strategi untuk mendorong komunikasi di antara komuniti yang tinggal in rumah bertingkat tinggi di kawasan bandar. Kajian ini dilaksanakan dengan mengkaji secara kritikal hasil kajian yang berkaitan daripada penyelidik lain. Hasil kajian ini telah menunjukkan bahawa adanya ruang sosial di kawasan kediaman mampu meningkatkan kemampanan sosial di kalangan komuniti. Namun begitu, keberkesanan keadaan ini tidak bergantung kepada reka bentuk susun atur sahaja. Ianya juga melibatkan perasaan ampunya seseorang terhadap komuniti tersebut. Oleh sebab itu, lawatan ke Kampung Pengkalan Rinting, Tampoi, Johor Bahru telah dijalankan untuk mendapatkan maklumat tentang ruang sosial yang mengeratkan hubungan sosial komuniti. Hasil kajian ini menunjukkan bahawa adanya ruang peralihan yang terletak di hadapan rumah mendorong interaksi sesama komuniti. Selain daripada itu, penyelenggaraan ruang sosial dan strategi pembentukan komuniti di rumah bertingkat tinggi turut menjayakan kemampanan sosial di kalangan komuniti tersebut. Hasil kajian ini adalah satu garis panduan reka bentuk ruang sosial di rumah bertingkat tinggi.

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LIST OF GLOSSARIES

- Social Sustainability - a process for creating sustainable, successful places that promote wellbeing, by understanding what people need from the places they live and work.
- Transitional Space - (intermediate area, third area) is that space of experiencing, between the inner and outer worlds, and contributed to by both, in which primary creativity (illusion) exists and can develop.
- Sense of Place - The first aspect, relationship to place, consists of the way people relate to places, or the type of bonds we have with places. The second aspect, community attachment, consists of the depth and types of attachments to one particular place.
- Defensible Space - a residential environment whose physical characteristics (building layout and site plan) function to allow inhabitants themselves to become key agents in ensuring their security
- Threshold - A transitional interval beyond which some new action or different state of affairs is likely to begin or occur.

CHAPTER 1

INTRODUCTION

1.1 Introduction

Housing is a basic need to everyone. To house greater number of people in smaller land footprint is the main challenges in urbanization of future city throughout the world, including Malaysia. As houses are rising far above the ground, less intermediate space has been allocated for social interaction to happen. Social gap is getting worse especially for the urban high-rise community. The hectic lifestyle and the advance of technological gadgets have limited the physical communication within the neighbourhood. This phenomenon is expected to gets worse with the increasing number of one person households in the world.

The lack of social interactions within the neighbourhood will endanger a person both mentally and physically. The depression and loss of confidence to talk to people face to face will affect one's working performance. As a community, the lesser the social interactions happen, the lesser the neighbourhood bonding. Natural surveillance within the housing compounds would not happen. Architects have to bear certain responsibilities towards this social issue. Architects often assume that housing is simply a physical need but it is actually also a psychological need. Our willingness to improve living conditions, how we psychologically attached to the surroundings, and how much we invest in the neighbourhood are the factors that differentiate a house from a home (Sinno, 2012).

The study will first redefine the home based on social setting in urban mass housing. Besides, it investigates the form of community in high rise housing as compared to landed housing, and how these are different in their social settings. The study examines the instrumental dynamics of the neighbourhood at place-making and enriching the quality of life. Home, in this paper, is about a habitat that invests in social capital. Such living environment will also include the attainment of happiness and wellness as part of its urban metric. Lastly, this paper will explore the design of social platform in diverse dimension and scale integrated in high-rise residential tower.

1.2 Problem Statement

Social sustainability is regarded as an important pillar of sustainability in general, especially at the era where solo living has become common for working adults in urban areas. Social sustainability is a critical concern alongside mankind's withdrawal from traditional social structure. The invention of electronic social networking and the diminished of social platform in which neighbours interact has been the key factors for the lack of social interaction. A deficit of social support, reduced exposure to divergent views, the lack of ability to consider opposing viewpoints and the gestation of mistrust or general disengagement from the community are all results of reduced physical interaction (Modi, 2014). It happened exceptionally often in high-rise communities. A generation conditioned to isolation could have devastating effects on society.

There are many research papers written about social sustainability. Most of these researches focused on the social dimension in the urban context, such as a pilot study defining urban social sustainability by using case study in United Kingdom (Nicola Dempsey, 2009). Some researcher has investigated the role of density and housing type in relation to urban form and social sustainability (Glen Bramley S. P., 2009). However, there is not much research done on social sustainability in high-rise community. This has encouraged the author to study the implication of social spaces in high-rise housing and their contribution towards social sustainability.

1.3 Research Aim and Objectives

The aim and objectives of this research is to identify the design strategies of social platform that are applied in high-rise residential in urban areas that leads to social sustainability in community. This research was derived from a global issue concerning the increasing population in high-rise urban housing due to urbanisation. The study can help to clarify relevant criteria to implement suitable design strategies to improve social sustainability in urban high-rise residential housing proposed in the Design Thesis. The aim and objectives that need to be fulfilled are:

- i) To identify the definition of a home beyond the physical boundary for the urban community.
- ii) To verify the lack of social interaction of urban community in high-rise housing in relation to the housing layout design.
- iii) To outline design strategies that can be implemented in current practice which aim to improve social sustainability in both high-rise and low-rise housing community.

1.4 Research Question

Based on literature studies, the research questions arising are:-

- i) What is the definition of home for community living in urban high-rise housing?
- ii) What kind of housing layout design contribute to the lack of social interaction in highrise housing community?
- iii) What are the similarities and differences of social platform design strategies in high-rise and low-rise housing community? How can these strategies be implimented in order to improve social sustainability in urban high-rise housing?

1.5 Literature Review

The author discusses the findings from the reading mainly based on publications, journals and relevant thesis. It is important because this qualitative research is based on literature findings and analysis. Literature reviews will expose to author the basic underlying criteria of research which will help to better formulate the research methodology to achieve research objective. This chapter will focus on subject matters which emerge repeatedly throughout the literature reviewed. These subject matters are social sustainability specifically in high-rise residential, the focus population will be based on urban community and further discuss about their lifestyle, their definition of home and their need for social interaction in their neighbourhood compound.

Firstly, this Chapter explains the definition of home for urban community in high-rise housing. This study will analyse the need for social attachment and current social issue within their community.

Secondly, the literature will further elaborate on idea, principle and theory of social sustainability in high-rise residential. This will give a thorough understanding of urban high-rise community and what is the key factor in the forming of this community. This is essential because the communities in high-rise urban residential are different from the low-rise residential with regards to their identity, age group, life style, interest, and others.

Thirdly, this study analyses the strategies being adapted in order to improve social sustainability in current urban high-rise housing. This will help to understand the home-making in social attachment in relation to architectural space making solution.

The fundamental of literature review is to harvest the results of previous studies related to the proposed subject matter. All the studies summarizes in in search for the relationship to build suitable design attributes in architectural solution.

1.6 Research Methodology

Research methodology is a way to systematically achieve the research objectives. It may be understood as a science of studying how research is done scientifically. There are many methodologies to carry out a research. However, the notion of this chapter is the discussion of the methodology chosen in conducting a qualitative study; where this method is useful when it comes to human and social science research.

The author further explains in detail every aspect of the process how the study will be done and identify the process of selection, recruitment, and delineation of the subject pool used for the study. The aim of this chapter is to suggest recommendations for interested researchers to replicate the study. The research begins with choosing a topic and set an aim to achieve. This chapter also analyze each theory, based on literature review, and discussing their differences and similarity. The studies will synthesis into architectural design solution.

1.7 Expected Findings

From this research, it is expected that the quality of social spaces in various scales are the main contribution towards social sustainability in high-rise community. Based on several readings, it was mentioned that the better the quality of social spaces, the better the social interaction within community, the higher the attainment of happiness in high-rise living.

The research involved comparison of social living in high-rise and low rise community. It is expected that certain factors contributed to good social living in low rise community does not exist in high-rise community. By doing so, the findings of this research will establish the relationship of architectural approach towards social sustainability in term of spatial design.

The author will further list down the potential strategies in designing quality social spaces especially for younger generation of highrise community in urban area.

Based on this research, the principles are to be applied in the author's design thesis. However, the evaluation of effectiveness for these principles are to be verified through real projects by case study.

1.8 Structure of Dissertation

In general, the dissertation is divided into five main Chapters. Chapter 1 demonstrates an overview of study. This chapter outlines the study framework which includes background of issue, research objectives, research questions, methodology chosen to achieve research objective and the expected findings of the study.

Chapter 2 is a collection of related studies done by other researchers. It is to provide the basic understanding of research background and subject matters. Chapter 2 includes the definition of home and housing in social setting, community building, housing trend in urban area, social sustainability in high-rise housing and comparison of social spaces in low-rise as well as high-rise housing.

Chapter 3 presented the methodology chosen to conduct this study. The main research strategy is based on literature review about case study on high-rise housing development which focuses on social living. Besides, this chapter provides research paradigm and research procedure and the outline of overall research framework.

Chapter 4 discussed the findings based on the collected data. In this study, data is assembling for analysis purpose. The analysis of the data will be used to suggest relevant design strategies to achieve research objectives.

Lastly, Chapter 5 will conclude the study with a summary of research and the significant of this study. Besides that, this chapter will discussed the limitations and outline the potential further study regarding this subject.

1.9 Summary

This study is an extension from previous related researches. It is specifically focusing on the social sustainability issue in urban high-rise community. The author's concern is not limited to the perspective of social spaces design only but also how people define their home based on the attachment to the social setting. The solutions would contribute to rectify the lack of sense of community in urban high-rise housing in the country. It is to outline strategies architecturally for current practice to promote social sustainable urban high-rise living.

LIST OF REFERENCES

- A, S. (1990). Participant observation: a study of state-aided self-help housing in Lucknow. *Housing the Poor in the Developing World* Eds A T Tipple, K G Willis (Routledge, New York).
- Agyeman, J., Evans, T., 2003. Towards just sustainability in urban communities: building equity rights with sustainable solutions. *Annals of American Academy of Political and Social Science* 590, 35 – 53.
- Aldrich, J. O. (2000). *An Exploratory and Descriptive Study of Attitudinal and Behaviour Dimensions of Selected Civic Culture Analogues in a Gated Community*. California: Doctor of Philosophy Thesis.
- Alper, M., & Chappell, A. T. (2012). Untangling Fear of Crime: A Multi-Theoretical Approach to Examining The Causes of Crime-Specific Fear. *Sociological Spectrum*, 32, 346-363.
- Ahmad Hariza Hashim, Z. A. (2005). Visual privacy and family intimacy: a case study of Malay inhabitants living in two-storey low-cost terrace housing. 18.
- Ahmad, A. A. (2009). Home making in Low- Cost Housing Area .
- Ariel Peixian, R. G. (2015). *Fostering social interaction within communal spaces within high-rise residential building on UBC Campus*. Columbia: UBC Social Ecological Economic Development Studies (SEEDS) Student Report.
- Azhan Abdul Aziz, A. S. (2011). Flats outdoor space as a vital social space. *Asian Journal of Environment-Behaviour Studies*, 12.
- Balanchard, A. L. (2008). Testing a Model of Sense of Virtual Community. *Computers in Human Behaviour*, 2107-2123.
- Banks, M. (2005). Spaces of (in) Security. *Media and Fear of Crime in a Local Context, Media, Culture, l(2)*, 169-187.
- Baron, S. W. (2011). Street Youth's Fear of Violent Crime . *Deviant Behaviour*, 32, 475-502.
- Brower, S. N. (1980). Territory in urban setting. *Environment and Culture*.
- Burg, J., 2003. The World Summit on Sustainable Development: empty talk or call to action? *Journal of Environment and Development* 12 (1), 111 – 120.

- Chris Sneddon, R. B. (2005). Sustainable development in a post-Brundtland world. *Ecological Economics*, 253-268.
- Coco, F. &. (2010). *Sharing in Collective Living*.
- Creswell, J. W. (1994). *Research Design: Qualitative & Quantitative Approaches*. London: Sage Publications.
- D.K.Ching, F. (2007). *Form, Space and Order*. Hoboken New Jersey: John Wiley and Sons, Inc.
- David W. McMillan, D. M. (1986). Sense of community: A definition and theory. *Journal of Community Psychology*.
- Davidson, M. (2010). Social Sustainability and the City. *Geography Compass*, 9.
- Davidson, W. B., & Cotter, P. R. (1989). Sense of Community and Political Participation. *Journal of Community Psychology*, 119-125.
- Davidson, W. B., & Cotter, P. R. (1991). The Relationship Between Sense of Community and Subjective Well-Being. *Journal of Community Psychology*, 246-253.
- Demeritt, D., 2002. What is the 'social construction of nature'? A typology and sympathetic critique. *Progress in Human Geography* 26, 766 – 789.
- Diyannah Inani Azmi, H. A. (2012). Implications of walkability towards promoting sustainable urban neighbourhood.
- Evans, P. (Ed.), 2002. *Livable Cities? Urban Struggles for Livelihood and Sustainability*. University of California Press, Berkeley
- Ezzy, D. (2002). *Qualitative Analysis: Practice and Innovation*. Allen & Unwin.
- Farrall, S., Gray, E., & Jackson, J. (2007). Theorising the Fear of Crime: The Cultural and Social Significance of Insecurities about Crime. *Experience & Expression in the Fear of Crime Working paper No. 5*.
- F, W. (1994). *Learning from the Fields: A Guide from Experience*.
- Ghazali, M. (2006). *Theory*. Retrieved 11 24, 2014, from Tessellar: <http://tessellarhoneycomb.blogspot.com/>
- Ghazali, M., Davis, P., & Nordin, A. (2006). *Thermal Comfort Honeycomb Housing*. Universiti Putra Malaysia.
- Glen Bramley, J. M. (2003). Building competitiveness and cohesion: The role of new housebuilding in central scotland's cities. *housing studies*, 25.
- Glen Bramley, S. P. (2009). Urban form and social sustainability: the role of density and housing type. *Environment and Planning*, 20.

- Government, M. o. (1997). *Housing Strategies and Programmes in*. Kuala Lumpur: Research and Development Division, National Housing Department.
- Grbich, C. (2007). *Qualitative Data Analysis: An Introduction*. London: SAGE Publications Ltd.
- Grillo, M. C., Teixeira, M. A., & Wilson, D. C. (2010). Residential Satisfaction and Civic Engagement: Understanding the Causes of Community Participation. *Soc Indic Res* 97, 451-466.
- Groat, L. (2002). *Systems of Inquiry and Standards of Research Quality*. Canada: John Wiley and Sons Publication.
- Guba, E., & Lincoln, Y. (1998). Competing Paradigms in Qualitative Research. In N. Denzin, & Y. Lincoln, *The Landscape of Qualitative Research*. Thousand Oaks, California: Sage Publications Hall.
- Harlina Mohamad Ali, M. M. (2012). Self-Sufficient Community through the Concepts of Collective Living and Universal Housing.
- Hashim, A. H. (2003). Residential Satisfaction and Social Integration in Public Low Cost Housing in Malaysia. *Pertanika Journal of Social Science and Humanities*, 1-10.
- Henning, E. (2004). *Finding Your Way in Qualitative Research*. Pretoria: Van Schaik Publishers.
- Hillier, J. (2002). Presumptive planning: From urban design to community creation in one move? In A. T. Fisher, C. C. Sonn & B. J. Bishop (Eds.), *Psychological sense of Community: Research, Applications and Implications* (pp. 205-222). New York, NY: Kluwer Academic/Plenum Publishers.
- Iranmanesh, N., & Etaati, K. (2009). CPTED: A Considerable Aspect in Urban Planning. *Real Corp*, 737.
- Jacobs, J. (1961). *The Death and Life of Great American Cities*. New York: Random House.
- Jan Jonker, B. P. (2010). *The Essence of Research Methodology: A Concise Guide for Master and PhD Students in Management Science*. New York: Springer.
- Joo, H.-J. (2003). Crime and Crime Control. *Social Indicators Research Vol. 62/63, The Quality Life in Korea: Comparative and Dynamic Perspectives*, 239-263.
- Joseph, E. B. (1995). Livability and Safety of Suburban Street Patterns: A Comparative Study. *Working Paper*, 641.

- Karim, H. A., & Rashid, S. M. (2010). Community Participation: Towards a Safer Housing Environment. *Asian Journal of Environment - Behavioral Studies*, 19-31.
- Kingston, S., Mitchell, R., Florin, P., & Steven, J. (1999). Sense of Community in Neighbourhoods as a Multi-Level Construct. *Journal of Community Psychology*, 681-694.
- Kim, J. & Kaplan, R. (2004). Physical and psychological factors in sense of community: New urbanists Kentlands and nearby Orchard Village. *Environmental and Behavior*, 36, 3114-340.
- Kosman, K. A. (2008). *50 Tahun Perumahan Awam di Kuala Lumpur*. Bangi: Institut Alam dan Tamadun Melayu (ATMA).
- Lafferty, W., Meadowcroft, J., 2000b. Concluding perspectives. In: Lafferty, W., Meadowcroft, J. (Eds.), *Implementing Sustainable Development: Strategies and Initiatives in High Consumption Societies*. Oxford University Press, Oxford, pp. 422 – 459.
- Langhout, R. D. (2003). Reconceptualising quantitative and qualitative methods: A case study dealing with place as an exemplar. *American Journal of Community Psychology*, 32 (3/4), 229-244.
- Laurent, K. (2003). Adolescents' attachment to and identification with their community. *Network, The Journal of the College of Community Psychologists*, 14 (1), 26-32.
- Magis, K. (2010). Community Resilience: An Indicator of Social Sustainability. *Society & Natural Resources: An International Journal*, Volume 23, Issue 5, 401-416.
- Mark L. Harvey, R. J. (1998). The influen of museum exhibnit design on immersion and psychological flow. *environment and behavior*.
- Marshall, C., & Rossman, G. B. (1989). *Designing qualitative research*. Newbury Park, CA: Sage.
- McKenzie, S. (2004). Social sustainability: towards some definitions. *Hawke Research Institute Working Paper Series*, 31.
- McMillan, D. W., & George, D. M. (2003). Sense of Community: A Definition and Theory. *Journal of Psychology*, 14, 6-23.
- Mike jenks, C. J. (2009). *Dimention of the sustainable city*. London: Springer Science & Business Media.

- Miremadi, T., Salekdeh, G., Aghdami, N., Gharanfoli, M., Vasei, M., Kouhkan, A., et al. (2013). Stem Cell Research and Therapy in the Islamic Republic of Iran: Pioneering in the Islamic World.
- Md Sakip, S. R., Johari, N., Abdullah, A., & Salleh, M. N. (2013). Assessing Sense of Community Dimension in Residential Areas in the Malaysian Context. *Asia Pacific International Conference on Environment-Behaviour Studies*, 655.
- Modi, S. (2014). Improving the Social Sustainability of High-rises. *CTBUH Journal*.
- Mohammad Javad Koohsari, J. A. (2012). Public Open Space and Walking: The Role of Proximity, Perceptual Qualities of the Surrounding Built Environment, and Street Configuration. *Environment and Behavior*.
- Mouton, J., & Marais, H. C. (1990). *Basic Concepts in the methodology of the Social Sciences*. Pretoria: Human Sources Research Council.
- Nasar, J., & Julian, D. (1995). The psychological sense of community in the neighbourhood. *Journal of the American Planning Association*, 61, 178-184.
- Newman. (1973). *Defensible Space: People and Design in the Violent City*.
- Newman, O. (1972). *Defensible Space*. Macmillan Publishing .
- Newman, O. (1996). *Creating Defensible Space*. U.S. Department of Housing and Urban Development Office of Policy Development and Research.
- BIBLIOGRAPHY \l 1033 Nicola Dempsey, G. B. (2009). The social dimension of sustainable development: Defining urban social sustainability. *Sustainable Development*, 289-300.
- Oren Yiftachel, D. H. (1993). Urban Social Sustainability: The planning of an Australian city. *Cities*, 18.
- Obst, P., Smith, S. & Zinkiewicz, L. (2002). An exploration of sense of community, Part 3: Dimensions and predictors of psychological sense of community in geographical communities. *Journal of Community Psychology*, 30, 119-133.
- P., Zinkiewicz, L & Smith, S. (2002). Sense of community in science fiction fandom. Part 1: Understanding sense of community in an international community of interest. *Journal of Community Psychology*, 30, 87-103.
- O'Brein, D., & Ayidiya, S. (1991). Neighbourhood Community and Life Satisfaction. *Journal Commun. Dev. Soc.*, 21-37.
- Pacione, M. (1990). Urban Livability: A Review. *Urban Geography*, 1-30.

- Peterson, N. A., & Speer, P. W. (2000). Linking Organizational Characteristics to Psychological Empowerment. *Administration in Social Work*, 39-58.
- Peterson, S. K. (1980). Space and Anti-Space. *Harvard Architectural Review*, Spring v.1: 88-113.
- Ross, C. E., & Jang, S. J. (2000). Neighborhood Disorder, Fear and Mistrust: The Buffering Role of Social Ties with Neighbors. *American Journal of Community Psychology*, 28 (4), 401-420.
- Sean A Kidd, J. D. (2010). home is where you draw strength and rest.
- Shadar, H. (2011). The linear city: linearity without a city. *Architecture*.
- Sharifah Sofiah Atiqah Syed Ibrahim, Z. J. (2001). Private Low Cost Housing: Implication towards consumers.
- Silverman, D. (1997). *Qualitative Research: Theory, methos & Practice*. SAGE Publications.
- Shumaker, S. T. (1983). Towards a Clarification of People-Place Relationships : A Model of Attachment to Place.
- Sinno, Y. S. (2012). On the Way to Home. *Anlässlich von: ARCHTHEO' 12 - International Theory of Architecture Conference 2012*. Zürich: Eidgenössische Technische Hochschule Zürich, Department of Architecture, Institute for the History and Theory of Architecture.
- Ta, T. L. (2000). Managing High-Rise Residential Building in Malaysia: Where Are We? *2nd NAPREC CONFERENCE* (pp. 1-25). George Town: INSPEN.
- Taylor, R. (1996). Neighbourhood Responses to Disorder and Local Attachments: The Systematic Model of Attachment, Social Disorganization and Neighbourhood Use Value. *Sociological Forum*, 11 (1).
- Tipple AT, W. K. (1991). Housing the Poor in the Developing World.
- United Nations. (2013). *World Population Prospect The 2012 Revision*. New York: United Nations.
- Uzzel, D. (2002). Place Identification, Social Cohesion and Environmental Sustainability. *Environment and Behaviour*, 26-53.
- Vanderstoep, S. W., & Johnston, D. D. (2009). *Research Methods for Everyday Life: Blending Qualitative and Quantitative Approaches*. San Francisco: John Wiley & Sons, Inc.
- Vilalta, C. J. (2012). Fear of Crime and Home Security Systems. *Police Practice and Research: An International Journal*, 13:1, 4-14.

- Wahyuni, D. (2012). *The Research Design Maze: Understanding Paradigms, Cases, Method and Methodologies*. 11.
- Wallen, N., & Fraenkel, J. (1991). *Educational research: A guide to the process*. New York: MacGraw-Hill.
- Williams, R. (2008). Night spaces: Darkness, Deterritorialization, and Social Control. *Space and Culture*.
- Wolfe, M., Bakos, M., & Chapin, D. (1985). *Community Group Homes: An Environmental Approach*. NY: Van Nostrand Reinhold Company.
- Woolever, C. (1992). A contextual approach to neighbourhood attachment. *Urban studies*, 17.
- Yin, R. K. (2012). *Applications of Case Study Research 3rd Edition*. London: Sage Publications.