Sense of Place on Expatriate Mental Health in Malaysia

Mehran Rostamzadeh, R. N. Anantharaman, and David Yoon Kin Tong

Abstract—we propose that sense of place effects on mental health or psychological adjustment among expatriates. The dominant trend in previous studies of expatriates' adjustment was influenced by management and organizational psychology, which are not a wide-eyed sight to the problem. Filling the gap needs to create a new systematic approach supported by different disciplines. This research is an interdisciplinary study which reconciles environmental psychology, cross-cultural psychology, organizational psychology, management and clinical psychology to observe the expatriation from different angles. The results conclude significant relationship between sense of place and mental disorders among expatriates in Malaysia. The results notify government of Malaysia (GOM) to create a positive sense of place for expatriates by selecting the certain strategies.

Index Terms—Sense of place, mental health, expatriate, psychological adjustment.

I. INTRODUCTION

Malaysia is one of the most 'globalised' countries in the Asian region and top 20 in the world among globalised 62countries [1]. It is also a target country mainly to the Asian skilled labor migrants since the statistics show 12.7 per cent of the workforce are migrant labors. The reason being, Malaysian government launches different programs like Capturing 5000 knowledge workers every year until 2020 responding the increasing need of expatriates. As a result, the number of expatriates in Malaysia rose up from 21,859 in 2001 to 35,583 in 2007[2], [3]. It was argued that it can led to social problems for the reason that the unacceptability and socio-cultural dissimilarities of foreign labors in Malaysia [4]. Consequently, expatriates are not quite happy with reduced job opportunities, earnings and perks; increased workloads and exploitation points to stress, depression, and reducing in the quality of life. In the other word, in presence of difficulties to access resources by expatriates compare to Malaysian community that felt uncomfortable with foreign labors in the certain areas, such as socio-cultural problems, health issues, and problem in language and communication, local resentment, overstaying of expatriates, security threat and economic deprivation, it is expected to see much more interpersonal relationship problems and psychological disorders or mental health issues among expatriates.

Besides, inequitable treatment in Malaysia by the companies with local and expatriate-which sends massage to local labors that they are less respected than expatriates-generates tension between them and in turn decreases desire to cooperate and support expatriate by local co-workers which makes the process of expatriate adjustment to new environment more complicated and heighten failure rate[5]. Nowadays, work places in Malaysia create more stress so that workers increasingly prone to anxiety, psychosis, multiple personality disorders, schizophrenia, risk-oriented personal problems and job-related stress [6]. Therefore, conducting research to detect determinant of psychological adjustment or mental disorders in expatriates is necessary.

II. LITERATURE REVIEW

Adjustment is a form of harmonious relation to the place enable person to be satisfied for most of one's needs in physical settings [7], [8]. Therefore, psychological adjustment is regarded conceptually as the level of fit between the expatriate and new environment in a way of increased effectiveness ,satisfaction with new place and reduced stress and conflict [9] or lack of mental health issues such as depression [10]-[12] or psychological comfort experienced by expatriate toward the overseas environment [13], [14]. Previous studies maintain indicators of adjustment including willing of expatriate to work overseas or expatriates' intentions [15], [16], organizational commitment[16], [17], job satisfaction [15], [17] expatriate's ability to overcome the cultural shock and living overseas and interact successfully with host country nationals[18], psychological well-being and positive job attitudes [15]. For better understanding, Bolino [19] classified the studies on expatriate adjustment in five issues including: first, cross-cultural training (CCT) [20], cultural distance [21].Second, career development programs or free choice in taking overseas assignments and realistic attitude of the assignment [15], [22].Third, the organizational selection criteria. Fourth, the individual factors, like personal style attributes and personality traits [23], emotional stability [24] flexible/ adaptable manner, motivation, openness to other culture, and self-efficacy [25] [18]. Fifth, studies about family factors [9], [26], marital status, spouse employment status, and having minor children in the household [27].

Concerning expatriates mental health issues, Carta, Bernal, Hardoy, & Haro-Abad [1] explained expatriate experience is a psycho-social process during seven grieves (losses) causing distress that is experienced including: "family and friends, language, culture, homeland (hometown), loss of status, loss of contact with the ethnic group, and exposure to physical risks. Difficulties in expressing grief can cause mental problems." In addition, Mary Lyn Glanz [2] pointed out the exposure to these grieves leads to their redefining their satisfaction with their current location or place, which is intertwined with adjustment. Moreover, Aycan [3] refers to expatriate adjustment emphasized that how significant is "the

degree of fit between the expatriate manager and the new environment in both work and non-work domains" and in turn he implicitly highlighted the role of relationship between person and environment in expatriates' mental health. Moreover, inability to adjust to new environment is one of the most serious reasons of an early return home or failure in completing the assignment, which is costly to the organization and to the individual [4].

Mental health is defined as a state of psychological well-being in which an individual is capable of use his cognitive and emotional abilities and social function, and handle the usual demands of daily life. The most ordinary indications of mental health contain effectively functions, independent life, feeling competent, satisfying relationships, dealing with normal levels of stress, and recover from complicated situations. Mental disease which is also called mental disorder, mental illness or mental health issues are including impairment of behavioural, cognitive, and emotional functioning caused by environmental, social, psychological, biochemical, genetic. In the current research, mental health will measure generally through Global Severity index (GSI) and in detail by nine psychological illness such as Somatization (SOM), Obsessive Compulsive (O-C), Interpersonal Sensitivity (I-S), Depression (DEP) , Anxiety (ANX), Hostility (HOS), Phobic anxiety (PHOB), Paranoid Ideation (PAR), Psychoticism (PSY); the factors of Symptom Checklist-90-R (SCL-90-R) which is a recognized questionnaire measuring mental health [5].Berry [6] pointed out psychological adjustment is evaluated in terms of sustaining of mental health. He mentioned that the majority of expatriates experienced mental health issues such as depression and anxiety.

Malaysia in the Asian region is known as one of the most globalised nations by which the ranking 8 in economic incorporation into international economy, and in 2004 among 62 countries, placed into the top ten most globalised country and the top 20 in the world where came after the first ten like USA, Canada, Switzerland, etc. Saving this distinguished position, government of Malaysia (GOM) obliged to be more serious about soothe expatriates and protect them against difficulties [7]. Achieving globalization and vision of being a developed nation, Malaysia gives in the inflow of expatriates into the country in order to transfer skilled manpower in various fields. Moreover, Shephard [9] predicted that "It is expected that Malaysia still need this foreign expertise for 10 to 20 years to come." [8, 10].

When the earlier study was carried by Mohd Tahir & Ismail [8] on Adjustment among expatriates in Malaysia in 1999, the numbers of expatriates were 21,859, a figure they obtained from the Immigration Statistics. Later, the number of expatriates increased from 33,400 in 2005 to 35,480 in 2006 [11] , and 42,000 expatriate workers in 2007[12]. Andersen [13] through a study on expatriates showed that in the past four years, the number of employees on international assignment has doubled in the world. Although in Malaysia, the numbers have not doubled, while the country is keeping progressing towards it can be expected to rise[11]. In addition, Miranda[14] argued although international assignment in Malaysia has required high recruitment and staff cost, many of the mini multinationals are still relying on hiring expatriates. Referring Hill's idea to progressing mini-multinationals companies due to globalization, he argued that Malaysia as a developing country is a good example to support Hill's idea. Therefore, to defeat a biggest obstacle, Malaysian companies should render expatriation very well-managed. Increasing the number of expatriate, cost-effective and attractive for recruiters and the fact of difficulties they face in this developing country propose human-resource managers should be concerned about expatriate assignment and the external factors' effect on their performance such as language, values and culture, and more study in this controversial topic [14].

Malaysia has a progress plan called "Vision 2020" which is a road map for Malaysia's Accelerated Industrialization Drive to make it a developed nation economically. Fulfilling the goal of Vision 2020, the private investment services' sector -where expatriates mostly working there- should increase by 6% for the next 15 years and needs to attract 5000 knowledge workers or expatriate yearly[15]. However," Malaysia should not be developed only in the economic sense. It must be a nation that is fully developed along all the dimensions: economically, politically, socially, spiritually, psychologically and culturally" [16]. Thus it is essential to develop Malaysia in either local perspective or foreigners. Since the prevalence of psychiatric morbidity was significantly higher in non-Malaysian (18.4%) as compared to Malaysians (10.4%)[17] and lack of psychological adjustment has been the serious weak point of expatriation process, which caused in high failure rate of international assignment. It is thought that study on expatriates' mental health is necessary. In addition, according to 2006 Worldwide Survey of International Assignment Policies and Practice, Asia-Pacific area is the most well-liked expatriate host region with 29% of expatriates' population[18]. However, this information refers to companies' preference to sending their employees to the certain locations without bargain that is dissembling intricacies, which are faced by expatriates. In other words, expatriates, through the pre departure discussion, have not been asked whether they imagine host locations as a preferred place and if the level of attachment to those places has been high, As if they are left to face challenges by trials and errors. This matter will become more noticeable when Asia is known a complicated and challenging region and "Malaysia and its capital city; Kuala Lumpur is listed in 20 difficult expatriate destinations" [18]. Therefore we need to know if Malaysia is really popular to expatriate by testing their sense of place of Malaysia.

Therefore, there is paucity of studies on expatriate adjustment or mental health considering environmental factors like sense of place. It leads to launch a new area of research combination of different disciplines: environmental psychology, clinical psychology, and cross-cultural psychology, and management.

Sense of place is a topic from environmental psychology that is defined as an emotional connection between place and person. Place is a particular position with its relatives such as physical attributes or characteristics of a location, meaning or perceptual and psychological facets and activities by which play role to make sense of place. Therefore, sense of place is a consequence of the mutual relationship between human and

her/his living space [19]. There is a tendency of human to prefer specific places where they feel comfortable and safe more similar to the environment they were born [20]-[25]. Similarly, the phrase 'place' refers to an object with a repository of meaning as one achieves a level of 'dwelling' or rootedness. Bonding to a restricted geographical locale where a person is aware of is assessed as a field of care, centre of value, centre of shared meaning, and if he/she rose, felt at home and being secured therein with feeling of belonging to that place, a sense of place will be developed [26]. Therefore, a sense of place is formed from meaning of a specific locale based on an individual experience associated with that place [27]. Therefore, the concept of sense of place is utilized in studying place attachment and its meaning. It is generally described as an overarching feeling encompassing the steps by which people sense place, assign concepts and value to it[19].It is a kind of identification engendered by living in that place [28]. In short, a sense of place is more than physical characters but the interaction of person with a space where brings symbolic meanings. To create sense of place, location itself can not generate a sense of place but long, deep. Thus, preferably connections to a place, recognizing ritual, myths, and local symbols bind persons to place strength[29]. A sense of place is therefore a set of symbolic meaning with a space or spatial setting which vary from individual to individual and time to time. It has a dual nature namely an interpretive perception of place as well as emotional affinity to it. Through environmental psychology, in order to make sense of place, there is a need for deep experience of a location and preferably taking part into a location and its ritual, symbols, and myths not only location itself purely. Moreover, Datel and Dingemans [30] referred to the bundle of meaning, qualities, and symbols for developing affective bonds with location to make sense of that place. Place has a personality with a mutual relationship with a person as if "the experience of a place is not neutral." [31]. A person values a place as being purposely used to completing assignments and achieving goals [29].

A number of new studies link residents' perceptions to their physical and mental health[32]. Likewise, self-place experience or perception of quality of a place exerts a force on psychological wellness and associated with either individual or collective mental health [33]. . For example, Wright & Kloos [34] found that resident's perceptions of physical quality of their apartments were better predictors of well-being outcomes. Similarly, the perception of immediate surrounding neighbourhood which was proven to be the most important predictive housing factor was the influential predictors for well-being outcomes [34, 35]. In addition, Aneshensel and Sucoff cited in [36] found that mental health was worse in neighbourhoods perceived to be frightening and threatening. Also poor fit between the individual and their surroundings may be damaging to psychological well- being. In sum, in general, those perceptions of area quality to be linked to mental health status[32, 36]. In terms of expatriation, being moved from home to another country will leave them alone into a foreign place with plenty of uncertainties and out of their generous or benevolent network at home [37].

In this study expatriation was tested as a cross-cultural psychological phenomenon and expatriates and local workers valued three types of places including settlement or town, region or province and country to show us their sense of belong to Malaysia [30]. Moreover, expatriate mental health which is conceptualized as an extent of fit between expatriates and new environment or place [3]will be examined.

III. METHODOLOGY

According to Chua [38] the result of research is influenced by the research design. In addition, the research design is concluded by the objective of the study. In this study, a quantitative research methodology was used. Chua[38] (2006) stated a research may use a number of types of research design.

A. Sampling

The rule of thumb in sample size for reliable factor analysis in SEM ranging from ten subjects per variable to twenty subjects per variable depending on the complexity of framework [39].

B. Research Population and Research Sample

The population of this research is the employees in Multimedia Super Corridor (MSC). The sample is the employees in the Multimedia Super Corridor (MSC) status companies in Malaysia. The target respondents in this study are expatriate workers and local staffs. In this research, the total number population is 99,590 people and the sample size is 300 people.

C. Research Instrument

The measures of this study were SCL-90-R to gauge mental health issues found by Derogatis [33] with reliability ranging from 0.73to 0.90 in subscales. Thus in this research SCL-90-R were used due to its comprehensive, valid and reliable items that demonstrated through the large volume of research. Holi (2003) discussed that this measurement tool is a practical and easy scale to fill out and can be administrated successfully via mail and in outpatient setting. Cyr et al. (1985) have concluded that it is a best measure of overall psychological distress. The SCL-90 which is prototype for SCL-90-R is well-suited for measuring general mental health (Bech et al. 1993, Derogatis 2000). It has been used in several studies as an indicator of mental health (Hauff & vaglum 1995, Derecho et al. 2002, Preston et al. 2002) especially in non psychiatric settings (Boudrez & De Basker 2001, Skydsbjerg et al. 2001, Yang 2001, Osterberg et al. 2002). Also, cross–cultural validation researches for SCL-90 have been carried in different countries (Schmitz et al. 1999) and among immigrants thus it is sub-cultural test (Noh & Avison 1992).

SCL-90-R (SCL-90-Rivised) consists of 90 items assessing 9 symptoms. The 45 items of SCL-90-R measuring five primary symptoms were retained from HSCL and 45 items, measuring four new symptoms were added to the HSCL by the above mentioned program (Derogatis, 1994). SCL-90-R is a self-report scale that designed as a measure of global symptom severity that describes the symptoms psychopathologically. SCL-90-R intended to measure symptom intensity on nine different subscales. The items scored on a five-point scale ranging from (0) to (4) referring

to not at all true (0), a little bit (1), moderately (2), quite a bit (3), and extremely (4). The nine subscales referring to nine symptoms including Somatization (SOM), Obsessive-Compulsive (O-C), Interpersonal Sensitivity (I-S), Depression (DEP), Anxiety (ANX), Hostility (HOS), Phobic Anxiety (PHOB), Paranoid Ideation (PAR), Psychoticism (PSY). The assessment of the validity of the SCL-90-R scale according to Derogatis (1994) based on factorial invariance and correlation among the nine dimensions showed that this measurement scale was very good in terms of convergence validity and discriminant validity among dissimilar construct.

Examining sense of place, Shamai and Ilatov [30] developed a questionnaire with a good reliability ranging from 0.88 to 0.90[34]. Sense of place is a very vague concept related to complex buddle of meaning, symbols, and qualities that a person associates with a particular locality such as country, region, and settlement. Shamai & Ilatov [40] reviewed different method of sense of place measurement and classified them based on their criteria. Based on the reviewed literature they develop a scale for sense of place measurement. The developed scale was tested in pervious study of Shamai [29]. Further, according to Shamai's reply to researcher's email for clarification about the scale reliability, the scale showed very high reliability using "Inter-rater reliability" and looking at the variation in measurements when taken by different persons but with the same method or instruments.

The recent study of Shamai & Ilatov [40] also discussed on the scale reliability through conducting a pilot test using first face to face interview and later through phone interview. Then, the scale used in a quantitative study among inhabitants and immigrants in Kiryat Shemona located in northern part of Israel and the results shows a good reliability of scale. Thus, present study used the sense of place scale developed by Shamai & Ilatov [40]. It is a scale with three questions regarding individual attachment to different level of places. The question has an eleven-point scale to be used to indicate the degree of negative and positive connection to the place. The question score ranges from (-5) to (+5) that (-5) refers to very negative, zero (0) in middle refers to no connection, and (+5) refers to very positive.

IV. DATA ANALYSIS

A number of descriptive and inferential statistical tests were being applied to provide an understanding of the data and analysis the hypothesized relationships among the variables.

Descriptive statistics were performed such as percentages, means and standard deviations. Structural Equation Modeling (SEM) was used to check the validity of the instrument, to examine the direct and indirect effects of sense of place on the mental health among the MSC workers.

A. Structural Equation Modeling (SEM)

Structural equation modeling is a multivariate technique which is including a combination of both factor analysis and path analysis. SEM is a statistical method that lets examine a number of dependence relationships between

exogenous/independent variables and endogenous/dependent variables concurrently (Ho, 2006). The aim of SEM analysis is to determine the extent to which the theoretical model is supported by sample data (Schumacker & Lomax, 2010).

There are some advantages for using SEM in research such as; estimation of multiple relationships simultaneously, ability to represent unobserved (latent) concepts in the analysis, and SEM improves statistical estimation by accounting for measurement error in the estimation process (Hair, et al., 2006; Ho, 2006).

B. Demographic Profile

Demographic descriptive analyses of the respondent showed information regarding gender, originality (local and expatriate), marital status. The summary of descriptive analyses of demographic variables is displayed in Table I.

TABLE I: DEMOGRAPHIC PROFILE OF THE RESPONDENT (N=300)

Variables	Categories	Frequency	Percent
Gender	Male	171	57%
	Female	129	43%
Marital status	Single	124	41.3%
	Married	176	58.7%
Originality	Local	139	46.3%
	Expatriate	161	53.7%

V. RESULTS

The current study contains two hypothesizes which tested by using structural equation modeling (SEM) as below:

H1: There is a significant negative relationship between sense of place and mental health issues among the MSC workers in Malaysia.
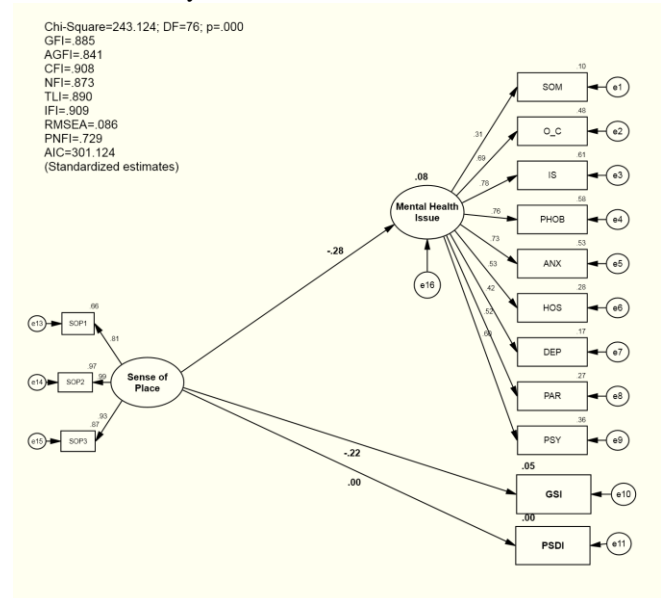

Fig. 1. The modified structural model with standardized estimates.

The modified structural model with standardized estimates shows the relationship between the independent variable (sense of place) and dependent variable (mental health issue), and in Malaysian MSC workers under a specific hypothesis.

This parsimonious SEM model has been obtained after

testing the different hypothesized models.

TABLE II: UNSTANDARDIZED AND STANDARDIZED REGRESSION WEIGHTS

Hypothesized Path	S.R.W*	C.R.	P
Sense of Place -> mental health problems	-.283	-3.489	0.000

* Standardized Regression Weights

Table II showed the unstandardized and standardized regression weight for the final hypothesized path model and also Fig. 1 referred to the modified structural model with standardized estimates The result as displayed in Table 2 and Fig. 1, show that sense of place had significant negative contribution towards the mental health among MSC worker in Malaysia (β = .283, C.R. = -3.489, p = .000). Therefore, H1 was supported by the research data. In other word, the level of mental health could be affected by the level of sense of place among workers.

H2: Originality (local and expatriate) moderate the relationship between the sense of place and mental health problems.

The result showed non-significant negative relation between senses of place and mental health problems among the local workers (β= -0.076, p-value = 0.429), while this relationship was significant for expatriates (β= -0.314, p = 0.004). Therefore, if the relations between two variables significant in one group and not for other group then the moderation effect supported. Consistently the moderation effect of originality (local and expatriate) supported for the relationship between sense of place and mental health problems.

VI. CONCLUSION

It is clear from the findings discussed above that the sense of place has contributed significantly to mental health. This finding matches with the study that mentioned having poor sense of place play a significant role in mental health problems [28]. For example, impaired sense of place causes in anxiety, mood and behavioral disorders [36]. In between, as Jackson [37] stated that home as with other places that normally obtain a strong sense of place, is more associated with mental health positively. Thus, new arrivals like expatriates who lose their home and their memories are more at risk of mental disorders and in turn are needed to be more taken into account by the countries where accommodate international workers. Moreover, Foley [38] discussed that mental health problems interfere with the productivity of people at work and home which is one of main concerns of Malaysian government and MSC companies. Malaysia is as a target for expatriates around the world and its progressed economy has been indebted to foreign workers in the past decades. Hence, Malaysians ought to be concerned with new arrivals experiences because psychological problems of newcomers like expatriates arising from grief due to removal from homes, land, and culture. Losing positive sense of home and negative sense of new place increase expatriate mental disorders which in turn reduce expatriate productivity and

heighten failure rate. Therefore, The current study propose to prepare the more stable environment and to some extent similar to the expatriate homeland as such architecture and physical elements, so that they become familiar with the new location sooner and fostering sense of place, by enriching the present cross-cultural training for expatriate scholarly in accordance with the theories of environmental psychology.

The study also can be used by organizations' human resource of MSC to increase organizations' productivity throughout promoting expatriate mental health which would be obtained by fostering sense of place, by becoming venue for social activities and community conversation, peer association settings, and ideal place to be comparable with home or the expatriate preferred environment.

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