JOURNAL OF CRITICAL REVIEWS

ISSN- 2394-5125 VOL 08, ISSUE 02, 2021

LONELINESS AND MENTAL HEALTH AMONGST INDIANS WORKING IN ABU DHABI, UAE

1ST AUTHOR: HITESH MOHAN, RESEARCH SCHOLAR DEPARTMENT OF PSYCHOLOGY, LOVELY PROFESSIONAL UNIVERSITY, JALANDHAR, PUNJAB, INDIA, HITESH.41800237@LPU.IN
2ND AUTHOR: DR. ZAHOOR AHMED LONE, ASSISTANT PROFESSOR, DEPARTMENT OF PSYCHOLOGY, LOVELY PROFESSIONAL UNIVERSITY, JALANDHAR, PUNJAB, INDIA
ZAHOOR.20966@LPU.CO.IN

Abstract
The high prevalence of loneliness has been evidenced to be directly associated with the risk of acquiring mental health disorders such as anxiety, depression and even susceptibility to suicide ideation if not address with long term mitigation practices. The risk of loneliness and mental health disorders have been evidenced to be higher across individuals living away from their native homelands. The Indian population has been estimated to comprise of one of the largest communities of expatriates residing in the UAE. It has been postulated that expatriates, though living a seemingly prosperous life, often encounter a range of adverse circumstances such as, loneliness, occupational distress, and concerns on occupational security which in turn, pave the way for increase prevalence of mental illnesses such as depression, stress and anxiety. Thus, the followed research aimed to evaluate the prevalence of loneliness, state of mental health and the subsequent risk of mental health disorders across Indians working in Abu Dhabi, UAE. To address the same, a quantitative cross-sectional design, coupled with data collection on demographics, mental health and social functioning were collected, using self-reported questions such as the General Health Functioning-28 and Social Functioning Questionnaire. Based on such findings, the sample was found to be equally distributed with respect to their risk of mental health illnesses and high level of social functioning, possibly due to equal inclusion of both participants who were living alone as well as not living alone. Additionally, the equal distribution of such risk as well as high levels of social functioning may also be attributed to demographic factors like age, education and occupational levels. There is thus a need to conduct further research on the role of specific demographic factors in influencing mental health status and social functioning across Indian expatriates residing in the UAE.
Keywords Loneliness, Mental Health, Depression, Social Functioning, Abu Dhabi

Introduction

The high prevalence of loneliness has been evidenced to be directly associated with the risk of acquiring mental health disorders such as anxiety, depression and even susceptibility to suicide ideation if not address with long term mitigation practices. The risk of loneliness and mental health disorders have been evidenced to be higher across individuals living away from their native homelands (Bierwiaczonek&Waldzus, 2016).Thus, with this respect, the following paper aimed to evaluate the prevalence of loneliness across the population of Indians residing in Abu Dhabi, the United Arab Emirates (UAE), as well as their potential risk to acquire mental health or psychiatric disorders. For the purpose of evaluating the same, this research implemented a range of self-reported questionnaires, the results of which, were then statistically analyzed to demonstrate their relevance to the outlined aims and objectives.

Research Background

Loneliness has been described as an unpleasant and undesirable emotional reaction or feeling in response to being alone or in a situation perceived to be one of isolation. In addition to living alone, factors like poor self-esteem, lack of social support, prevalence of existing mental or physical health disorders as well as situations of grief and loss, such as the loss of a spouse, can also trigger negative emotional responses and thus, the feeling of loneliness across individuals (Hack-Polay, 2020). Loneliness can also be associated with demographics factors, like age (as in the case of elders residing in aged care centers), education (students residing away from their families while studying abroad) and marital status (individuals who are divorced or separated) (Doki, Sasahara&Matsuzaki, 2018).

At present, the growing prevalence of loneliness across the global population, has been regarded as concerning worldwide problem. As per the findings reported by The Economist and the Kaiser Family Foundation (KFF), in the form of a survey, it has been reported that more than two adult individuals from a group of ten, are estimated to feeling lonely, both across the United Kingdom (23%) as well as across the United States (22%) (Howe, 2019).

ISSN- 2394-5125 VOL 08, ISSUE 02, 2021

Additionally, according to another report by the European Commission (2018), it has also been estimated that approximately 30 million of Europeans have been reported toreside in loneliness, while an estimated 75 million having been reported to communicate with family or friends only once a month. Such data thus exhibit the global nature of the issue of loneliness.

Additionally, as per a recent news article published in the Gulf, the Indian population has been estimated to comprise of one of the largest communities of expatriates residing in the UAE, amounting to approximately 3.3 million. The reason for the same is the rising rates of Indians achieving remarkable professional achievements across professions such as medicine, information technology, engineering as well as chartered accountancy resulting in increased career prospects across nations others than their native homeland (Dhar, 2019). However, in another news report published specially in the UAE, it has been postulated that expatriates, though living a seemingly prosperous life, often encounter a range of adverse circumstances such as, loneliness, occupational distress, and concerns on occupational security which in turn, pave the way for increase prevalence of mental illnesses such as depression, stress and anxiety. Considering this existing background on an extensive Indian population and risk of mental health diseases due to loneliness reported in the context of the UAE – there is thus a need to implement further research on Indian expatriates currently residing in this region (Mannan, 2017).

Research Rationale

If not controlled, living in loneliness for prolonged periods of time, have been evidenced to increase the risk for adverse physiological as well as psychological consequences. Chronic or prolonged loneliness have been evidenced to increase the risk of acquiring adverse psychiatric concerns such as depression, anxiety as well as increased risk of individuals engaging in poor lifestyle choices and behaviors such as smoking, alcohol consumption, intake of a nutritionally imbalanced diet, drug or substance abuse and suicide ideation (MUcci et al., 2019). Such risks, as a result of loneliness, are likely to pave the way for adverse physiological impacts such as: cardiovascular diseases, diabetes, self-harm and increased stress. Additionally, migrants or expatiates who are elderly and are living lonely, are also at an increased risk of experiencing falls, fractures and temporary or complete loss of immobility. Thus, the increased risk of health, especially mental health adversities due to the loneliness and the importance of immediately addressing the same with evidence based clinical interventions thus form a major rationale underling the completion of this research (He, An & Berry, 2019).

Additionally, as discussed previously, the major section of the population in the UAE comprise of Indian expatriates. While there exist some form of informal, publicly accessible information with regards to the prevalence of loneliness across Indian expatriates residing in the UAE, there is limited evidence concerning the prevalence of the same, as well as the risk of psychiatric disorders across those Indian expatriates residing in Abu Dhabi (Hack-Polay& Mahmoud, 2020). Further, in order to provide assistance to such at-risk populations, mental health interventions specific to demographic backgrounds of such migrant individuals must be considered – another area of limited research – since loneliness is caused due to a multitude of risk factors. Thus, the prevalence of limited research as well as the importance of providing timely, person centered interventions to expatriates living along, thus form additional important rationales for completion of this research (Giorgi, Montani, Fiz-Perez, Arcangeli&Mucci, 2016).

Aims and Objectives

Thus, as per the given research background, the aim of this research is: 'To evaluate the prevalence of loneliness, state of mental health and the subsequent risk of mental health disorders across Indians working in Abu Dhabi, UAE.' In doing so, this research addresses the following research objectives:

1. To explore the prevalence of loneliness and risk of mental health disorders across Indians working in Abu Dhabi, UAE.
2. To examine the nature of social functioning across Indians working in Abu Dhabi, UAE.
3. To assess the role of demographic factors, such as gender, occupational position, income and education, in influencing the risk mental health disorders and loneliness across Indians working in Abu Dhabi, UAE.
4. To suggest recommendations and strategies based on which, Indians working abroad can reduce their risk of mental health disorders despite loneliness.

Research Questions

Hence, the findings of this research focused on providing empirical and evidence-based answers to the following research questions:

ISSN- 2394-5125 VOL 08, ISSUE 02, 2021

1. What is the prevalence of loneliness and associated risk of mental health disorders across Indians working in Abu Dhabi, UAE?
2. What is the extent to social functioning is affected or influenced across Indians working in Abu Dhabi, UAE?
3. What is the role of demographic factors, such as gender, occupational position, income and education, in influencing the risk mental health disorders and loneliness across Indians working in Abu Dhabi, UAE?
4. What are the strategies based on which, Indians working abroad can reduce their risk of mental health disorders despite loneliness?

Research Hypothesis

Thus, the findings of this research were evaluated against the following hypotheses:

- **Alterative hypothesis:** Indians residing in the UAE, are at a statistically significantly increased risk of experiencing poor mental health status and inadequate social functioning due to loneliness.
- **Null hypothesis:** Indians residing in the UAE, are not at a statistically significantly increased risk of experiencing poor mental health status and inadequate social functioning due to loneliness.

Research Significance

The importance of the findings of this research, lie in their ability to inform the public health workforce, especially in the context of India and UAE, on the importance of addressing the mental health needs of expatriates living alone. The findings of this study additionally have future implications and significance, in the form of educating such expatriate individuals, especially Indians, on the possible demographics factors which can increase the risk of mental health issues while living abroad and alone, as well as possible strategies with which, they can mitigate the same (Wright-St Calir&Nazar, 2019). Additionally, the findings of this research will also prove to be useful in educating or guiding mental health practitioners, across both India as well as abroad, on specific risk factors to asses for while examining the risk of mental health disorders across expatriates, especially those who are living abroad. Further, the findings of this research also prove to be significant in informing public health and governmental workforce, across both India and the UAE, on the importance of collaborating with each other in order to facilitate development of policies specifically suited to address the mental health needs of Indian expatriates living alone (Banerjee et al., 2020). Lastly, the findings of this research will also be useful for researchers to conduct further research on the associations between loneliness, state of mental health and specific demographic factors, across Indians residing alone and away from their native lands (Wright-St Clair et al., 2018).

Research Dissemination

It is worthwhile to note that the findings of any research paper, can only be applied successfully to practical environments and real-life settings, when the same are disseminated effectively (Ramis& Conception, 2020). Thus, to address the same, it is expected that the findings of this research will be disseminated across both online as well as offline platforms. The former will comprise of publishing the findings of this research across academic and scholarly journals which can be accessed online, so as to enable mental health practitioners, researchers as well as governmental officials to access the same for future implementation in professional practice (Thoma et al., 2018). To facilitate dissemination of research findings across the public, and thus, the targeted population of migrants living alone, the same will also be published in the form of blogs, press releases, editorials and newspaper articles, in lay language for improved understanding, which can be accessed both online as well as offline (Brown et al., 2017). Lastly, the findings of this research will also be disseminated across public platforms such as seminars, workshops and conferences, both nationally as well as internationally, so as to further facilitate knowledge transmission across professional stakeholders such as researchers, academicians and healthcare practitioners (Rabin & Brownson, 2017).

Statistical Analysis/Methods

Research Philosophy

In order to obtain findings specific to the research aims and objectives, the design of this study was formulated as per the research philosophy of positivism. According to this research philosophy, the working and application of a phenomenon or issue can only be studied and validated with the help of objective observation of the same (Park, Konge&Artino Jr, 2020). While practicing a positivist research philosophy, it is expected that the researcher will study the chosen issue or phenomenon to be studied via collection of objective data followed by interpreting the same within objective and quantitative analytical methods. Since this research focused upon understanding the

relationship between loneliness and nature of mental health status across Indian expatriates in the UAE, by collecting real life quantitative data and statistical analysis of the same, adoption of an positivist research philosophy was considered to be the most appropriate (Ryan, 2018).

Research Design

This research was based upon a quantitative research design. A quantitative research design is associated with the direct collection of primary empirical data by the researcher followed by objective statistical analysis of the same, in order to evaluate its relevance to the chosen hypothesis (Leavy, 2017). Since this research comprised of the objective analysis of prevalence of loneliness and risk of mental health disorders across the Indian population residing in the UAE, a quantitative research design was considered as the most important. Specifically, as a part of quantitative data collection and analysis, a cross sectional research design was chosen for this study. A cross sectional research design is one which is associated with observing and evaluation the relationship between two variables at a given point of time and across a specific population subset (Rahi, 2017). For this study, a cross sectional study design was considered as the most appropriate since it focused upon objectively evaluating the associations between loneliness, mental health and social functioning across a given section of the Indian population and at a given point of time.

Research Methodology

The independent variable for this study was the prevalence of loneliness while the risk of poor mental health or psychiatric diseases and inadequate social functioning were considered as the dependent variables since they were assessed against the independent variable. In order to obtain primary data relevant to the research aims and objectives, quantitative methods like self-reported surveys were used (Saleh &Bista, 2017). Self-reported surveys are useful since they are relatively simple to understand by both researchers and participants and facilitate the collection of a large amount of data within a limited time frame. Considering that this research focused upon evaluating the prevalence of loneliness, the risk of mental health disorders and poor social life functioning across a seemingly large population, that is, the population of Indian expatriates in the UAE, administration of self-reported surveys were considered as the most appropriate (Günther, El Shafey& Marcel, 2016).

Data Collection Tools and Administration

Thus, the surveys which were used for the purpose of collecting primary, quantitative data relevant to the aims and objectives of study, two survey questionnaires, the General Health Questionnaire – 28 (GHQ-28) and the Social Functioning Questionnaire (SFQ) were used. The GHQ-28 is a 28 item multiple choice based questionnaire assessing the mental health and wellbeing as well as the prevalence of psychological disorders in individuals using a 4 point Likert scale where: 0 = Better than usual/not at all, 1 = same as usual/no more than usual, 2 = worse than usual/rather more than usual and 4 = much worse than usual/much more than usual. The scoring ranges from 0 to 84, with more than 24 indicatives of the risk of psychiatric disorders (Hjelle et al., 2019). The SFQ is used to measure the ability of an individual to demonstrate sound social engagement in both personal as well as community activities and is specifically useful for assessing individuals post treatment or rehabilitation as an indicator of quality of life and wellbeing. It comprises of a total of 5 areas, with 8 multiple choice-based questions, assessing the social functioning of individuals across sections like: Domestic Skills, Self-care Skills, Social Skills Community Skills and Responsibility (Pallathra et al., 2018).

For the purpose of administration of the given data collection tools, the researcher shared the specified questionnaires across social networks to propose to be interested individuals to take part in the research. This was then followed by requesting such acquaintances to share the same with their own social acquaintances resulting in the collection of a total of 848 participant responses. The study was conducted within the month of January' 2020. The data collection period took approximately 30 days to be completed from the start day of initial questionnaire sharing.

Sampling Strategy

For the purpose of recruiting sample participants relevant to the research question, a purposive or convenience sampling strategy was utilized. Purposive sampling strategy is a type of non-probability sampling comprising of participants, with characteristics specific to the research question, only being selected for a study. Since this research is focused primarily on the prevalence of loneliness, mental health status and social functioning across a population which is working and who are Indian, a purposive sampling strategy was found to the most important (Etikan, Musa &Alkassim, 2016).

To ensure the same, the researcher communicated the purpose and details of the study, via virtual platforms, across acquaintances, who were then asked to share the same with their social networks and acquaintances. This process

ISSN- 2394-5125 VOL 08, ISSUE 02, 2021

then resulted in the inclusion of approximately 848 participants as the sample of the study, based on the following inclusion criteria.

1. Indians, aged 21 to 60 years of age to prevent the impact of age as a confounding factor since the both adolescence as well as the elderly are also prone to mental health risks due to age-associated concerns in comparison to adults, which was beyond the scope of this study.
2. Indians working in Abu Dhabi, UAE since the last 6 months or more.

Sample Demographics

Prior to administration of the chosen questionnaires as a part of primary data collection, participants were also asked to share their demographic data, which were then categorized as per the following divisions:

- **Gender:** Male and Female
- **Age:** 21 to 30 years, 31 to 40 years, 41 to 50 years, 51 to 60 years
- **Educational levels:** High School, Diploma, Graduate, Masters
- **Levels of Income (In United Arab Emirates Dirham or AED):** 1000 – 3000, 3001-6000, 6001-9000, 9001-12000, 12000 and above
- **Occupational Positions:** Top level manager, Mid-level manager, other managerial work, no managerial work
- **Living Arrangements:** Categorized and coded as 1 (Living alone) and 2 (Not living alone). 'Living alone' in this case, was used to describe those individuals who were married but were living alone due to work demands away from their native homeland.

Data Analysis

For the purpose of assessing the distribution of participants in terms of demographics, the raw data was analyzed in the form of percentage against a total population (N) of 848 participants. Additionally, the risk of mental health or psychiatric disorders across the sample were evaluated by categorizing the GHQ-28 responses as >24 being psychiatric and <24 being non-psychiatric (Hjelle et al., 2019). The participant distribution across these categories was then calculated using percentages. A similar approach was followed with regards to demographic factors like living arrangements where the distribution of participants living alone or not living alone were evaluated using percentages. Lastly for analyzing SFQ scores, the total means of all the mean scores of participants for each of the five areas of Domestic Skills, Self-care Skills, Social Skills Community Skills and Responsibility. Means values and percentages are useful for the summative calculation of averages from a large amount of numerical data as well as providing insights into the prevalence or distribution of specific factors or research issue of focus (Panis, Schmidt, Bergson and Racine, 2019). Considering that the research focused extensively upon assessing the prevalence of loneliness, the risk of mental health disorders as well as the level of social functioning across an extensive population of Indians, the utilization of percentages and mean values was found to be appropriate. Further, for the purpose of analyzing the relevance of the obtained primary data with respect to the aims, objectives and questions of the researcher, secondary data in the form of a narrative discussion of findings from existing academic research was utilized. Such unstructured form of data analysis thus proved to be useful for extensive discussion of key findings which otherwise would not have been possible with the help of objective, quantitative data (Ruggiano& Perry, 2019).

Reliability and Validity

Despiteconvenience and feasibility, a key issue with regards to the implementation of self-reported data collection measures like surveys are prone to limitations such as social desirability and bias often participants, in an attempt to present their responses as desirable or acceptable, tend to give biased, incorrect answers thus impacting the validity and reliability of the survey (Brenner &DeLamater, 2016). To address the same however, prior to survey administration, the researcher engaged in gentle persuasion wherein all participants were communicated on the importance of maintaining honesty in their responses. Additionally, to further ensure the reliability or applicability of findings to other individuals residing in loneliness, the sampling strategy and participant inclusion criteria was developed with respect to the aims, objectives and research topic of focus. Additionally, to ensure validity and reliability of data collection tools, survey questionnaires which had been validated in previously published academic and scholarly literature were used for this research (Hjelle et al., 2019; Pallathra et al., 2018).

ISSN- 2394-5125 VOL 08, ISSUE 02, 2021

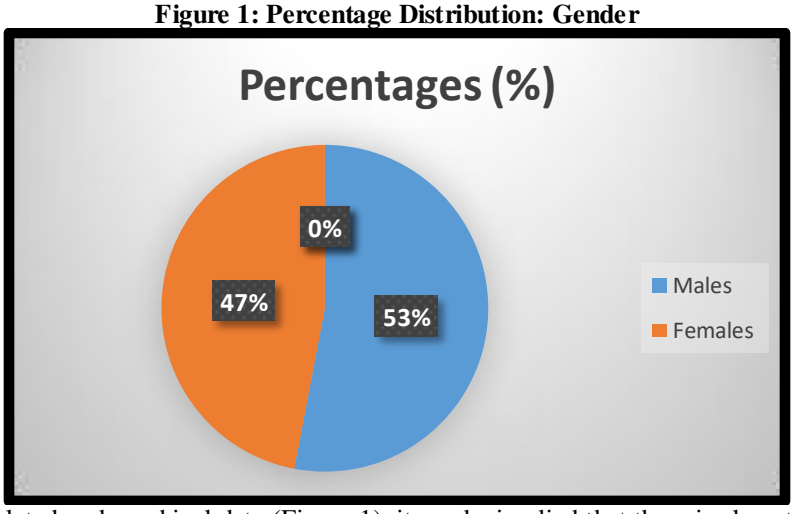
Ethical Considerations

To ensure that this research was respectful to the needs and interests of all the participants and associated stakeholders, certain key ethical considerations were followed. Prior to survey administration, informed consent was obtained, and all participants were assured that their participation is voluntary and autonomous and that lack of the same will not impact the quality of their present lifestyles whatsoever (Miracle, 2016). Additionally, the ethical aspects of veracity were observed with the researcher communicating the details and purpose of the study to the participants. In order to maintain ethical issues of privacy and confidentiality, the names and personal details of all the participants were coded using numbers and participants were assured that data will not be shared with any party or stakeholder other than the researcher, without obtaining their consent. Lastly, for the purpose of ensuring safety and security, the data and personal information collected from participants were stored in a secure online database which was restricted from access by unauthorized individuals other than the researcher (Bracken-Roche, Bell, Macdonald & Racine, 2017).

Results

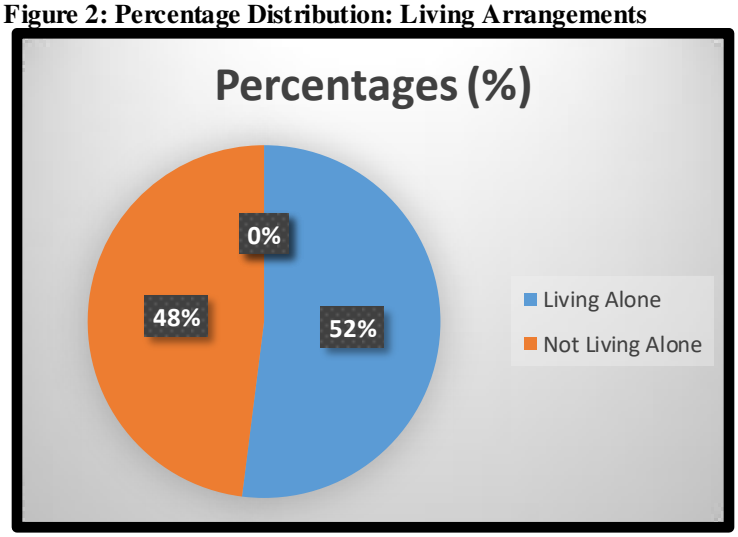
The following sections demonstrate a representation of the key findings obtained after evaluation of the raw primary data obtained from all participants. As mentioned previously, statistical methods such as percentages and descriptive statistics like means were utilized for the same. A combination of both tabulated as well as pictorial presentations have been used for demonstration of key research findings so as to facilitate key understanding with regards to the research aims and objectives.

Figure 1: Percentage Distribution: Gender



As per the given tabulated and graphical data (Figure 1), it can be implied that there is almost equal distribution of males and females within the sample selected for the study (N = 848).

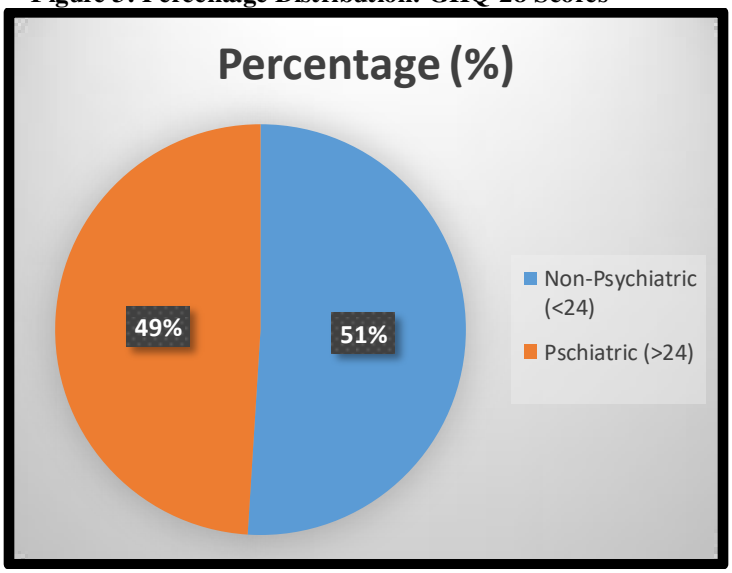
Figure 2: Percentage Distribution: Living Arrangements



ISSN- 2394-5125 VOL 08, ISSUE 02, 2021

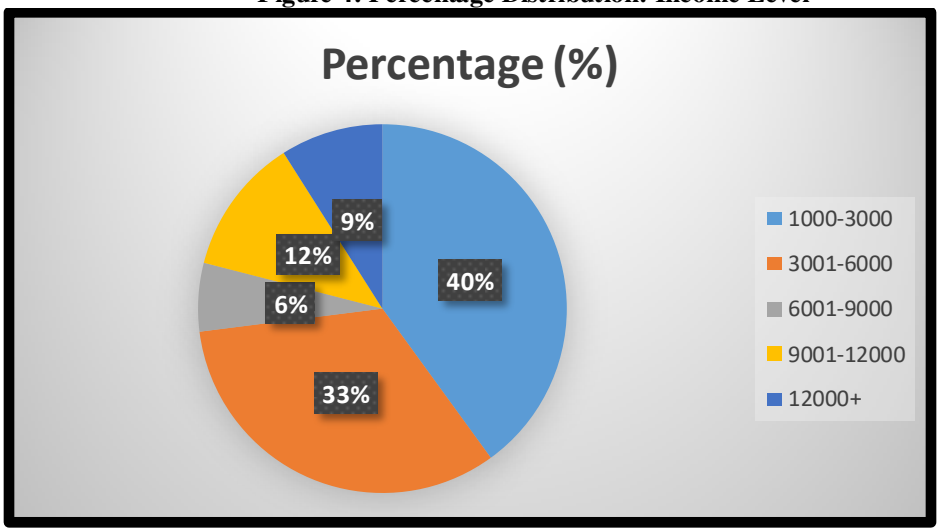
As per the given tabulated and graphical data (Figure 2), it can be implied that there is almost equal distribution of Indians living alone and not living alone in Abu Dhabi, UAE within the sample selected for the study (N = 848).

Figure 3: Percentage Distribution: GHQ-28 Scores



Thus, as presented in the given tabulated and graphical data (Figure 3), there is an almost equal distribution of the Indians at risk and not at risk of psychiatric disorders across the give population included in the study (N = 848) (Hjelle et al., 2019).

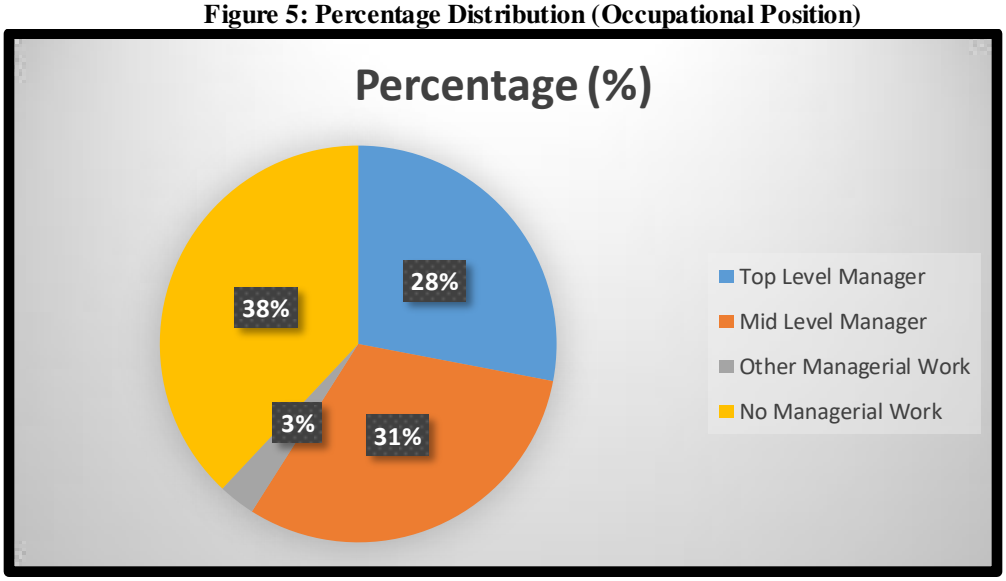
Figure 4: Percentage Distribution: Income Level



As per the given tabulated as well as graphical data (Figure 4), it can observed that a majority of the participants belong to low (40%) or middle income groups (33%), whereas the remaining participants can be observed to belong to higher income groups across the chosen sample (N = 848).

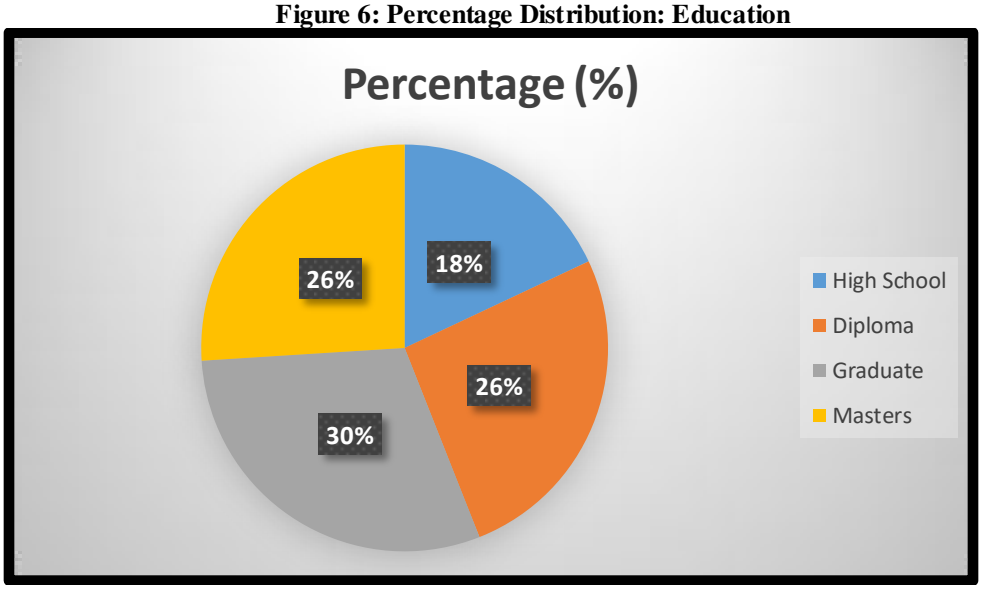
ISSN- 2394-5125 VOL 08, ISSUE 02, 2021

Figure 5: Percentage Distribution (Occupational Position)



Thus, as observed from the given data (Figure 5), it can be observed that a majority of the participants in this population are not involved in any form of managerial work (388), followed by participant with positions associated with middle (31%) or top level managerial work (28%).

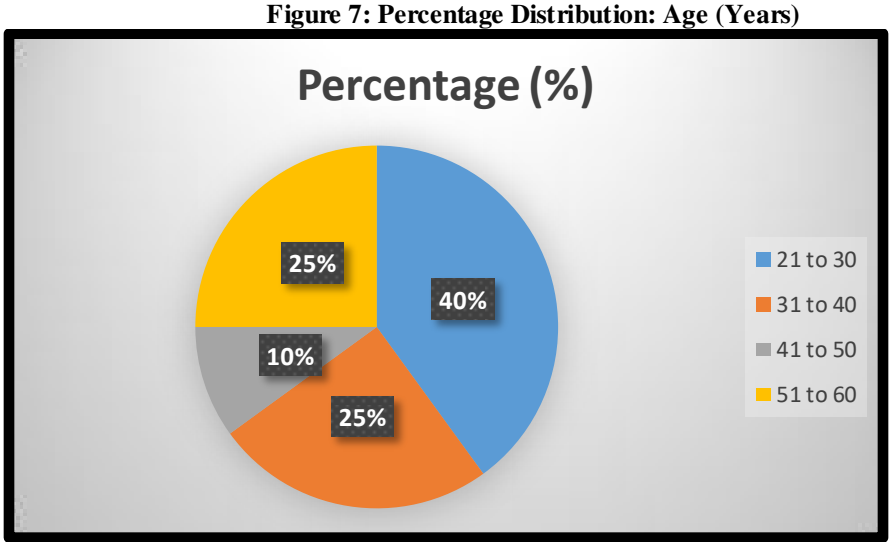
Figure 6: Percentage Distribution: Education



Thus, as per the given graphical and tabulated data (Figure 6), it can be observed that a majority of the participants in the sample had completed their educational level up to their graduation (30%), followed by an equal number of participants having completed their diploma and masters (26%, 26%) and a limited number of participants who had completed their education till high school levels.

ISSN- 2394-5125 VOL 08, ISSUE 02, 2021

Figure 7: Percentage Distribution: Age (Years)



As per the given data (Figure 7), it can be observed that a majority of the participants comprise of young adults (40%), followed by those aged 31 to 40 years (25%), 51 to 60 years (25) and 41 to 50 years (10%), across the total sample participants of study (N = 848).

Table 8: Total Mean Scores of SFQ

SFQ Areas	Total Mean Scores	Level of Social Functioning
Self-Care	3.74	High
Domestic	3.76	High
Community	3.73	High
Social	3.68	High
Responsibility	3.73	High

The given tabulated data indicate the mean levels of social functioning recorded the entire sample of participants (N = 848), across five areas of self-care, domestic, community, social and responsibility. As per the given data (Table 8), it can be observed that almost all participants demonstrate a reasonable high level of social functioning, of which however, the 'Social' area reflected the lowest scores. While the score for this area, despite being the lowest, is still reasonable high, it is worthwhile to note that this area of the questionnaire largely measures the extent and abilities to which, individuals participate in social activities in their life. With this respect, the comparatively lower scores thus demonstrate the potential of further examination, which have been expounded upon in the following sections of the paper.

Discussion

Thus, as per the given findings (Table 3; Figure 3), it can be observed that there lie limited differences between Indians with the risk of psychiatric disorders and Indians who do not present with such risks, as per the GHQ-28 scores. Such equal distribution may be due to the fact that the given sample was found to be equally distributed in terms of those who are living alone and those who are not living alone (Table 2, Figure 2). This is because it has been evidenced that prolonged exposure to loneliness and social isolation are likely to increase the risk of mental health disorders such as anxiety, depression, and suicide ideation (Callahan, King &Halversen, 2020). Such risks due to loneliness are also likely to increase across individuals living as expatriates or migrants away from their home since immigration exposes them to novel cultures, practices and lifestyles which often become difficult to adjust to especially in the absence of social support (Ikafa& Perry, 2020). However, the risk of such illnesses due to loneliness have been evidenced to be mitigated when individuals are surrounded by social networks other than their spouses or family members in their homes, such as peers, workplace colleagues and neighbors (Callahan, King &Halversen, 2020). Additionally, it must be noted that feelings of loneliness are perceived and subjective in nature, which is why, an individual with extensive social networks may not perceive themselves to be lonely despite living alone. There is thus a need to explore further on the prevalence and role of social support networks for Indians living alone in the UAE (Kanstrén&Mäkelä, 2020).

ISSN- 2394-5125 VOL 08, ISSUE 02, 2021

However, it has been evidenced that the risk of loneliness varies with age. While young adults and adolescents may be at risk of mental health disorders due to increased peer, familial and academic pressures, the prevalence of peer support networks often mitigate loneliness and the risk of the same. Such risks, however, may be higher with respect to those who are older due to limited mobility, or age-associated loss of spouse or emergence of age-associated health concerns. It is worthwhile to denote that the sample for this research comprised almost of equal proportions of young adults followed by middle aged adults with an absence of elderly, thus resulting in equal distribution of scores pertaining to mental health (Sterle, Fontaine, Moi &Verhofstadt, 2018).

It has been evidenced that loneliness and poor mental health can be mitigated by factors such as education and occupation, since both improve awareness and financial ability of individuals to access healthcare or social resources for improved health and wellbeing. It must be noted that the sample in this study is largely comprised of individuals who have reached higher educational levels as well as those individuals with limited income or employment in middle level managerial jobs. Such sample distribution thus could have caused the equal distribution of mental health risk thus paving the way for further research on the role of such factors in the future (Warinsowski&Laakkonen, 2020).

Additionally, the findings also revealed (Table 8) that almost all participants demonstrated a high level of social functioning in terms of all areas as per the SFQ scores. Such findings, however, do not correlated with existence evidence. It has been evidenced that individuals exposed to loneliness and social isolation are likely to demonstrate the low level of social functioning. However, it must be noted that social functioning comprises several areas such as self-care and domestic as well as community based responsibilities, which otherwise are likely to be restricted across elderly residing alone due to age-associated limitations in terms of mobility (Reza, Subramaniam & Islam, 2019). It is worthwhile to note that a majority of this sample comprised of young adults or middle-aged individuals, free from any form of physical comorbidities which may be impacting their social functioning, thus resulting in such high scores. However, in criticism, it must be noted that the 'Social' area reflected the lowest scores (Table 8) (Sterle, Vervoort &Verhofstadt, 2018). While the score for this area, despite being the lowest, is still reasonably high, it is worthwhile to note that this area of the questionnaire largely measures the extent and abilities to which, individuals participate in social activities in their life. With this respect, the comparatively lower scores may demonstrate the risk of loneliness and social isolation especially across Indians living alone in the UAE, and thus call for more specific research (Chen & Lin, 2019).

Implications and Future Directions

Thus, as per the findings of this research, it is recommended that further research be conducted concerning the prevalence of loneliness, mental health status and social functioning, based on specific demographic factors such as gender, age, social support, education and occupation. Additionally, it is recommended that healthcare professionals when addressing mental health issues in lonely expatriates provide interventions specific to such demographic factors. Additionally, it is recommended that governments of both India and the UAE collaborate to develop virtual communication platforms as per which Indians living alone can contact or share their concerns via a helpline (Harper, 2016). Lastly, it is recommended that such individuals access peer support networks or social support groups, referred to by mental health practitioners based on which, they can share and gain assistance with regards to their mental health and loneliness since such groups have been evidenced to mitigate the same (Hofhuis, Hanke & Rutten, 2019). Lastly, it is recommended that the public be educated, on the risk such mental health issues across expatriates so as to facilitate improved awareness and self-care management by individuals. It is also recommend that governments and public health officials collaborate worth each other to develop specific health policies or packages based on which, expatriates living alone can maintain positive quality of life and mental wellbeing despite the absence of social support (Odedra, Blackwood & Thorn, 2018).

Strengths and Limitations

Despite the comprehensiveness of findings, it must be noted that the study is not devoid of certain limitations. One of the first limitations of this study is its cross-sectional design. While cross sectional studies provide insights into the objective relationships between key variables, the fact that they comprise of data collection across a specific point of time, thus limit their ability to provide insights into a possible cause-cause effect relationship between variable across different points of time (Rahi, 2017). There is thus a need to conduct further research on the issue of loneliness and mental health across expatriates using cohort study designs which will provide detailed data on the same, across different life stages or time periods across a selected population considering that the risk of mental health disorders and even loneliness varies due to age (Rahi, 2017). Additionally, the inclusion of only self-reported data collection methods can be implied as a limitation of this study. As mentioned previously, a major section of data collected for this study, was based upon primary data collection methods such as surveys, which are often

highly prone to social desirabilityand biased responses. While the researcher took the time to communicate to participants on the importance of honesty and truthfulness in findings, the risk of bias in responses cannot be fully overlooked. Additionally, it is worthwhile to note that loneliness and its associated perceptions and feelings may be highly subjective in nature and influenced by factors like culture, gender, or age (Warinowski&Laakkonen, 2020). While this study did explore the prevalence of demographic associations in loneliness and risk of mental health disorders, there was limited exploration of specific cause-effect relationships between certain demographic factors, loneliness, and risk of poor mental health. There is also a need to conduct further qualitative research in this area since objective studies like this research, may not accurately capture the true feelings and experiences contributed to loneliness, poor mental health, and social functioning across participants. Restricting the sample to include only Indians is also a key limitation since it limits the ability of the findings to be applied or transferred across populations of diverse ethnicities. It must also be noted that this research merely focused on assessing the prevalence of loneliness and risk of mental health disorders – there is a need to explore further on associations between loneliness and specific mental health disorders using disease specific diagnostic tools, which otherwise have not been covered by this research. Lastly, the sample selected in this research was largely purposive in nature and comprised of inclusion of well-known social networks who were well educated on the details of the study and were already living in the UAE for more than six months, which in turn, can serve to be confounding factor. Since such forms of sampling are prone to bias, there is thus a need to conduct further research using randomization and inclusion of expatriates based on the duration of their stay away from their homeland.

Despite such limitations, this study also demonstrated certain strengths which in turn, hold significance and future implications for further professional research and future practice. Most of the limitations of this study, can be attributed to its limited scope as per the research aims and objectives outlined in the initial sections. It is worthwhile to note that this study was one of the few limited researches to have explored the prevalence of loneliness and associated mental health status and social functioning across Indians – one of the largest populations of expatriates residing in the UAE. With this respect, the findings of this study provide useful insights based on which, future researchers and healthcare professionals can be prompted to explore the associations between loneliness, mental health status and social functioning further with respect to specific demographic factors. Additionally, the extensive sample size of participants as well as inclusion of participants based on the research questions and highlighted problem demonstrate considerable internal validity and reliability. The inclusion of valid data collection tools, which have been used extensively in previous academic research further demonstrate reliability and credibility of data collection and findings. Lastly, this study is one of the few of its kinds to explore loneliness, mental health illness risk as well as level of social functioning simultaneously. Thus, the given comprehensiveness of findings can prove to be useful in prompted future practitioners in developing interventions targeting mental health status and social functioning improvement across individuals facing loneliness based on their specific demographic factors.

Conclusion

This paper thus, provide extensive insights into the relationships between the prevalence of loneliness and possible risk of poor mental health and social functioning across Indians living in the UAE. The high population of Indian expatriates coupled with the risk of loneliness and poor mental health across migrants, formed key rationales underlying implementation of this research. To address the same, a quantitative cross-sectional design, coupled with data collection on demographics, mental health and social functioning were collected, using self-reported questions such as the General Health Functioning-28 and Social Functioning Questionnaire. Based on such findings, the sample was found to be equally distributed with respect to their risk of mental health illnesses and high level of social functioning, possibly due to equal inclusion of both participants who were living alone as well as not living alone. Additionally, the equal distribution of such risk as well as high levels of social functioning may also be attributed to demographic factors like age, education and occupational levels. To conclude there is thus a need to conduct further research on the role of specific demographic factors in influencing mental health status and social functioning across Indian expatriates residing in the UAE.

References

Banerjee, P., Gupta, R., Shaheen, M., David, R., Chenji, K., & Priyadarshini, C. (2020). Exploring adjustment mechanisms of adolescent expat kids from South Asia against sociopolitical stigma. *Journal of Global Mobility: The Home of Expatriate Management Research*. doi: https://doi.org/10.1108/JGM-06-2020-0041.

Bierwiaczonek, K., &Waldzus, S. (2016). Socio-cultural factors as antecedents of cross-culturaladaptation in expatriates, international students, and migrants: A review. *Journal of Cross-Cultural Psychology*, *47*(6), 767-817. doi: https://doi.org/10.1177%2F0022022116644526.

Bracken-Roche, D., Bell, E., Macdonald, M. E., & Racine, E. (2017). The concept of 'vulnerability'in research ethics: an in-depth analysis of policies and guidelines. *Health research policy and systems*, *15*(1), 8. doi: https://doi.org/10.1186/s12961-016-0164-6.

Brenner, P. S., &DeLamater, J. (2016). Lies, damned lies, and survey self-reports? Identity as a cause of measurement bias. *Social psychology quarterly*, *79*(4), 333-354. doi: https://doi.org/10.1177%2F0190272516628298.

Brown, C. H., Curran, G., Palinkas, L. A., Aarons, G. A., Wells, K. B., Jones, L., ... & Tabak, R. G. (2017). An overview of research and evaluation designs for dissemination and implementation. *Annual review of public health*, *38*, 1-22. doi: https://www.annualreviews.org/doi/pdf/10.1146/annurev-publhealth-031816-044215.

Callahan, C., King, J., &Halversen, A. (2020). Blogadapting: Adaptation Experiences among Expatriate Bloggers. *Journal of Intercultural Communication Research*, 1-15. doi: https://doi.org/10.1080/17475759.2020.1765840.

Chen, A. S. Y., & Lin, Y. C. (2019). Speak to your heart: The joint moderating effects of language proficiencies on cultural intelligence and expatriates' work performance. *Jiao Da Guan Li Xue Bao*, *39*(1),119-154.doi: https://search.proquest.com/openview/8ae39d054b5bd49e6aa4bef6d68bbce9/1?cbl=2050701&pq-origsite=gscholar.

Dhar, S. (2019). Indians largest group of expats in UAE. Retrieved 28 September 2020, from https://gulfnews.com/uae/indians-largest-group-of-expats-in-uae-1.66500784.

Doki, S., Sasahara, S., &Matsuzaki, I. (2018). Stress of working abroad: a systematic review. *International archives of occupational and environmental health*, *91*(7), 767-784. doi: https://doi.org/10.1007/s00420-018-1333-4.

Etikan, I., Musa, S. A., &Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American journal of theoretical and applied statistics*, *5*(1), 1-4. doi: 10.11648/j.ajtas.20160501.11.

European Commission. (2018). Loneliness – an unequally shared burden in Europe. Retrieved 28 September 2020, from https://ec.europa.eu/jrc/sites/jrcsh/files/fairness_pb2018_loneliness_jrc_i1.pdf.

Giorgi, G., Montani, F., Fiz-Perez, J., Arcangeli, G., &Mucci, N. (2016). Expatriates' multiple fears, from terrorism to working conditions: development of a model. *Frontiers in psychology*, *7*, 1571. doi: https://doi.org/10.3389/fpsyg.2016.01571.

Günther, M., El Shafey, L., & Marcel, S. (2016). Face recognition in challenging environments: An experimental and reproducible research survey. In *Face recognition across the imaging spectrum* (pp. 247-280). Springer, Cham. doi: https://doi.org/10.1007/978-3-319-28501-6_11.

Hack-Polay, D. (2020). Global South expatriates, homesickness and adjustment approaches. *Public Health Reviews*, *41*, 1-20. Doi: https://doi.org/10.1186/s40985-020-00122-9.

Hack-Polay, D., & Mahmoud, A. B. (2020). Homesickness in developing world expatriates and coping strategies. *German Journal of Human Resource Management*, 2397002220952735. doi: https://doi.org/10.1177%2F2397002220952735.

Harper, M. (Ed.). (2016). *Migration and mental health: past and present*. Springer. Retrieved from: https://books.google.co.in/books?hl=en&lr=&id=j9t6DAAAQBAJ&oi=fnd&pg=PR5&dq=loneliness+mental+health+migrants+expatriates&ots=9PVaUWEykH&sig=tTm9od8kzMMGB98NZYopZnyT36k&redir_esc=y#v=onepage&q&f=false.

He, B., An, R., & Berry, J. (2019). Psychological adjustment and social capital: a qualitative investigation of Chinese expatriates. *Cross Cultural & Strategic Management*. doi: https://doi.org/10.1108/CCSM-04-2018-0054.

Hjelle, E. G., Bragstad, L. K., Zucknick, M., Kirkevold, M., Thommessen, B., &Sveen, U. (2019). The General Health Questionnaire-28 (GHQ-28) as an outcome measurement in a randomized controlled trial in a Norwegian stroke population. *BMC psychology*, *7*(1), 18. doi: https://doi.org/10.1186/s40359-019-0293-0.

Hofhuis, J., Hanke, K., & Rutten, T. (2019). Social network sites and acculturation of international sojourners in the Netherlands: The mediating role of psychological alienation and online social support. *International Journal of Intercultural Relations*, *69*, 120-130. doi: https://doi.org/10.1016/j.ijintrel.2019.02.002.

Howe, N. (2019). Millennials and The Loneliness Epidemic. Retrieved 28 September 2020, from https://www.forbes.com/sites/neilhowe/2019/05/03/millennials-and-the-loneliness-epidemic/#4cda3fdc7676.

Ikafa, I., & Perry, L. (2020). Resettlement experiences of African migrants in Australia and how they affect mental health. *Mental Health Practice*, *23*(3). doi**:** 10.7748/mhp. 2019.e1394.

Kanstrén, K., &Mäkelä, L. (2020). Expatriate partners' subjective well-being and related resource losses and gains. *Community, Work & Family*, 1-28. doi: https://doi.org/10.1080/13668803.2020.1801582.

Leavy, P. (2017). *Research design: Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches*. Guilford Publications. doi: https://books.google.co.in/books?hl=en&lr=&id=hxyDDgAAQBAJ&oi=fnd&pg=PP1&dq=research+design&ots=T

53W2Zp8f6&sig=4GpGQmQkBVrZeY0Yt5Y1-X6E1WY&redir_esc=y#v=onepage&q=research%20design&f=false.

Mannan, N. (2019). Depression 'a big issue' for isolated UAE expatriates. Retrieved 28 September 2020, from https://www.thenational.ae/uae/depression-a-big-issue-for-isolated-uae-expatriates-1.2140.

Miracle, V. A. (2016). The Belmont Report: The triple crown of research ethics. *Dimensions of Critical Care Nursing*, *35*(4), 223-228. doi: 10.1097/DCC.0000000000000186.

Mucci, N., Traversini, V., Giorgi, G., Garzaro, G., Fiz-Perez, J., Campagna, M., ... &Arcangeli, G. (2019). Migrant workers and physical health: An umbrella review. *Sustainability*, *11*(1), 232. doi: https://doi.org/10.3390/su11010232.

Odedra, N., Blackwood, K., & Thorn, K. (2018). The Career Experiences of Skilled Migrant Women in New Zealand: A Career Theory Perspective. *New Zealand Journal of Human Resources Management*, *18*(2). doi: https://web.b.ebscohost.com/abstract?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=11755407&AN=134098923&h=W94LEUL47qpRR4pcBVSYr%2f9B4yxa2xFIsZYt6riEzKvlp7MRySBjjDjBwk5B9SKT9Corv3swd2wFZqSrM1PF1g%3d%3d&crl=c&resultNs=AdminWebAuth&resultLocal=ErrCrlNotAuth&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3dehost%26scope%3dsite%26authtype%3dcrawler%26jrnl%3d11755407%26AN%3d134098923.

Pallathra, A. A., Calkins, M. E., Parish-Morris, J., Maddox, B. B., Perez, L. S., Miller, J., ... &Brodkin, E. S. (2018). Defining behavioral components of social functioning in adults with autism spectrum disorder as targets for treatment. *Autism Research*, *11*(3), 488-502. doi: https://doi.org/10.1002/aur.1910.

Panis, S., Schmidt, T., Bergson, H., & Racine, J. (2019, April). Are We Fooling Ourselves When Comparing Mean Correct RTs, and Error Percentages? In *PERCEPTION* (Vol. 48, pp. 204-204). 1 Olivers Yard, 55 City Road, London Ec1y 1sp, England: Sage Publications Ltd. Retrieved from: https://www.researchgate.net/profile/Sven_Panis/publication/327403527_Are_we_fooling_ourselves_when_comparing_mean_correct_RTs_and_error_percentages/links/5b8d5bbe299bf114b7eef911/Are-we-fooling-ourselves-when-comparing-mean-correct-RTs-and-error-percentages.pdf.

Park, Y. S., Konge, L., &Artino Jr, A. R. (2020). The positivism paradigm of research. *Academic Medicine*, *95*(5), 690-694. doi: 10.1097/ACM.0000000000003093.

Rabin, B. A., & Brownson, R. C. (2017). Terminology for dissemination and implementation research. *Dissemination and implementation research in health: Translating science to practice*, *2*, 19-45. Retrieved from: https://books.google.co.in/books?hl=en&lr=&id=ycM9DwAAQBAJ&oi=fnd&pg=PA19&dq=research+dissemination&ots=boJ-PLH0eK&sig=VsIU25qStKKc_aShR6bsFE9ZRbc&redir_esc=y#v=onepage&q=research%20dissemination&f=false.

Rahi, S. (2017). Research design and methods: A systematic review of research paradigms, sampling issues and instruments development. *International Journal of Economics & Management Sciences*, *6*(2), 1-5. doi: 10.4172/2162-6359.1000403.

Ramos, E., & Concepcion, B. P. (2020, May). Visual abstracts: redesigning the landscape of research dissemination. In *Seminars in nephrology* (Vol. 40, No. 3, pp. 291-297). WB Saunders. doi: https://doi.org/10.1016/j.semnephrol.2020.04.008.

Reza, M. M., Subramaniam, T., & Islam, M. R. (2019). Economic and social well-being of Asian labour migrants: A literature review. *Social Indicators Research*, *141*(3), 1245-1264. doi: https://doi.org/10.1007/s11205-018-1876-5.

Ruggiano, N., & Perry, T. E. (2019). Conducting secondary analysis of qualitative data: Should we, can we, and how? *Qualitative Social Work*, *18*(1), 81-97. doi: https://doi.org/10.1177%2F1473325017700701.

Ryan, G. (2018). Introduction to positivism, interpretivism and critical theory. *Nurse researcher*, *25*(4), 41-49. doi: https://doi.org/10.7748/nr.2018.e1466.

Saleh, A., &Bista, K. (2017). Examining Factors Impacting Online Survey Response Rates in Educational Research: Perceptions of Graduate Students. *Online Submission*, *13*(2), 63-74. doi: https://files.eric.ed.gov/fulltext/ED596616.pdf.

Sterle, M. F., Fontaine, J. R., De Mol, J., &Verhofstadt, L. L. (2018). Expatriate family adjustment: An overview of empirical evidence on challenges and resources. *Frontiers in Psychology*, *9*, 1207. doi: https://doi.org/10.3389/fpsyg.2018.01207.

Sterle, M. F., Vervoort, T., &Verhofstadt, L. L. (2018). Social support, adjustment, and psychological distress of help-seeking expatriates. *PsychologicaBelgica*, *58*(1), 297. doi: https://dx.doi.org/10.5334%2Fpb.464.

ISSN- 2394-5125 VOL 08, ISSUE 02, 2021

Thoma, B., Murray, H., Huang, S. Y. M., Milne, W. K., Martin, L. J., Bond, C. M., ... & Chan, T. M. (2018). The impact of social media promotion with infographics and podcasts on research dissemination and readership. *Canadian Journal of Emergency Medicine*, *20*(2), 300-306. doi: https://doi.org/10.1017/cem.2017.394.

Warinowski, A., &Laakkonen, E. (2020). Psychological Adjustment of Expatriate Children in Cultural Transitions. *International Journal of Child, Youth and Family Studies*, *11*(1), 1-22. doi: https://doi.org/10.18357/ijcyfs111202019471.

Wright-St Clair, V. A., &Nayar, S. (2019). Resettling amidst a mood of loneliness: later-life Chinese, Indian and Korean immigrants in New Zealand. *Ageing & Society*, 1-17. doi: https://doi.org/10.1017/S0144686X19000655.

Wright-St Clair, V. A., Nayar, S., Kim, H., Wang, S. M., Sodhi, S. K., Chung, A., ... & Hu, C. (2018). Late-life Asian immigrants managing wellness through contributing to socially embedded networks. *Journal of Occupational Science*, *25*(1), 51-64. doi: https://doi.org/10.1080/14427591.2017.1370607.