

Social support and mental health among female employees: the moderating effect of age

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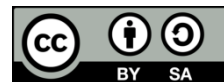
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ABSTRACT

The association between social support and mental health at work has been widely established; nevertheless, notably among working women, the significance of age in that relationship remains controversial. This research used age as a moderator to determine mental health from social support. The Interpersonal Support Evaluation List-12 (ISEL-12) and the Mental Health Inventory-18 (MHI-18) was answered by 100 working women ($M_{age}=41.20$; $SD_{age}=9.80$). A significant association between social support and mental health were reported but not between age and mental health. Age moderated the connection between social support and mental health. Younger women demonstrated greater mental health than older women in low-social support environments. With increasing social support, older working women reported better mental health. The findings of this study can be implemented by companies to develop and implement social support methods and policies to improve overall mental health in the workplace.

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1. INTRODUCTION

Poor mental health is a threat to the working sector, impacting both employers and employees. Challenges with mental health has been on the rise over the past few years. Statistics have shown that over half a million adults in Malaysia are depressed, with females reporting more depression than males [1]. The depression rates are comparable to those of other neighbouring countries [2], [3]. Not only that, globally, working adults face workplace challenges (i.e., workplace violence, work stress, burnout, and job insecurity), and work-family conflicts [4]–[8], which affect employees' turnover rate [9] and negatively impact their well-being. Noteworthy, the presence of social support buffers the impact of workplace challenges and maintains the well-being of employees [5], [6], [10]. Social support is defined as an individual's experiences of being loved, cared for, and valued, and experiences being a part of a social network with shared support and obligations that is helpful to their mental and physical health [11]. Social support can be broken down into three categories (tangible, belonging; appraisal), revolving around a person's social network and affecting how they think or act in ways that affect their health and well-being [12]. Social support is present on the third level of the hierarchy of needs, which revolves around social needs and includes needs to be accepted, supported, loved, and a sense of being a part of a group [13].

Specifically, in the work setting, social support occurs during interpersonal relationships at work that enhance the well-being and coping abilities of the receiver [14]. Social support provides numerous benefits to the workplace, such as better-perceived work productivity [15], lower psychological abnormality [16], lower depression, anxiety, and stress levels [17], protection of mental health from the harmful consequences of low

resilience [18], and reduction in psychological distress, burnout, anxiety, stress and improvements in self-efficacy [19]. Evidence-based studies have included social support as an important component for optimum mental health across all ages including children and adolescents [20], young adults [21], adults [22], and the elderly [23], irrespective of gender, age, and socioeconomic background [24]. Social support is undeniable important, and lack of workplace support resulted in emotional exhaustion, job stress, and a high burnout rate [25]. Social support from supervisors strengthens the employees' sense of belongingness in the company [26], improving job satisfaction and mental health status [27]. The chain reaction of high social support by peers, supervisors, and subordinates reduces burnout tendencies, and job turnover [28], [29]. With that, to identify the influence of social support and mental health in our research sample, we proposed the hypothesis: Hypothesis 1: There is a significant relationship between social support and mental health.

Past literature has proven that social support determines the productivity of employees in the workplace, yet, studies showed conflicting and inconsistent findings for social support and mental health when considering age. Some studies reported higher social support in older employees than younger employees [16], [30]–[32]. In contrast, diminishing social support was related to increasing age [18]. Interestingly, higher perceived social support and lower mental health issues are reported to be significant only for younger veterans, yet insignificant for older veterans [31]. Noteworthy, these findings are from the perspectives of both Asian and Western contexts, however, none are from the Malaysian context from recent years. The inconsistent findings on the role of age in the relationship between social support and mental health require further investigation, particularly in the Malaysian context. Contradicting results on social support may be found due to different employees' needs in different work settings. Hence, we proposed two hypotheses to be tested in our research context: i) Hypothesis 2: There is a significant relationship between age and mental health and ii) Hypothesis 3: Age significantly moderates the relationship between social support and mental health.

The association between social support and mental health at work has been widely established; nevertheless, notably among working women, the significance of age in that relationship remains controversial. Therefore, this study aimed to: i) identify the link between age and mental health among working women; ii) determine the link between social support and mental health among working women; and iii) investigate the moderating role of age in the association between social support and mental health among working women. The findings of this study are hoped to guide the management on the different needs of social support of younger and older employees, and improve existing social support or develop new social support policies in the workplace.

2. METHOD

2.1. Ethical approval

This research has been approved by the Human Research Ethics Committee of Sultan Idris Education University (Code: 2022-0595-01). A copy of an informed consent form was attached at the beginning of the instrument set together with the description of the research and research team.

2.2. Procedure

This study employed a cross-sectional survey method. A set of instruments was developed using a Google Survey Form and was distributed between July and August 2022 via various social media, for instance, Facebook and WhatsApp. The reasons for adopting an online measure for data collection are forth-fold: i) to reach a wider audience using a cost-effective approach; ii) faster distribution of the survey; iii) easier to administer for data analysis; and iv) as a precaution measure taken post-COVID-19 pandemic that requires physical distancing.

Respondents were briefed on the introduction, objectives, content, risks and benefits, confidentiality, and rights to withdraw from the survey. On the first page of the survey, the participants were provided with informed consent, a statement of agreement to participate in the study, acknowledgement of the choice to participate and the ability to opt out from the study at any point during the research. Respondents who clicked on the submit button at the end of the online survey are considered as having given their consent to participate in the research.

2.3. Participant

The targeted population of this study was females who are currently employed and of Malaysian nationality. Using the G*Power Version 3.1.9.7 software [33] to compute the a priori power analysis of linear multiple regression statistical test with medium effect size, $f^2=.25$, significance criterion $\alpha=.05$, and the number of predictors as 2, the minimum sample size required to achieve a statistical power level of 0.95 is 81 participants. This research uses purposive sampling, as the following inclusion criteria were referred to for recruitment (female, working, Malaysian nationality). Since this research focuses on Malaysian working

women, those identified with different gender, unemployed females, and non-Malaysians are not included in the study. The Interpersonal Support Evaluation List-12 (ISEL-12) and Mental Health Inventory-18 (MHI-18) were answered by 100 working women ($M_{age}=41.20$; $SD_{age}=9.80$). They were mainly Malays (96.00%), working as professionals (52.00%) in public sectors (65.00%) with one to 35 years of working experience ($M=16.53$; $SD=9.28$). Table 1 shows the distribution of respondents according to their race, work sector and workgroup.

Table 1. Distribution of respondents according to race, work sector and workgroup

Demographic information	<i>n</i>	%
Race		
Malay	96	96.0
Indian	2	2.00
Others	2	2.00
Work sector		
Public	65	65.00
Private	32	32.00
Self-employed	3	3.00
Workgroup		
Management	15	15.00
Professional	52	52.00
Technical	9	9.00
Clerical	12	12.00
Service and sale	9	9.00
National defence, Security, Rescue	3	3.00
Total	100	100.00

2.4. Instrument

Respondents completed an online survey which consisted of the demographic section, Interpersonal Support Evaluation List-12 and Mental Health Inventory-18. The demographic section asked several items about the background of the respondents, for example, gender, age, and working experience. ISEL-12, developed by Cohen *et al.* [12] was used to evaluate the level of social support received by the respondents. It has 12 items with four response formats, from 0 (definitely false) to 3 (definitely true). Items 1, 2, 7, 8, 11, and 12 need to be reverse-scored. There are three subscales in ISEL-12, namely, appraisal, belonging, and tangible, with four items each. In this research, all the items of ISEL-12 have been translated into *Bahasa Malaysia* or Malaysian language and have been found valid and reliable to be used on Malaysian respondents with the internal consistency for a total social support score of $\alpha=0.85$. The internal consistency indexes for the appraisal ($\alpha=0.71$), belonging ($\alpha=0.58$), and tangible ($\alpha=0.58$) sub-scales were lower than the total social support, however, this is common for sub-scales with a small number of items. Furthermore, the ISEL-12 are reliable and valid across various contexts [34]–[36].

MHI-18 is a simplified version of the original 38-item [37] and has been back-translated into *Bahasa Malaysia* by Hamzah *et al.* [38]. It has two dimensions, namely psychological distress, and psychological well-being with ten and eight items respectively. All items under psychological well-being need to be reverse-scored. MHI-18 uses a 6-point Likert scale from 1 indicating all the time to 6 indicating none of the time. A higher total score of MHI-18 indicates a better mental health status. *Bahasa Malaysia* translated MHI-18 was found valid and reliable to be used on Malaysian respondents [38] with the internal consistency for total mental health score ($\alpha=0.87$), psychological distress ($\alpha=0.89$), and psychological well-being ($\alpha=0.90$). Similarly, the original version of MHI-18 has good reliability and validity across various contexts including [39]–[41].

3. RESULTS

Using the SPSS version 25, descriptive analyses were conducted. As shown in Table 2, on average, all the respondents reported moderately high social support and mental health. The findings are supported by other research reporting similar outcomes [19], [30], [33], [42], [43].

Table 2. Result of descriptive analysis for social support and mental health and respective sub-scales

Variable and sub-scale	M	SD	Range	Level
Social support	25.23	6.71	2-36	Moderately high
Appraisal	8.53	2.65	2-12	Moderately high
Belonging	8.31	2.46	0-12	Moderately high
Tangible	8.39	2.44	0-12	Moderately high
Mental health	77.52	15.41	26-108	Moderately high
Psychological distress	41.00	9.95	10-60	Moderately high
Psychological well-being	36.52	8.33	16-48	Moderately high

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Next, the results of the Pearson correlation reported a significant association between social support and mental health ($r=.48$; $p=.001$) but not between age and mental health ($r=.13$; $p=.20$). Thus, hypothesis 2 is rejected and hypothesis 1 is accepted. Specifically, this study found that when social support increases, mental health will increase too. This finding is supported by past studies that discovered that with increasing levels of social support comes better mental health status [16]–[18]. Furthermore, to test hypothesis 3, a simple moderator analysis was conducted using PROCESS version 4.1. The interaction between social support and age among female employees was found to be statistically significant, $\beta=.047$, $SE=.018$, 95% C. I (.01, .08), $p=.013$. At low moderation, social support = -9.79, the conditional effect = .86, 95% C. I (.18, 1.19), $p=.008$. At middle moderation, social support = .00, the conditional effect = 1.14, 95% C. I (.75, 1.53), $p=.001$. At high moderation, the result for social support = 9.79, and the conditional effect = 1.60, 95% C. I (1.04, 2.15), $p=.001$. The conditional effects are visualized in Figure 1. Thus, hypothesis 3 is accepted.

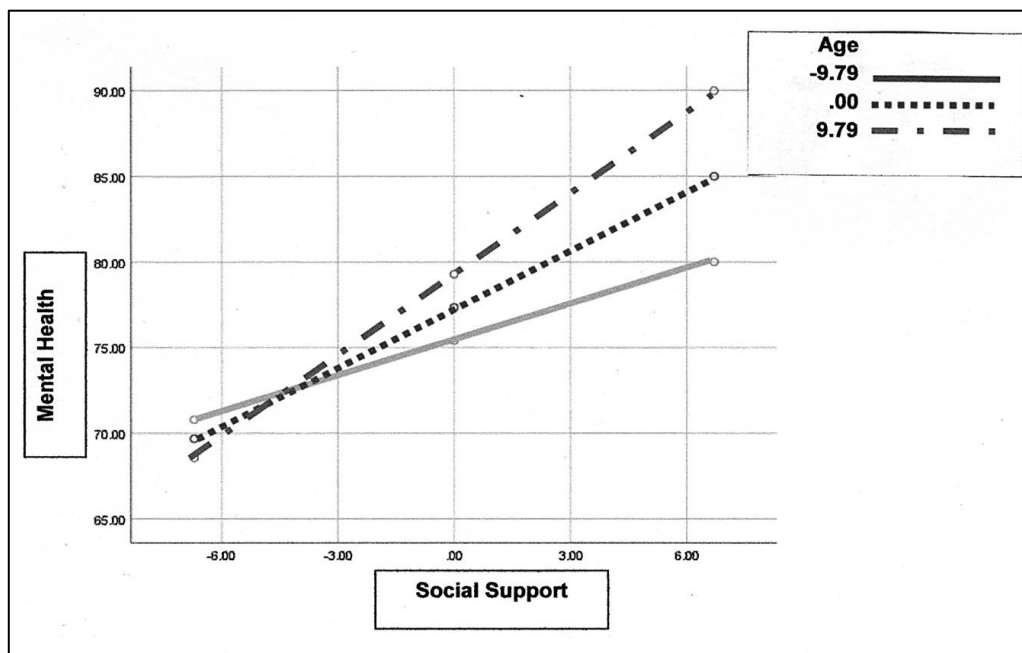


Figure 1. Conditional effect of social support on mental effect with low, middle and high age

This particular finding concluded that age moderated the connection between social support and mental health. Younger women demonstrated greater mental health than older women in low-social support environments. With increasing social support, older working women reported better mental health. These findings are supported by past research with similar results [44], but, are opposite to an outcome of one study that reported an increase in social support with increasing age, however, when including mental health, the study found that with high support, younger employees showed better mental health status than older employees [31]. Results of this study have shown a significant positive association between social support and mental health, meanwhile, the relationship between age and mental health is nonsignificant. Finally, this study has found that age moderates the relationship between social support and mental health, whereby, as age increases, the relationship between social support and mental health is strengthened.

4. DISCUSSION

This study aimed to identify the relationship between social support and mental health, age and mental health, and the moderating role of age in the relationship between social support and mental health. Findings reported that as social support increases, mental health increases, but no association was found between age and mental health. Additionally, age moderates the relationship between social support and mental health, whereby, as age increases, the relationship between social support and mental health also increases.

The result of the study indicated that social support is exceptionally important for senior female employees to maintain good mental health status. One of the reasons could be the growth in understanding of their past mistakes, resulting in older people getting more sympathy and support from society [44] compared

to younger employees. Additionally, older employees reported leaving the workplace due to complications with physical and mental health and a lack of support from their employers, insufficient care provided by their family members, feeling patronized and stigmatized, and inability to frequently contact their family and friends due to different geographical locations [45] limiting assistance of social support. Older employees when compared to the younger ones are more likely to experience numerous long-term conditions that affect their physical and mental health, hence requiring more support in the workplace to maintain their productivity and sustain employment in the long run [46].

This study found that 50% of the respondents were more than 40 years old and are in the category of middle age group. In this modern era, those in the middle age group were known as the “sandwich generation” and are typically responsible both for bringing up their children and caring responsibilities for their ageing parents. In this sense, the “caught in the middle” generation provides support to both living elderly parents and small children physically, financially, and psychologically. Generally, women were found to provide care for both younger children and elderly parents more than men [47]. Hence, working women are juggling their responsibilities as a mother, a woman, and an employee, making older working women require more social support than younger women for the betterment of their mental health. Another possible explanation for the results obtained was work-life conflicts. Commonly middle-aged people, especially women, struggle to develop their careers and since they are considered senior employees in the workplace, thus they are faced with challenges from the younger employees who are cognitively fresh and motivated to develop their careers as well. Besides, younger employees have a higher perception of competitive culture than the older group of employees, with a more competitive spirit and attachment to success [48].

Noteworthy, the younger employees are more welcoming, and open-minded to changes in the workplace and have a higher willingness to obtain new information. Younger employees usually come from millennials generation consider themselves to be confident, team-oriented, and achieving, have high openness to changes, are easy to self-express, and value openings for professional development and work that are meaningful and have a purpose when compared to the older generation [49]. Based on the understanding of the characteristics of the younger employees supported the result that they require less social support to maintain their mental health, which is conflicting with the older generation of female employees. One study that investigated the characteristics of employees from multiple generations revealed the younger generation of employees have less need for approval from society, are open to new ideas and approaches, and put a higher value on independent work when compared to the older generation. Notably, they also have better time management than the older generation. In comparison, these older generation workers value a more inspirational work atmosphere and traditional work routine, making them struggle with flexible working options that have become a new norm in today’s working environment. The older generation particularly the baby boomers also experienced higher self-motivation-related challenges compared to the younger ones and lacking in opportunities for self-development in terms of demonstrating their incomparable work skills and outcomes in the work setting [50]. Generally, the younger generation is more adaptable, flexible, and open to new approaches compared to the older staff.

The mid-life crisis occurs with the perception of the uncertainty of job retainment once an individual gets older if no development to their career were made immediately. Comparing these older female employees with the younger ones, young employees are often more vigorous, and energetic in getting what they want, and may go the extra mile more than the older employees in terms of work responsibilities to achieve the target work performance. To explain further, the career stage model suggests that employees’ attitudes differ according to the career stages that they are currently in. There are four stages in the model: i) exploration (trial) phase whereby employees explore their current employment to understand the requirement, culture, and job preferences with the current ones; ii) establishment whereby employees work to advance in their career progression within the organization; iii) maintenance phase, in which in this phase, the employees struggle with sustaining past achievements and current position in the workplace; and iv) the disengagement phase, where employees develop a new self-image independent of their success in their career [51]. Looking at the result, researchers assumed that younger employees are at the stage of establishment, while older employees are at the stage of maintenance. Hence, struggles experienced by older employees are influenced by younger employees trying to make advancements and take up positions within the company. This increases the mental stress experienced by older employees which explains the initial higher level of mental health for younger employees when compared to older employees when the level of social support is low. With that being said, younger employees require less social support to maintain their mental health when compared to older employees. Other factors influencing the need for social support among older employees include ageing factors, cognitive declination, being physically weaker than the younger employees, reduced attention span and the ability to concentrate on tasks that require a heavier mental workload. Therefore, older employees require more social support, attention, recognition, and assistance in sustaining their motivation to work and increasing their work productivity ultimately maintaining healthy levels of mental health.

4.1. Implication

This study provides insights into the variety of approaches to productivity working for young and older female employees. Findings outlined that younger employees have a better mental health state than older employees at low levels of social support. With increasing social support, older employees exhibited higher levels of mental health compared to younger employees. This particular finding is imperative in acknowledging the importance of social support for older female workers. The findings suggest that younger employees are adaptable and more suitable to work independently, while older employees require more social support and perform better in a teamwork setting with personal support received from the team members which will lead to an increase in their work performance. The authors assert that employers take note of the importance of social support towards employees as a whole with more attention to older employees. A few ways to ease the burdens of older employees with conditions in the workplace can be done by adjusting their workloads following their mental and physical capabilities, providing accessible social support, and receiving empathy from their supervisors or managers [46]. Alternatively, the management can permit a flexible work arrangement or schedule or remote working arrangements. This approach has been adopted worldwide and proven to better work productivity [52], [53], creativity and work-life balance [54], and employee satisfaction [55].

Another possible suggestion would be to provide an alternative to physical attendance at the office by allowing a work-from-home policy for employees at all position levels. Several studies have shown effectiveness in job performance and job satisfaction using remote work options [56], [57]. An interesting finding showed that the work-from-home policy replaced with the work-from-anywhere approach has a 4.4% increase in work output, suggesting the effectiveness of remote working. In the aspect of family responsibilities, continuous social support from family members is vital for older women above 40 years old that are currently “sandwiched” between the responsibilities of a mother and the responsibilities towards their parents [58]. One of the ways that others can help (i.e.: spouse/children/siblings) is by rearranging the schedule for caring for the elderly, giving regular me-time to the older women and lastly, working together and dividing chores for household responsibilities (i.e.: mother takes care of the cooking while spouse takes care of the cleaning chores and taking out the trash).

4.2. Limitation

Despite the success demonstrated, significant limitations are observed throughout the commencement of the study. Firstly, this study only included a small sample size of 100 participants from various occupational backgrounds and different work environments. For a better result and generalizability, it is recommended that future studies increase the number of participants and focus on only one work sector (i.e.: private or public sector) and workgroup (i.e.: management level). Secondly, the result of this study was only from participants of the female gender. There is no data obtained from the male gender. Hence, comparisons between genders were unable to be conducted and analysed. Future studies could include both genders of participants to allow for a different judgement of social support needed for male and female workers. Additionally, this study investigated the role of social support towards employees. Other social support components are a better fit in the workplace and need more research such as organizational support and supervisor support. These components can be conducted simultaneously to understand the role of support as a whole that is received and needed by individuals in the workplace.

5. CONCLUSION

This study revealed that a significant association between social support and mental health were reported but not between age and mental health. Age moderated the connection between social support and mental health. Hence, this study adds new knowledge to the previously known positive relationship between social support and mental health by identifying that older female employees require more social support than younger female employees to achieve better mental health. This study provided insights into the importance of having adequate social support for the mental health status of older employees. To achieve better mental health in the workplace, employers and supervisors must improvise the existing social support policy with an emphasis on older employees. Additionally, the management may conduct further research on the need for social support among different genders of older employees in the workplace.

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