Coping with Loneliness among the Elderly: An Interpretive Structural Modeling of Self-Management Coping Strategy

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Abctract: Studies have reported that older people are at higher risk to succumb to loneliness due to a number of prevalent factors which prevent or limit their social activities. Past studies concured that loneliness if left unattended could lead to declining of physical health, depression, cognitive impairment and even suicidal. Therefore, investigations into appropriate strategies in managing loneliness among the elderly should be a continous effort. Contributing to the investigations, instead of adding to external interventions, this study aimed at investigating how the elderly could cope with loneliness through self-management srategies. In detail, the objective of the study is to propose a self-management coping strategy model as intervention to aid the elderly in Malaysia to cope with loneliness. The model was constructed through integrated expert's views managed via Interpretive Structural Modeling (ISM) Technique. About (84) experts from various backgrounds such as academics, ex-patient of loneliness, retired professionals and old folk's home caretakers were selected to give the input to develop the model. The outcome of the study resulted in a network of 16 self-management coping strategies to map a holistic guide for the elderly in managing loneliness effectively. The outcome of the study would implicate how the elderly could cope with loneliness through self-management strategies as a viable alternative to external aid.

Key words: Self-management coping strategy, elderly, loneliness coping strategies, interpretive structural modeling, investigations

INTRODUCTION

Loneliness among elderly people is a prevailing social phenomenon which has received considerable critical attention. Past research findings have exhaustively indicated various adverse effects of loneliness on the elderly. Derbyshire argued to the extent that loneliness is more potent than smoking to the extreme that loneliness may lead to suicide ideation and parasuicide (Stravynski and Boyer, 2001), Alzheimer's disease and other dementia (Radowitz, 2012; Wilson et al., 2007). Previous research not only showed that ageing is associated with loneliness among the elderly (Valtorta and Hanratty, 2012) but various findings have also reported that the prevalence of feeling lonely sometimes or often/modest or severe seems to range.

Between 20-50% for people aged 65 year or older (Dykstra, 2009; Golden et al., 2009). Factors associated with lower psychological wellbeing (Cacioppo et al., 2015) or worse health behaviors and poorer health

(Stickley et al., 2013) appeared as the major reasons for loneliness. Studies have added that older people are at higher risk of experiencing loneliness especially due to death of spouses and close friends, onset of disability and illness (Mansfield and Gill, 2007; Dahlberg et al., 2015), loss of contact with friends/relatives, lack of supportive community and lack of acceptable social opportunities (Goll et al., 2015) which prevent or limit social activities. Loneliness can be problematic regardless of intensity and is likely to be unresolved, if left unattended. Therefore, providing or guiding strategies for managing loneliness are essential.

Probing into what constitutes loneliness, Dykstra (2009) suggested that it is associated with being invisible to others, feelings of losing the spirit, feeling sad, empty and anxious. The sense of hopelessness could be temporary but also a reflection of disappointment over the person's life situation with no future hope for improvement (Holm et al., 2013).

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In terms of loneliness treatment, past studies have discussed various interventions to treat or manage loneliness among the elderly ranging from nursing care, therapy, pharmological treatment or the combination of these interventions (Cacioppo *et al.*, 2015). Previous research has also shown that elderly people may 'improve' or 'recover' from loneliness, although these number tend to be fairly small (Dahlberg *et al.*, 2015; Victor and Bowling, 2012). Self-management strategies were also investigated as one of the viable and alternative treatment which could be employed by the elderly who suffered loneliness. Among the findings, self-management abilities were found to have significant relationship to well-being and depression among older people (Cramm *et al.*, 2012ab). Bucknall *et al.* (2012) in their exploratory study on patients with Chronic Obstructive Pulmonary Disease (COPD) found that the group of patients who were able to self-manage their condition recorded significant reduction in COPD resubmission compared to their counterparts who had lesser ability to manage. This underscore the important role of self-management coping skills among patients in dealing with their condition as in the context of the study, how the elderly could cope with loneliness through self-management coping skills.

In the concept of self-management coping strategies, the theory of Self-Management of Abilities (SMA), Cramm *et al.* (2012ab), identified six self-management abilities having a positive frame of mind being self-efficious taking initiative investing in resources for long term benefit taking care of a variety of resources taking care of resource multifunctionality. Although relative numbers of researches have been carried out on loneliness among elderly people, a holistic mechanism in self-management strategies to cope with loneliness has yet to be established. This study is based on how professionals perceive loneliness and what they consider being important for the psychological wellbeing of elderly people.

Focusing on the self-coping intervention, the aim of this study was to develop and propose a Self-Management Loneliness Coping Strategies Model among the elderly in Malaysia. A focus on the understandings Self-Management Loneliness Coping Strategies among the elderly is critical because this information has the potential to inform, support and shape strategies designed in order to support the everyday needs and lives of elderly people.

MATERIALS AND METHODS

The method employed in the investigation was the Interpretive Structural Modeling (ISM) Method. This method or technique is known as a management decision-making tool that interconnects ideas of individuals or groups to facilitate an understanding of a complex situation using a map of relationships between the many elements involved in the complex decision situation (Charan *et al.*, 2008).

ISM begins with identifying the variables of the issue at hand followed by the literature sought of specific criteria for the model. In this study, the issue is to determine self-management loneliness coping strategies among the elderly based on expert's views. This is followed by problem-solving session in a group of experts with the knowledge of the issue. Then, a contextual relation phrase is identified to best connect the variables based on the context of the issue. A Structural Self-Interaction Matrix (SSIM) is developed based on pair-wise comparison of the variables and transitive logic. The SSIM is then transformed into a reachability matrix with the aid of discrete mathematics. Finally, depending on the partitioning of the variables, a structural model called Interpretive Structural Model (ISM) is produced. The model is interpreted and evaluated by the experts to produce a solution or at least a solid understanding of the issue. Based on the ISM process, the self-management loneliness coping strategies among the elderly were determined through three phases.

Phase 1: Identifying and ranking of self-management loneliness coping strategies among the elderly through modified Nominal Group Technique (NGT). This was done using a set of 'voting' questionnaire to identify and agree on the list of self-management loneliness coping strategies among the elderly. The participants voted on the self-management loneliness coping strategies among the elderly that they personally believe have significant impact.

Phase 2: Develop the model though ISM session. The final list of self-management loneliness coping strategies among the elderly was then inserted in the ISM software to facilitate development of the factor model through pair-wise comparison of the elements based on contextual and relation phrase. The contextual phrase proposed was 'In determining the most significant self-management loneliness coping strategies among the elderly, the strategy...' and the relation phrase was 'MUST be more significant than the coping strategy'.

Phase 3: The model was then further deliberated based on the model. This phase also serve to evaluate the model through the interpretation.

The participants were a panel of experts. Dalkey and Helmert (1963) defined experts as individuals who are knowledgeable in a certain field while Adler and Ziglio (1995) stressed that the selection of experts should be based on five 'expertise' requirements) knowledge and experience with the issues under investigation) capacity and willingness to participate) sufficient time to participate in the study) effective communication skills High interest and committed to the objective and outcome of the study. The expert panelist in this study consisted of about (12) academics who profess and publish in elderly studies with at least 15 year's experience, about (22) elderly (ex-patient of loneliness/retired professionals of least 60 years of age), (14) professionals who have ageing parents, about (18) elderly home caretakers, about (6) gerontologists, about (4) representatives from the home ministry (government officials) and about (8) representatives from non-government organizations. The selection of experts from diverse backgrounds were intended to suffice development of a holistic model of self-managed coping strategies for loneliness which included viewpoints from as many perspectives as possible relating to elderly loneliness. Hence, the total numbers of experts employed for the study was about (84).

RESULTS AND DISCUSSION

The first objective of the expert deliberation session is to identify a list of significant self-management loneliness coping strategies among the elderly. Based on Phase 1 of the deliberation session, the participants (experts) agreed upon the list of coping strategies as the following:

- Able to define loneliness (e.g., difference with solitude)
- Acceptance of loneliness (e.g., accept that he/she suffers from loneliness)
- Practicing and maintaining positive expectation
- Engage in social activities (e.g., as volunteers in social activities)
- Maintain belief in personal competence or value.
- Put in efforts need to be happy
- Self-motivation through own initiative (e.g., having a hobby, investing)
- Realize own strength and weakness
- Stability of emotion
- Strengthen existing relationship (e.g., Maintaining relationship with close family)
- Maintaining basic needs (e.g., food and drink)
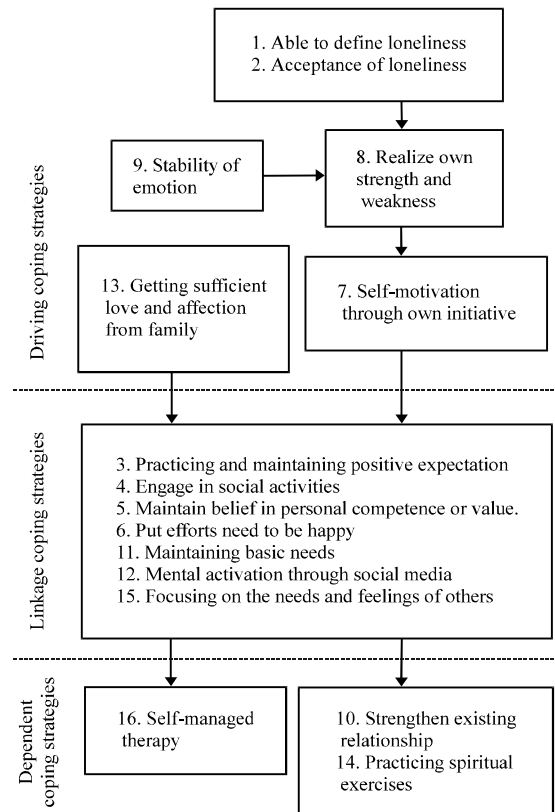- Mental activation through social media (e.g., online support such as 'Stress Management Forum)

Fig. 1: Self-management loneliness coping strategies model for the elderly

- Getting sufficient love and affection from family
- Practicing spiritual exercises (e.g., praying, fasting, religious activities)
- Focusing on the need and feelings of others (the less attention on self lonely thought and feelings)
- Self-managed therapy (e.g., adopting a pet)

The final list of self-management loneliness coping strategies among the elderly was then inserted into the ISM software in accordance to the priority of elements. The model was then developed based on participant's collective agreement in Phase 2. The model is shown in Fig. 1.

Interpretation and evaluation of the model: As observed in Fig. 1, the model shows that coping strategies 1 (Able to define loneliness) and 2 (Acceptance of loneliness) are indicated as the most significant coping strategies and most influential in driving other self-management loneliness coping strategies among the elderly. Significance of these coping strategies are followed by strategies 9 (Stability of emotion), 8 (Realize own strength

and weakness), 13 (Getting sufficient love and affection from family) and 7 (Self-motivation through own initiative). This interprets that in order to overcome the issue of loneliness among the elderly as self-management to cope with their loneliness, the most important strategy is that the elderly person needs to able to distinguish that they are actually facing loneliness but not aloneness, alienation or solitudethe final result. The experimental result is in Fig. 1 (coping strategy). Once the elderly are able to define that they are lonely, the next strategy would be to be able to come to terms with their loneliness in other words as coping strategy 2 (Acceptance of loneliness). This findings supports past studies which assert that the ability to define and accept loneliness are primary steps in coping with loneliness (Cattan *et al.*, 2003; Graneheim and Lundman, 2010). Based on the model (Fig. 1), both coping strategies 1 and 2 are be used consecutively as they are grouped in a same box.

The model also suggested that once the elderly person is aware of his loneliness and accepts it, he should learn to recognize his own strength and weaknesses (coping strategy 8-realize own strength and weakness). Coupled with the help of emotional stability (coping strategy 9 Stability of emotion), the elderly should then self-manage his/her loneliness though own initiative such as having a hobby or finding an interest in which to spend his/her time (coping strategy 7). Lou and Ng (2012) stressed the importance for the elderly in developing and maintaining dynamic daily rhythms; in other words the elderly should keep themselves occupied with a daily interest to alleviate loneliness. Another important driving coping strategy is coping strategy 13 (Getting sufficient love and affection from family). The literature has exhaustively stressed the support of the family in helping the elderly to cope with loneliness (Varghes and Elangovan, 2014). Varghes and Elangovan (2014) in their study on emotional health among elderly discovered that weakened family bonds have a negative impact on the social aspects of older adults which could lead to loneliness. Earlier study by Holm *et al.* (2013) reported that high frequency of contacts with family or friends registered satisfaction among the elderly and decrease in their feelings of loneliness. These were especially important in support and treatment of loneliness from a perspective of wholeness. The self-management loneliness coping strategies 1, 2, 7, 8, 9 and 13 are important in driving other coping strategies (Fig. 1). In short without these strategies, other coping strategies are irrelevant. While past studies identify and investigated the coping strategies individually or in clusters, this study, through the model (Fig. 1) demonstrates what and how these coping strategies (1, 2, 7, 8, 9 and 13) are

integrated in the manner of significance as main drivers of self-management coping strategies in relation with other coping strategies in addressing loneliness among the elderly. Based on the model, these self-management loneliness coping strategies among the elderly are interconnected to drive other loneliness coping.

The second phase or the linkage self-management loneliness coping strategies among the elderly consist of strategies that have strong dependence and driving power. These strategies among the elderly are being labeled as important links between the Driving coping strategies and the Dependent self-coping strategies among the elderly. Coping strategies 3 (Practicing and maintaining positive expectation), 4 (Engage in social activities), 5 (Maintain belief in personal competence or value), 6 (Put efforts need to be happy), 11 (Maintaining basic needs), 12 (Mental activation through social media) and 15 (Focusing on the needs and feelings of others) are categorized under this cluster. The overall strategies here stressed upon the involvement of the elderly in social participation and maintaining positive individual emotional stability (Valkenburg and Peter, 2011). The strategies proposed here also support previous studies which identify the pertinent role of social networks in enhancing well-being of the elderly to cope with loneliness, (e.g., coping strategy 4-Engage in social activities and 12-Mental activation through social media). For example, relevant studies discovered that the use of social media via internet encourage communication between the elderly and others which led to decrease in loneliness (Cotten *et al.*, 2013). The third phase consists of dependent coping strategies among the elderly that have weak driving power but strong dependence power. Strategies among the elderly 10, 14 and 16 are classified in this cluster. The matrix interprets that these self-management loneliness coping strategies can be considered significant in contributing to coping in the presence or in support of other strategies among the elderly in the linkages cluster and especially the Independent cluster.

CONCLUSION

The outcome of the study through the development of a self-management coping strategy model for the elderly not only proposed 16 self-management coping strategies to cope with loneliness but more importantly proposed how these strategies inter-connected with each other to render a holistic view on strategies to decrease loneliness. The experts viewed that elderly who suffer from loneliness need to be aided to define loneliness and accept being lonely. Once this stage is completed,

stability of emotion through positive values on oneself needs to be established. The next step would be establishing and maintaining dynamic daily rhythm (Lou and Ng, 2012) through daily activities, hobbies, family support and finally contacts with friends and society. However, this model is a prototype model in viewing how elderly could be aided to cope with loneliness through self-management strategies.

RECOMMENDATIONS

Further, studies could be conducted in exploring further into the strategies used, for example through cross-disciplinary studies with geriatrics or a similar medical field to develop elaborated strategies to cope with loneliness.

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