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The Exploration of Social Neuroscience Midlife Crisis in Malaysia

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Abstract

In the present study, researcher explored the social factors that link to the neuroscience attitudes which lead to midlife crises in the multi-ethnic Malaysia. Loud and prominent sociological crisis generally calls for an immediate action, yet the silent social crisis coming like a wild phantom had subdued thousands of people suffering quiescently and reprimanded no response from local authority which has jeopardised many of their social functioning as an individual and leads to committing suicide. The exploration focus on three main areas. The actual age band in which midlife progress and crisis happens; the gender and age band distinction to social neuroscience midlife crisis; assess whether the social neuroscience midlife crisis delayed because of expanded life span in Malaysia. Methodology of this exploration based on a three tiers study. First tier qualitative in-depth interview on a total of 32 members in a focus group with similar background who seek therapy for midlife crisis of different ages and socioeconomic backgrounds. The finding were biological aging, relationship stress and life failure issue. Followed by a quantitative second tier pilot study by survey form conducted to confirm the midlife crisis caused by social factor, the finding shows a positive discovery that social has impacted their neuro-processing. Third tier mixed method where the main survey of both qualitative and quantitative on 220 candidates were reported a similar trigger to social neuroscience midlife crisis. The major finding from qualitative self-portrayed candidates showing that 33% of Malaysian solicitudes over static life condition and time lapsed issue while quantitative surveyed reviewed two social dimensionality, namely human hibernation and fading life episode. Both finding are parallel in outcome. These issues were overall associated with the linking line of social-neuro-crisis about midlife progression. This study also shows that the social neuroscience midlife crisis is moving toward reverso context where the older we get the higher chances to have the crisis. However, gender is not a factor for the crisis while age is. Therefore, those providing midlife crisis prevention and intervention programs should consider invoking the survey form as a diagnosis instrument in the Malaysian setting. Proceed from here, further research should be performed on the magnitude of the crisis since the severity of such crisis could be different to every individual.

Introduction

At the time this article is written, Malaysia is undergoing a rapid outbreak of the world wide pandemic, the coronavirus crisis. This crisis has placed all Malaysian into a compulsory movement restriction order under the Prevention and Control of Infectious Diseases Act 1988

which take effect from 18 March to 31 March 2020 and is subject to review when the restriction period is approaching the end. This control is part of the precautionary measure to address the spread of COVID-19. A public directive for nationwide social distancing with full lockdown.

Such are a loud and prominent crisis threatening our nation on the daily life issues on the sociological perspective that calling for an immediate action (Kiran, 2020). Yet, on one quiet corner of our society, there is a silent social crisis subdue thousands of people on this land who are suffering quiescently without any aids and does not reprimand any response from the local authority's attention (Woon and Pang, 2017). This crisis is so silent that coming as a wild phantom, attacking our society noiselessly which has jeopardised many of their social functioning as an individual (Lin et al., 2017), destroy their families, finances are ruined and even losing their identity as a human being which may leads to committing suicide (Dimitrov, 2015, p. 638). Inter alia, the name of this silent social crisis is called Midlife crisis. We trace the development of dominant theory in this Studies for a marginal topic (Alvesson, 2019). This invisible component lies at the heart of the social constructionist view of social problems (Rubington & Weinberg, 2010). Yet both situation has happened due to the operation of societies that could be either directly hit the society or indirectly created the social problem (Entrena-Duran, 2020). The nature of midlife crisis is inevitable an invisible social problem that so quietly and indirectly affecting our society. Thus, midlife crisis is relevant as part of the social science study.

The aim of this study, therefore, is to analysis the pre-during-post causal link social neuroscience midlife crisis experience of middle aged Malaysian's life narratives in order to gain a deeper understanding of how Social constructionism and personal construct has influenced the midlife crisis experience. There are three stages of exploration.

- a. To investigate an age band during midlife phase that cause social neuroscience midlife crisis in Malaysia.
- b. To analyse gender and age band distinction of social neuroscience midlife crisis in Malaysia.
- c. To assess whether the social neuroscience midlife crisis delayed because of expanded life span in Malaysia.

Literature Review

Midlife is a critical stages of life in which a rapid change points progression occurred in term of character change and the point of subconscious meaning of death to the conscious one (Jaques, 2018). Whereas midlife crisis as per Jacques (1965), is described as a crisis in transition of identity, and self-confidence, and also is that comes in highlighting the age, inevitable mortality, and the shortcomings in personal life, or unmet goals set for life till that time.

As for the social neuroscience perspective, an adult's attitude toward the risk-taking is deteriorating when there is a reversal in the brain's cognitive control system, such modification enhance an individuals' capacity for self-regulation (Steinberg, 2017). A model on the social brain about the interaction between social functions and brain mechanisms which lead to adaptation to the social situation launching a new point for a better understanding of the social neuroscience (Greenberg, 2021). The presence of social neuroscience has substantially impetus our knowledge of the reinforcement that exists

between social structural constructs and their neurobiological linkage (Parsons, 2017). The study on social brain in the context of neuroscience disclosed an intricate relationship between health disparity and socioeconomic environments (Suryoputri, 2022). That is how powerful social neuroscience perspective influence the human life that demand a study on the social neuroscience midlife crisis.

The dynamic interaction of structural constructs to the social neuroscience midlife crisis, the social status of an individual, in short the ranking in the social hierarchies has a tremendous effect on the perception of the society (Mattan, 2017). McCrae and Costa (2003) expressed that there is a misconception about people at their 40th that there will be an expansion in conjugal friction, a higher frequency of self-destruction, change of occupations and psychological wellness issues. Despite of this, Cooper (referred to in McCrae and Costa, 2003) led analysis into the social neuroscience midlife crisis and tracked down no proof of this peculiarity. This research was reproduced by McCrae and Costa (1978) who then, at that point, likewise saw as no indication of it, as did Farrell and Rosenberg (1981) who additionally professed to have seen as no indication of these highlights in the midlife stage.

The dynamic interaction of personal construct to the social neuroscience midlife crisis, humans are inherently social organisms, from the stage of infant to the growing up adult and progressing into midlife till the old age, human show signs of the needs of social encounters and wanted it to be persistently intensify through time, failing which an emotion of distress appeared for the thirst of this social interaction and stimulation (Kiesow et al., 2021). The measurement of personality use by McCrae and Costa (2003) present that an individual's personality perspectives do affect the midlife progress and conceivable crisis of people and appropriately these attributes and angles should be estimated in this momentum research study. The multiple dimensional personalities of an individual does affect the psychoanalytical approaches especially in work (Jackson, 2021). As for most of the ladies, their physical changes making them look aging is a notable influence to their personality changes in the social environment, which leads to the personality social crisis in their midlife (Diah, 2019). As for men, Tamir (1982) recommended that associations with others is the most prominent factor at midlife age. The variable of social connectedness for a men with less education in their late forties, there was a huge connection between confidence and social connectedness. The lower the social connectedness the lower the self-esteem. McCrae and Costa (2003) expressed that analysis has shown that the most dependable data is gathered through self-reports commended by life partner.

Does the dynamic interaction of social structure construct and personal construct which lead to the social neuroscience midlife crisis? According to Atherton (2021), this is an interesting subject to many social scientist, yet little research has propounded the longitudinal research from teenage to the midlife which is associating between personality traits and life goals demanded by the social structure. McCrae and Costa (2003) along these lines infer that personality doesn't change at midlife as verified in the findings of numerous researchers during the 1960s and 1970s. However, McCrae and Costa (2003) rolled out an essential improvement to their methodology during the 1990s when they recognized that it was a distortion to express that personality is steady having due respect to how complex life had become. They recognized that there is both steadiness and change in the existences of people and a notional model, which included the two angles, should have been advanced.

Research Methodology

Mixed method of three levels analysis carried out. Each level will have the different objective to achieve. From the homogeneous level 1 group to qualitatively interview them to elicit the cause of the midlife crisis, then all the pertinent causes collected is compiled to form the original aspect of Midlife Progression Experience Questionnaires (hereafter referred to as MPEQ) survey form for the understanding of the subject of Social Neuroscience Midlife Crisis (hereafter referred to as SNMC) to test run on level two people. Thereafter the valid factors from MPEQ is roll out to the level three candidate. All the collected data is analysed by SPSS V25.

Level 1: Focus group

An analysis study began with an exploratory in-depth interview methodology on three selected focus age groups of which a total of 32 individuals whom were under the therapeutic treatment for midlife crisis. They are from age 30 to 60 which cover the three age bands of lower, middle and upper age band from their midlife experience. The objective of interview is to find out which dimensionality of crisis occurred in their life, at the same time to find out the sequence events of the pre-during-post crisis.

Level 2: Pilot study

The objective is to create a valid survey form for the main level three survey. A provisional survey form is created with a total of 131 aspects. It makes up of 76 aspects of midlife crisis Questionnaire (MCQ) by Oles' (1999) and 45 aspects of concerns emerging from the focus groups. A total of 131 aspects poll was dispatched to 68 individuals with the age band above 35 years old, of which 58 answered. The form is then analysed for the communality of the factors.

Level 3: Survey

A total of 44 aspects survey form is formulated. It was a reduction from 131 aspects in the pilot study which factor loadings values from 0.6 to 0.8 is adopted. The form reached 843 individual and a sum of 264 responded to participated in the survey (31.3% reaction rate). The respondents included different type ethnic group of people. The snowball strategy for testing was additionally utilized. Every one of the individuals who didn't answer after the principal email, a followed up mail were to send out and some even with the third email (Durrheim and Painter, 2006). Albeit an aggregate of 264 respondents took part, a portion of these respondents didn't finish the entire review. It is derived that they were upset while finishing the overview or became unengaged. A last sample of 220 individuals who had finished the whole survey was, in this way, recognized for the data analysis.

Two type of information is targeted to achieve by the survey:

- i. Qualitative Information

Self-portrayed as sufferers of social neuroscience midlife crisis (SNMC) and their personal experience of what midlife crisis is.

- ii. Quantitative Information

By using the Midlife Progression Experience Questionnaires (MPEQ) to test the public understanding of the subject of social neuroscience midlife crisis in Malaysia.

Finding Results

The discussion are taking two tiers. The major finding from MPEQ survey, and, finding results according to research questions.

The Major Finding

a. *Qualitative Self-portrayed social neuroscience midlife crisis experience*

From the full cohort of 220 participants, there are two questions asked, whether they has experienced a social neuroscience midlife crisis, and, what has happened. Following are finding of the answer collected. Question 1 is on the probability of SNMC occurrence in their life, it was measured by the four categories: 100% certain of oneself having SNMC; high change of having it; may be having it; not happened.

Table 1

Probability of SNMC occurrence to 220 participants

	No of participants	Percentage
Not happened	91	41.4
May happened with Low probability	46	20.9
High probability of happening	11	5
Confirm happened	72	32.7

From the data of table 1, there are 32.7% of people who portrayed positively as having SNMC. This result is signifying a ratio of 3:1, meaning to say that for every three Malaysian, one had SNMC. When the data of the confirmed happened cases add together with the high probability of happening cases, the result shows that 37.7% of Malaysian who has the SNMC. This finding is somewhat near to Chang (2018) who shows the results 34% Influencing predictors on mid-life crisis. The result also reproduces Wethington's (2004) findings in the United States that 33% of respondents said they had experienced a social neuroscience to midlife crisis.

Question 2 as to what domains of the SNMC, the experience given by the 83 participants (72+11) who portrayed as struggling for social neuroscience midlife in their life is the enlightening account of the discovery of experience of SNMC. The identification of the areas of SNMC on the exact field mentioned by respondents in this analysis study is by getting the participants to give an affirmative answer of 'yes' or 'no' to their life situation without giving any additional explanation. It was conceivable from their message and concluded with three clear categories of the areas of concerns as social neuroscience midlife crisis.

The distribution of the 83 individuals who said they were certainly or most likely to have experienced a SNMC as indicated by area is seen in Table 2 beneath.

Table 2

The domain of SNMC by 83 participants

Areas of concern	Frequency	Percentage
Career static issues	26	31.3
Time lapsed issues	36	43.4
Internal value clash issues	7	8.4
Don't know/prefer not to say	14	16.9
Total	83	100

The domain for SNMC by 83 participants was statistically significant in correlation to Career Static ($F=326, p=31.3$), career plateaus without any advancement which cause the drop of the social and economic status. Further, there were significant correlations to time lapsed ($F=36, p=43.4$), issues like health status, physically aged, miss out the golden prime time in their life, and the day to death is near the door step. Another significant correlation to internal callus clash ($F=7, p=8.4$), where stress of values compromising, ego resilience due to younger generation perform better to threaten their current position.

b. Quantitative Midlife Progression Experience Questionnaires(MPEQ) approach

The major finding of MPEQ quantitative method is attracted from the strong measuring 32 factors which is tested by SPSS after deducting the deficient coefficient factors. The two dimensionality appeared as the SNMC. Table 3 below has indicated the closeness of the factors for the two dimensionalities.

Table 3

32 factors co-analyse across entire 220 respondents

	Total variance explained	KMO values	Communality	Matrix pattern (Coefficients)
Full cohort: *220 sample	Eigenvalue above 1: 7factors Total variances strength: 63% Note: 2 strong factors with total 43%	0.902	Above 0.4	Above 0.3

From the observation of the pattern matrices, scree plot a clear cut close proximity amongst all the variables appeared, and the loading values are closely fasten for two variables which is clearly seen in scree plot diagram. After looking into the total variables array, 1st dimensionality and 2nd dimensionality for both the age and gender cohort splits spotted. As such, the two dimensionality components concluded and are termed as follows:

First dimensionality: Human Hibernation

The term is so named simply because after looking at the total variables array, the entire variables which bunch onto this component are advocating a situation of inefficiency, idleness, hebetude and dormancy to carry on in their life. In other word, a total reflective situation of hibernation in animal world. Such finding is congruent with Tripathi (2020) who states the factor of midlife as stagnation where a mature individual coincide the crisis to their way of contribution. Such is the case as career obsolescence in their achievement (Markson, 2020). Exactly the same word is stipulated by Erikson (1950) where he was introducing generativity, which is a reverse to stagnation, a situation of hibernating state. Erikson (1950, p. 267) submitted that failure at generativity leads to an obsessive need for “pseudo-intimacy often with a sense of stagnation”.

Second Dimensionality: Life Fading Episode

The wording of the variables loaded on this component uses physical attractiveness, body shape and aging concerns. The midlife role transitions appears to be the factor of time and finitude is highlighted by (Markson, 2020).

After comparing the MPEQ approach with the self-portrayed approach, it should be noted that the two factors of human hibernation and life fading episode are of no conflict to the

self-portrayed analysis as discussed in the above Descriptive Statistical Analysis on Self-portrayed Crisis Experience. Following shows the similarity.

Table 4

Comparison of qualitative and quantitative research outcome

	MPEQ approach	Self-portrayed approach
1 st variable	Human hibernation	Career static concern
2 nd variable	Life fading episode	Time lapsed concern
3 rd variable	-NIL-	Internal clash concern

Results According to Research Questions

Three research questions to be answered under this study. Each of which will be handled separately in the following.

RQ 1: Is there an age band during the midlife phase that cause social neuroscience midlife crisis in Malaysia?

The popular theory of “timing of inevitable event” that laid down by Lachman (2001) is being recognised as one of the timing theory that making a significant sense. However, the challenges of dealing with the timing issue were set forth in the attempt to answer to the research question 1, in which the age band of the occurrence of social neuroscience midlife crisis has been identified. It has been written that the age of thirty started his worry about their impending middle and old age, and death that lead to a crisis (Jaques, 2018). A number of researchers (Lachman, 2001; Tamir, 1982) hypothesized that the circumstance of specific occasions like demise or ailment of a parent is accepted as happening during the age band of 40 to 60 years. This is likely more applicable to a potential crisis in midlife than age or an age range. Different researchers (McAdams, 1993; Tamir, 1982) have involved age in their analyses as this is more straightforward for research purposes.

For this reason, the total cohort of the 220 participants are analysed according to the slit three age bands in this research study. The three age bands are as follows:

- Lower age band (early midlife): 49 respondents is below 40
- Middle age band (midlife progression): 95 respondents from 40 to 50
- Upper age band (late midlife): 76 respondents over 50

Table 5

Probability of SNMC by age band

	Lower age band (35 to 39)	Middle age band (40 to 50)	Upper age band (51 to 70)
Not happened	51.0	38.3	37.7
May happened with Low probability	28.6	22.3	16.9
High probability of happening	2.0	7.4	2.6
Confirm happened	18.4	31.9	42.9

The finding according to the age band analysis on the occurrence of SNMC is accounted for in Table 5 above. First of all, the SNMC is happening to all three age band of people. The

percentage is spiking up when the age is progressing up. Base on the confirm happened cases, 31.9% of respondents in the middle age band (40 to 50 years old) as encountering a SNMC which is fundamentally higher than the lower age band (40 years old) where just 18.4% revealed as having SNMC experience. The most importance finding is that a highest rate of 42.9% of the respondents in upper age band (beyond 50 years old) detailed as has encountered SNMC.

From this statistical data, one can conclude that all level of age bands has suffered from the SNMC in a quiet corner without any loud signal which is waiting its turn like a docile lamb to be slaughter in the abattoir. The young adult has started experiencing SNMC. However, an obvious outcome from this study shows that the social neuroscience midlife crisis is moving toward reverso context, where the SNMC is now happening beyond the midlife progression. The older one get, the higher the change of having such form of crisis. The most alarming fact discovered from this research is that, in every two Malaysian who are above 50, close to one of them are having social neuroscience middle crisis silently. This is really something which call for a more in-depth and serious research to be done to curb the situation before it is getting worsen.

If the two categories of people (confirmed happened + high probability of happening) are added together, the results are remain the same.

- Lower age band: 20.4%
- Middle age band: 39.1%
- Upper age band: 45.5%

RQ2. Are there glaring gender distinction of social neuroscience midlife crisis experienced by an individual in Malaysia?

Gender differences often shows the result differences for the midlife experience (Fredriksen-Goldsen et al., 2018). Gender differences shows difference result too in difference areas. In the area of eliminating fatigue due to the physical activity, the results showed that the difference scores in different gender too (Colovic, 2020). Emotional experience in midlife for ladies are higher in rates (Brody et al., 2018). For this reason, the cohort of 220 respondents comprises of 105 ladies and 115 gentlemen taken part in this research study to test the gender differences in term of their experience of SNMC and the domains. Table 6 beneath is accounted for the probability of the self-portrayed midlife crisis occurrences according to gender. The result shows that the distinctions concerning the experience of SNMC among gentlemen and ladies are not much of the different in Malaysia.

- There are 6.2% (G:35.7% - L:29.5%) larger number of gentlemen encountering social neuroscience midlife crisis as compared to ladies.
- When the people who portrayed themselves as most likely to experience a social neuroscience midlife crisis is added to the number who experienced it, then the contrast among gentlemen and ladies is just a small gap of 4% (G:35.7+3.5) – (L:29.5+5.7).

Table 6

Percentage of SNMC occurrence to 82 participants by gender

	Ladies (%)	Gentlemen (%)
Not happened	41.0	40.9
May happened with low probability	23.8	20.0
High probability of happening	5.7	3.5
Confirm Happened	29.5	35.7
Total	100.0	100.0

As for the domains toward the social neuroscience midlife crisis is concern, table 7 shown the results by the full cohort of 220 who give their personal understanding of the subject of SNMC. Three categories has found. First its concern about their physical development, a sudden realization that they are aged now and the new generation has coming out to replace them. Second its concern about the interiority, where the inner values conflict taken place which propel them to compromise their values for something else not of their own choice. Third its concern about the stagnation where the unfulfilled dreams and none achievement in their life because of the missing out opportunity in their most productive years. The data shows that ladies have a 6.7% more significant level of internal conflict than gentlemen. While gentlemen's anxiety of death and maturing is 5.5% higher than that of ladies. Nonetheless, these distinctions are not viewed as adequately critical enough to reach any genuine inferences. Thus, Gender doesn't appropriately appear to be a critical directing variable for encountering a social neuroscience midlife crisis as indicated by the respondents in the study.

Table7

SNMC definition themes of 220 participants by gender

	Ladies	Gentlemen
Getting old concern	16.2	21.7
Internal conflict concern	47.6	40.9
Stagnation concern	31.4	31.2
Don't know	4.8	6.1

RQ3. Does social neuroscience midlife crisis has delayed due to the expanded life span in Malaysia?

Base on the popular belief by the general public, majority perceived the middle age band (40 to 50 years of age) as the durational point where an individual is stepping into their midlife (Jackson, 2020). Such perception of age has been adopted for the last 40 years since the work of Tamir (1982); McAdams (1993) had to suffice for this current research study. Following are the results obtained from qualitative self-portrayed SNMC experience taken from table 5.

Table 8

Percentage of people who has SNMC

Age Band	Affirmative happened	Affirmative with high probability
Lower age band	18.4	20.4
Middle age band	31.9	39.3
Upper age band	42.9	45.5

Base on the self-portrayed finding, despite that each stages of age band has a number who suffered from SNMC, nevertheless, the outcome shows by the respondents who claimed to have SNMC does gave a projection that the occurrence of this event has significantly raised from middle age band to upper age band now in Malaysia.

Discussion

There are four consequence drawn from this study.

- i. Social neuroscience midlife crisis has delayed due to the expanded life span in Malaysia. The individuals above 50 has the highest percentage of the occurrence as compare to those whom are in the middle and the lower age band. Although the figure is still high amongst the middle age ground. For individual below 40, than in the transition period (between 40 and 50 years) and under 40 years of age.
- ii. Gender difference for the experience of social neuroscience midlife crisis are not glaring. Ladies and gentlemen in today's society setting are equally severe which is no longer tilted to one side of the gender.
- iii. The domain concerns of SNMC has somehow take a different road. Two main areas of concerns. The personal advancement is the key constant personal demand as the people are affected by their static life condition which is term as "human hibernation". The individual who are in the upper age band (above 50 year old) concern about their demise and their physical development, which in this study the researcher term it as "Life Fading Episode", almost double up the frequency as compare to the middle age band respondents, and almost quadruple as often as those in the lower age band respondents.
- iv. The SNMC has progress and delayed to the older generation parallel to the life span expansion.

Conclusion

Two SNMC dimensionality from MPEQ which is named as human hibernation and life fading episode concerns were established and can be used to measure the extent to which a person will experience a social neuroscience midlife crisis. Comparatively, three SNMC was conceived from the self-portrayed personal experience as social neuroscience midlife crisis: Career static issues. Time lapsed issues and individual inward values clash issues. There are 37.7% population in Malaysia who are struggling from SNMC who are highly probable to have SNMC. Which the age band for an individual who is struggling from SNMC is slowly moving toward to the older age band. Generally, there is no different between ladies and gentlemen who are suffering from SNMC. The current researcher was also able to replicate the research findings by Wethington (2000) in regard to the number of self-portrayed definitions and experiences of SNMC. A similar percentage of people in Malaysia, as in the USA, believed they had experienced a SNMC. However, when a comparison between the self-portrayed experience approach with the more systematically precise MPEQ approach revealed that the frequency of self-portrayed SNMC was significantly over projected, as such a thorough MPEQ finding is more comprehensive in the result achieved.

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