Chronic Stressors, Coping Strategies, and Depressive Symptoms: A Comparison across Older Age Groups

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Research Article

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Abstract

Background: Late-life depression is a prevalent mental health problem among older adults. Variations may exist in the intensity of chronic stressors experienced by people in different older age groups and their effects on depressive symptoms.

Aim: To examine differences among older adults by age group in the experienced intensity of chronic stressors in relation to depressive symptoms and assess the mediating role of disengaged and engaged coping strategies.

Methods: Participants were 114 older adults. The sample was divided into three age groups: 65–72, 73–81, and 82–91. The participants completed questionnaires on coping strategies, depressive symptoms, and chronic stressors. Moderation and mediation analyses were conducted.

Results: The lowest levels of depressive symptoms were in the young-old age group and the highest levels were in the oldest-old age group. The young-old age group used more engaged and less disengaged coping strategies than the two other groups. The association between intensity of chronic stressors and depressive symptoms was stronger in the two older age groups compared to the youngest (moderating effect of age groups). The association of stressor intensity with depressive symptoms was mediated by disengaged coping, whereas engaged coping was not associated with depressive symptoms.

Conclusion: Differences exist in the relationships among chronic stressors, coping strategies, and depressive symptoms by age groups in the older adult population. Professionals should be aware of these differences between age groups in depressive symptoms and the impact of stressors and coping strategies on depressive symptoms in different older adult age groups.

Introduction

So far few studies have compared levels of depressive symptoms or other indicators of mental health among the subgroups of old age, very old age, and fourth age. The present research aimed to examine differences among older adult age groups in levels of depressive symptoms in relation to intensity of chronic stressors and the mediating role of coping strategies on the associations between intensity of stressors and depressive symptoms and whether these associations vary by age. In specific, we investigate in what ways age-associated increases of depressive symptoms are related to the perceived intensity of chronic stressors, and to different coping strategies among old and very old adults. Our research draws on two theoretical frameworks: The first is the cognitive coping model, adopting the classification of coping strategies into engaged, and disengaged coping. The second framework is the strength and vulnerability integration theory suggesting that the effect of chronic stressors is attenuated in old age; a process related to a shift in engaged coping towards disengaged coping. There is a gap in understanding the variations in the effects of chronic stressors and coping strategies on depressive symptoms among subgroups of older adults.
Age And Mental Health

In the literature about ageing, strong age-associated differences in emotional and physical health were observed, particularly with regard to the oldest-old adult population (Paik, 2018; Cohen, 2014; Luppa et al., 2012). In recent years, the fourth age (which includes the last years of adulthood starting at age 80 or 85) moved more into the focus of aging research (Baltes & Smith, 2003). Many people in their 60s and 70s are mostly healthy, fully functioning, and active individuals (Paik, 2018; Pruchno, 2012). Then, at about age 80, due to accumulating disease, physical decline, and personal and interpersonal losses (Paik, 2018; Yang, 2007), an increase in vulnerability to psychological symptoms is observed (Lowe et al., 2013).

Studies that distinguish among age groups in the older adult population reported differences in levels of mental health symptoms (Cohen, 2014; Luppa et al., 2012; Wu et al., 2012; Yang, 2007). Some studies reported linear differences in symptoms by age (Wu et al., 2012), whereas others reported a U-shape difference (Yang, 2007). For example, a systematic review showed that the rate of depressive symptoms is substantially higher in the oldest age groups: The rates of depressive symptoms increased substantially from 20% in the young-old age group (75–84 years) to 25% among those aged 85–89, and increased substantially to 30–50% among individuals aged 90 or older (Luppa et al., 2012). Another study conducted among 321 cancer patients aged 60 or older also showed the lowest levels of depression and anxiety in the 60–79 age group and highest in the 80+ age group (Cohen, 2014). Two studies of 69 men with prostate cancer (Harden et al., 2008) and 309 individuals with colorectal cancer (Amdt et al., 2006) reported that patients in their 60s to early 70s had better physical and mental quality of life than patients in their 50s or late 70s and older.

Age-related differences in levels of depressive symptoms among old and oldest-old adults may also depend on the intensity of chronic stressors they experience. Chronic stressors are “the persistent or recurrent difficulties of life” (Serido et al., 2004, p. 18), such as socioeconomic burden, health problems, neighborhood insecurity, excessive demands, and lack of control (Greenglass et al., 2006). Studies often indicated that the amount and severity of chronic stressors increase in old age in general and during the fourth age in particular (Boeninger et al., 2009; Osmanovic-Thunström et al., 2015; Yancura & Aldwin, 2008). Researchers suggested that with age, the nature of stressors may change from episodic to chronic (Aldwin & Park, 2007) and that stressors accumulate with age. Moreover, age-related changes in biological systems, notably the endocrine, immune, and cardiovascular systems, increase individuals’ vulnerability to psychosocial and environmental stressors (Yancura & Aldwin, 2008).

Chronic Stressors, Coping Strategies And Mental Health

Accordingly, studies reported that chronic stressors are associated with negative mental health outcomes such as anxiety and depression (Boeninger et al., 2009; Luppa et al., 2012), especially among the oldest-old adults (Aldwin & Yancura, 2011; Baltes & Smith, 2003). Nevertheless, the results of other studies showed that with age, people generally respond with less emotional distress to stressful situations
(Aldwin et al., 1996; Boeninger et al., 2009) and rank stressful events as less stressful compared to prior experiences at a younger age (Aldwin & Yancura, 2011; Boeninger et al., 2009). Most of these studies did not distinguish between different age groups (Boeninger et al., 2009), although a few studies showed that chronic stressors were related to depressive symptoms or negative affect, especially among the oldest-old adults (Birditt et al., 2021; Cohen, 2014; Cohen & Janicki-Deverts, 2012).

Coping strategies were often suggested as a main factor that mediates the effect of stressors on mental and physical health (Ben-Zur, 2005; Cohen, 2014; Lazarus & Folkman, 1984). Coping strategies are defined as individuals’ attempts to manage behaviors and emotions when they deal with external or internal demands that are appraised as exceeding their resources. A recent classification of coping strategies was suggested by Carver and Connor-Smith (2010): engaged and disengaged coping. Engaged coping involves active coping strategies directed toward dealing with the stressor or vigorously changing the context or meaning of the stressful situation. Engaged coping includes problem-focused coping and some forms of emotion-focused coping (e.g., support seeking, emotion regulation, acceptance, cognitive restructuring). However, disengaged coping is aimed at escaping the threat or related emotions (Carver & Connor-Smith, 2010); it consists of passive and avoidant strategies of escaping the stressor or stressful situation (e.g., denial, wishful thinking, excessive use of alcohol).

Although the efficiency of coping strategies is related to the nature of the stressor, the group of disengaged coping strategies was often related to higher distress, poorer adjustment (Park et al., 2021; Shapiro et al., 2010), and less efficient cognitive processes (Ben Zur, 1999), whereas engaged coping strategies were consistently associated with lower distress and better physical health and well-being (Carver et al., 1989; Ben Zur, 1999).

Carstensen (2006) and Charles (2010) suggested that during the aging process, individuals shift from engaged coping toward disengaged coping, such as avoiding situations that may elicit emotional distress and distancing themselves from negative emotions. Thus, disengaged coping strategies may have an adaptive function among older adults. For example, Lopez et al. (2008) found that avoidance of stressful interpersonal situations was associated with lower distress in older adults with chronic pain. Other studies reported that in contrast to engaged or active coping, disengaged coping was linked to higher negative affect, depressive symptoms, and anxiety in older adults (Birditt et al., 2021; Hansen & Ghafoori, 2017). However, the participants in such studies represented a wide range of ages, from 65 to very late in life. To the best of our knowledge, no study has examined age-differential effects of coping strategies on depressive symptoms in a broad age range including old-old and oldest-old adults. Also, studies have paid little attention to possible variations in the intensity of chronic stressors and their effects on depressive symptoms in different older adult age groups. Additionally, differences in the use of engaged and disengaged coping strategies among different age groups of older adults and their mediating role between stressors and levels of depressive symptoms in these age groups have not been examined. Acquiring a more thorough understanding of these associations in different age groups may be valuable for identifying older adult groups with higher risk of depression and tailoring interventions to strengthen effective coping strategies.
Research Aim And Hypotheses

In the present research we tested the following hypotheses: (1) Differences in levels of depressive symptoms, chronic stressors, and coping strategies will be observed between three age groups (young-old adults: 65–72; old-old adults: 73–81; and oldest-old adults: 82–91), such that the oldest-old adults will experience the highest depressive symptoms and intensity of chronic stressors, use more disengaged coping, and use less engaged coping than participants in the two other groups, whereas old-old adults will report scores in between the young-old and oldest-old adults. (2) Age will moderate the associations between intensity of chronic stressors and depressive symptoms: The association between stressor intensity and depressive symptoms will be weakest among young-old participants and strongest among oldest-old participants. (3) Age will moderate the associations between coping strategies and depressive symptoms: The association between disengaged coping strategies and depressive symptoms will be weaker in the group of young-old adults and stronger among the oldest-old adults and vice versa for engaged coping strategies, with participants in the old-old adult group falling in the middle. (4) Coping strategies will mediate the association between stressor intensity and depressive symptoms; mediation of engaged coping will be associated with higher depressive symptoms and mediation of disengaged coping will be associated with lower depressive symptoms.

Method

Participants and Data Collection Procedure

The study was approved by the University of Haifa Committee for Ethical Research with Humans (147/09). The study consisted of a secondary data analysis. Participants were 114 community-dwelling Jewish older adults living in Israel, recruited from centers for older adults (providing recreation and education activities) if they had no indication of severe cognitive decline (according to the report of the center managers). Participants were approached by a bachelor's degree-holding, trained interviewer; participants signed an informed consent form after receiving information about the study. No compensation was offered for participation in the study. Table 1 shows the background characteristics of the participants, by age groups. Most background characteristics were similar across the groups.
Table 1
Background characteristics of the sample (N = 114)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Young-Old (65–72)</th>
<th>Old-Old (73–81)</th>
<th>Oldest-Old (82–91)</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N = 45</td>
<td>N = 45</td>
<td>N = 24</td>
<td></td>
</tr>
<tr>
<td>Age, years (M, SD)</td>
<td>68.24 2.34</td>
<td>76.65 2.56</td>
<td>84.64 2.53</td>
<td>$F_{(2,111)} = 360.75^{***a}$</td>
</tr>
<tr>
<td>Gender (N, %)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>14 31.1</td>
<td>16 35.6</td>
<td>7 29.2</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>31 68.9</td>
<td>29 64.4</td>
<td>17 70.8</td>
<td>$\chi^2_{(2)} = .35$</td>
</tr>
<tr>
<td>Economic situation¹ (N, %)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low - Medium</td>
<td>15 34.1</td>
<td>20 34.1</td>
<td>7 29.2</td>
<td>$\chi^2_{(2)} = 2.41$</td>
</tr>
<tr>
<td>High - Very high</td>
<td>29 65.9</td>
<td>23 65.9</td>
<td>17 70.8</td>
<td></td>
</tr>
<tr>
<td>Family status (N, %)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married/ Cohabitating</td>
<td>30 66.7</td>
<td>30 66.7</td>
<td>10 41.7</td>
<td>$\chi^2_{(2)} = 4.99$</td>
</tr>
<tr>
<td>No married/ cohabitating</td>
<td>15 33.3</td>
<td>15 33.3</td>
<td>14 58.3</td>
<td></td>
</tr>
<tr>
<td>Religiosity¹</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secular</td>
<td>38 84.5</td>
<td>33 76.7</td>
<td>17 70.8</td>
<td>$\chi^2_{(4)} = 2.34$</td>
</tr>
<tr>
<td>Moderately religious</td>
<td>6 13.3</td>
<td>8 18.6</td>
<td>5 20.8</td>
<td></td>
</tr>
<tr>
<td>Religious</td>
<td>1 2.2</td>
<td>2 4.7</td>
<td>2 8.4</td>
<td></td>
</tr>
<tr>
<td>Health situation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>7 16.3</td>
<td>4 9.5</td>
<td>1 4.2</td>
<td>$\chi^2_{(4)} = 4.28$</td>
</tr>
<tr>
<td>Moderate</td>
<td>8 18.6</td>
<td>4 9.5</td>
<td>4 16.7</td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td>28 65.1</td>
<td>34 81.0</td>
<td>19 79.1</td>
<td></td>
</tr>
</tbody>
</table>

SD = standard deviation; *p < 0.05, ***p < 0.001

¹Percentages were computed according to valid number of respondents

Measures

Background details included gender, age, family status, education level, health status, economic status, and religiosity level.
Chronic Stressors Inventory consisted of 22 items detailing different types of chronic stressors in the lives of the participants, consisting of six categories: economic strains, health, relationships and social status, security and safety, and residence stressors. These items were selected from 117 daily and chronic stressors suggested by Kanner et al., (1981). Participants rated the degree to which they experienced these stressors during last 3 months (e.g., sleep problems, conflictual relationship with relatives) on a 4-point ranging from 0 (not at all) to 3 (very much), with higher scores indicating greater chronic stressors. A mean score was calculated. Internal reliability was acceptable (Cronbach's $\alpha = .92$).

The Depression Geriatric Scale is a 15-item shortened scale (Zalsman et al., 1998) of the original 30-item scale (Yesavage et al., 1982). The scale was translated into Hebrew and has good psychometric properties (Zalsman et al., 1998). Participants were asked to indicate their agreement with each item (i.e., “Are you basically satisfied with your life?” “Do you feel that your life is empty?”) during the week (1 = yes, 0 = no). A sum score of the positive responses was calculated and standardized according to the number of items that were answered. Internal reliability was acceptable (Cronbach's $\alpha = .82$).

Coping Strategies Questionnaire (COPE, Carver et al., 1989), a 30-item questionnaire detailing 15 different strategies (two items for each strategy), was used. Examples of statements include “trying to get advice from someone on how to act” and “trying to talk to someone who can do a concrete thing about the situation.” Participants rated the items on a 4-point scale ranging from 0 (not at all) to 3 (very much), with higher scores indicating greater use of the coping strategy. The questionnaire was translated into Hebrew, and its internal reliability coefficients in previous studies were acceptable (Ben-Zur, 2005). As previously suggested, exploratory factor analysis using varimax rotations was conducted to examine the factorial structure of the measure (Ben-Zur, 2005). The Kaiser-Meyer-Olkin test and Bartlett's test of sphericity confirmed the appropriateness of the data for the factor analysis. Two factors emerged that explained 36% of the variability. The internal reliability of the subscales was sufficient: Cronbach's $\alpha = .87$ for the engaged coping subscale, and acceptable with Cronbach's $\alpha = .65$ for the disengagement coping subscale (see factor analysis process and results in Supplemental Table S1).

Data Analysis

Data analysis was performed using SPSS 25. Descriptive statistics of the background and study variables and associations among the variables were calculated. Using a scatter plot diagram, three distinct age groups were created: 65–72, 73–81, and 82–91. Differences among the subgroups were assessed using analysis of variance and effect size, followed by Scheffe's post-hoc for multiple comparisons. Finally, the moderating role of age and the mediating role of coping strategies on the associations between chronic stressors and depressive symptoms were tested using the bootstrapping approach with the PROCESS program.

Results
Means, Standard Deviations, and Differences among Groups in Study Variables

Means and standard deviations of the study variables by age group are shown in Table 2. Overall, levels of depressive symptoms were medium, mean stressors’ intensity was low, and mean levels of coping strategies were low. In support of Hypothesis 1, levels of depressive symptoms differed between age groups; the lowest levels of depressive symptoms were found in the young-old adult group and highest in the oldest-old adult group (small effect size). Scheffé’s post hoc test indicated that the differences were statistically significant only for the comparison between the young-old and oldest-old adult groups. Although the stressors’ intensity increased among the age groups, the differences were not statistically significant, in contrast to Hypothesis 1. In support of Hypothesis 1, significant differences were found in coping strategies: The young-old age group used more engaged coping strategies than the two other groups (small effect size) and vice versa regarding disengaged coping (medium effect size). Scheffé’s post hoc test showed that for engaged coping, significant differences were found between young-old and old-old adults and for disengaged coping between young-old adults and both old-old and oldest-old adults. Therefore, Hypothesis 1 was confirmed regarding differences in depressive symptoms and coping strategies, but not regarding stressors’ intensity.

Table 2
Means, SDs of study variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Age 65–72 (N = 45)</th>
<th>Age 73–81 (N = 45)</th>
<th>Age 82–91 (N = 24)</th>
<th>F (2,111) (Effect size)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>2.01, 1.95</td>
<td>2.92, 2.22</td>
<td>3.51, 2.94</td>
<td>3.52* (.06)</td>
</tr>
<tr>
<td>Stressors’ intensity</td>
<td>1.63, 2.43</td>
<td>2.04, 2.27</td>
<td>3.00, 2.76</td>
<td>2.41 (0.04)</td>
</tr>
<tr>
<td>Engaged coping</td>
<td>1.97, 0.56</td>
<td>1.60, 0.64</td>
<td>1.71, 0.60</td>
<td>4.23** (0.07)</td>
</tr>
<tr>
<td>Disengaged coping</td>
<td>0.78, 0.49</td>
<td>1.30, 0.74</td>
<td>1.31, 0.97</td>
<td>6.99** (0.11)</td>
</tr>
</tbody>
</table>

*p < .05, **p < .01

Direct And Indirect Associations Between Study Variables

Prior to the associations analysis, Pearson correlations between background variables (education, economic status, number of chronic diseases, family status) and depressive symptoms were examined. Education and economic status were significantly correlated with depressive symptoms score ($r = -.28, p = .004$ and $r = -.20, p = .04$, respectively); therefore, these were controlled.
According to the hypotheses, first of all the moderating effect of age subgroups on the association between stressors’ intensity and depressive symptoms was examined (Hypothesis 2). The regression model indicates that stressors’ intensity was significantly associated with depressive symptoms ($B = 0.19, SE = 0.09, p < .04$) and with the dummy age group variable (the two older groups vs. the younger group) $B = -1.32, SE = 0.52, p < .000$), but not for the second dummy age group old-old vs. the youngers and oldest groups ($B = -0.40, SE = 0.39, p = .30$). The overall model, including the dependent and interaction variables was found to be significant ($F_{(5,108)} = 38.12, p < .001$); 63% of the variance of depressive symptoms were explained by the independent and interaction variables. The interaction added 13% to the explained variance of depressive symptoms ($R^2$ change $= 0.13, F_{(2,108)} = 19.37, p < .000$). Table 3 shows the conditional effect of stressors’ intensity on depressive symptoms for each age group and the graphic representation of the interaction between stressors’ intensity and age subgroups. Fig. 1A shows that the slope between stressors’ intensity and depressive symptoms was steeper for the two older age groups in comparison with the young-old adult group. In addition, the slope of the oldest-old adult group was slightly steeper than the old-old adult group. The difference between the slopes of the two older groups was not statistically significant. Thus, in partial support of Hypothesis 2, the negative association between stressors and depressive symptoms was stronger in the two older age groups compared to the young-old adult group.

| Table 3 |
| Bootstrapped indirect effects of stressors intensity on depression, by age group |
|---|---|---|---|---|
|   | B   | SE  | 95%CI   | p   |
| Indirect effects of stressors’ intensity on depression |   |   |   |   |
| Age 65–72 | 0.19 | 0.10 | .01, .38 | .04 |
| Age 73–81 | 0.80 | 0.09 | 0.62, 0.99 | .000 |
| Age 82–91 | 1.05 | 0.11 | 0.82, 1.27 | .000 |
| Indirect effects of disengaged coping strategies on depression |   |   |   |   |
| Age 65–72 | 1.10 | 0.63 | -0.15, 2.34 | .08 |
| Age 73–81 | -1.86 | 0.38 | -2.60, -1.12 | .000 |
| Age 82–91 | -1.91 | 0.49 | -2.74, -1.08 | .000 |

Hypothesis 3

was assessed only for disengaged coping, because engaged coping was not significantly associated with depressive symptoms. The moderating effect of age on the association between disengaged coping strategies and depressive symptoms was examined. The regression model indicates that depressive symptoms were significantly associated with disengaged coping ($B = -1.10, SE = 0.63, p < .05$) and with age subgroups (dummy variable 1: $B = 4.19, SE = 0.80, p < .000$; dummy variable 2: $B = 4.86, SE = 0.89, p$...
The overall model was found to be significant ($F(5,108) = 11.69, p < .001$); 35% of the variance of depressive symptoms was explained by the independent and interaction variables. The interaction of disengaged coping x age groups added 11% to the explained variance of depressive symptoms ($R^2$ change $= 0.11$, $F(2,108) = 9.38, p < .000$). Table 3 shows the conditional effect of disengaged coping on depressive symptoms for each age group and the graphic representation of the interaction between stressors’ intensity and age (Fig. 1B) shows that the slope between disengaged coping and depressive symptoms was steeper for the two older groups in comparison with the young-old adult group. Moreover, the moderating effect was significant for the two older groups, especially for the oldest-old adult group, but with a non-significant trend in the opposite direction for the young-old adult group. The interaction results indicate that in support of the Hypothesis 3, the associations between disengaged coping and depressive symptoms differed among groups. Therefore, Hypothesis 3 was partially supported.

To assess Hypothesis 4, mediation tests were performed to determine whether coping strategies mediated the association between stressors’ intensity and level of depressive symptoms. Controlling for age, a significant direct association was found between stressors’ intensity and depressive symptoms ($b = 0.66$, $SE = 0.07$, 95% CI $= 0.53, 0.79$, $\beta = 0.69, p < .001$). Stressors’ intensity was not significantly associated with engaged coping ($b = -0.04$, $SE = 0.02$, 95% CI $= -0.09, 0.01$, $\beta = -0.16, p = .16$) and engaged coping was not significantly associated with depressive symptoms ($b = -0.06$, $SE = 0.25$, 95% CI $= -0.56, 0.43$, $\beta = -0.02, p = .80$). As for the mediating role of disengaged coping strategies, stressors’ intensity was significantly associated with disengaged coping ($b = -0.09$, $SE = 0.03$, 95% CI $= -0.14, -0.03$, $\beta = -0.28, p = .002$) and disengaged coping was significantly associated with depressive symptoms ($b = -0.85$, $SE = 0.23$, 95% CI $= -1.30, -0.41$, $\beta = -0.27, p < .001$). After controlling for the mediators, the direct effect of stressors’ intensity was reduced ($b = 0.59$, $SE = 0.07$, 95% CI $= 0.45, 0.72$, $\beta = .61, p < .001$), indicating a partial mediation effect. The indirect effect of disengaged coping was significant ($b = 0.07$, $SE = 0.04$, 95% CI $= 0.01, 0.06$, $\beta = 0.08, p < .001$) and engaged coping was negligible, with no significant effect (total effect: $b = 0.08$, $SE = 0.04$, 95% CI $= 0.01, 0.15$, $\beta = 0.08, p < .001$). Thus, the second hypothesis was partially confirmed: Stressors’ intensity was associated with depressive symptoms via disengaged coping strategies. Higher stressors’ intensity was associated with higher use of disengaged coping, which was associated with lower depressive symptoms. Engaged coping did not mediate the association between stressors’ intensity and depressive symptoms.

**Discussion**

Findings of the present research suggest that levels of depressive symptoms differed between age groups: The lowest level was found among participants in the youngest group and the highest level was found in the oldest group. Intensity of chronic stressors was significantly associated with depressive symptoms, even after controlling for background variables (gender, age, education). This association was stronger in older age compared with the youngest participants. In addition, the young-old adult group
used more engaged coping strategies than the two other groups, and the associations between stressors and depressive symptoms was mediated by disengaged coping.

In contrast to previous studies that assessed depressive symptoms or other mental health indicators among older adults as one group, the present study assessed depressive symptoms among different age groups in the older population. Our results are in support of the few studies that showed diverse levels of depressive symptoms among different older adult groups (Blazer, 2003; Luppa et al., 2012; Wu et al., 2012). However, these studies reported variable directions of these differences among various older adult groups. The present results are in line with studies that showed an increase in levels of depressive symptoms with age (Wu et al., 2012). Although getting older is often related to accumulating declines in health and functioning including personal and interpersonal losses (Blazer, 2003; Luppa et al., 2012), in recent decades, there has been a sharp improvement in health and functional abilities among people in their 60s and 70s (Yanf, 2007). This may explain their lower depressive symptoms (Luppa et al., 2012).

Results of large epidemiological studies across Europe (Castro-Costa et al., 2007) and in the United Kingdom (Osborn et al., 2003) indicated a trend towards increased depression scores with age, while another study suggested a U-shaped relation between age and depression (Wild et al., 2012). Potential sources of differences among these studies could be related to various study designs, different samples, and the tools applied to assess depression (Luppa et al., 2012; Wild et al., 2012).

The increase in chronic stressors’ intensity across the age groups found in the present study is in line with the understanding that various health, functioning, or economic stressors are especially prominent with more advanced age (Ben-Zur, 2005; Osmanovic-Thunström et al., 2015). Moreover, the moderation analysis showed that the effect of the chronic stressors’ intensity on depressive symptoms increased in the two older age groups, especially the oldest-old adult group. This finding is in contrast to theories suggesting that the impact of stressors on the psychological well-being of older people is less prominent in older than in younger adults (Charles et al., 2009). However, these processes were identified in studies with mostly young-old adults; when problems and losses accumulate with age, they may create greater vulnerability (Charles et al., 2009). Thus, older individuals could be more prone to react with depressive symptoms to stressors.

Examining older adults as one group, several studies reported higher use of disengaged coping strategies and lower use of engaged coping strategies in older adults as compared to middle-aged or younger adults (Meléndez et al., 2012) and a shift toward higher use of disengaged coping by older adults. Our study is among very few studies (López-López et al., 2008; Melding, 1995) to show that oldest-old adults reported higher use of disengaged coping compared to the young-old adult group. The present findings are in accord with strength and vulnerability integration theory, which suggests that during the aging process, individuals gradually shift from engaged coping toward more disengaged coping (Charles, 2010).

In contrast to previous studies that reported that engaged coping was associated with lower depressive symptoms (Hansen & Ghafoori, 2017; Najmi & Wegner, 2008; Park & Adler, 2003; Shapiro et al., 2010), and
in contrast to studies that reported disengaged coping related to more depressive symptoms (Najmi & Wegner, 2008; Shapiro et al., 2010), we observed that higher use of disengaged coping strategies was related to lower levels of depressive symptoms, and no associations appeared between engaged coping and symptoms. These findings are in line with a few previous studies that found that disengaged coping was associated with lower depressive symptoms among older adults with chronic pain (López-López et al., 2008; Melding, 1995). This finding again supports the strength and vulnerability integration theory, suggesting that older individuals tend to avoid confronting stressors as a means of maintaining positive effect in light of diminishing abilities to control stressful situations (Charles et al., 2009). Moreover, the moderating effect of age found in the present study demonstrates a gradual change by age in the positive role of disengaged coping in reducing depressive symptoms.

Finally, engaged coping did not play a mediation role between chronic stressors and depressive symptoms, whereas disengaged coping partially mediated this association, pointing again to the central role of disengaged coping in maintenance of mental health in old age. Positivity effect theory (Carstensen, 1993; Carstensen, 2006) or strength and vulnerability integration theory (Charles et al., 2009) can explain this unique role of disengaged coping in old age. These theories assert that across adulthood, people become more selective in giving attention to external stimuli by increasing attention toward a positive stimulus and distract attention away from a negative stimulus (Charles et al., 2009).

**Conclusion And Limitation**

The present results have several implications for practice. The main implication is that psychosocial professionals should be aware of differences in the experience of stressors, depressive symptoms, and the use of coping strategies across older adult age groups. Another implication is that oldest-old adults face more chronic stressors and higher risk of psychological symptomatology. Therefore, screening for depressive symptoms along with high-intensity chronic stressors is warranted, as is tailoring interventions to increase adaptive coping strategies. The results do not imply that individuals from younger groups cannot benefit from such interventions but rather that special attention is particularly needed for the oldest-old adults. Another implication of the study relates to the possible adaptive function of disengaged coping that increases with age, which may be counterproductive to efforts of clinicians to assist their clients in strengthening engaged coping strategies. However, additional studies are needed to better understand the differential role of engaged, and disengaged coping strategies in various age groups of older adults.

Several study limitations should be underscored. This was a cross-sectional study examining differences among age groups. Consequently, no causal relationships can be established regarding associations among the study variables. Another limitation relates to the medium-size sample. Moreover, it was a convenient community sample, rather than a random one; all participants were recruited from centers for older adults, which could constitute a limitation of the generalization of our findings regarding older adults.
Declarations

Ethics approval: Approval was obtained from University of Haifa Committee for Ethical Research with Humans (147/09).

Consent to participate: Informed consent was obtained from all individual participants included in the study. In addition, all methods were performed in accordance with University of Haifa Committee for Ethical Research with Humans guidelines and regulations.

Availability of data and materials: The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy and ethical restrictions.

Competing interests: The authors state no conflict of interests.

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Authors’ contribution: All authors contributed to the study conception and design. Material preparation and analysis were performed by all authors. Data collection was performed by RR, The first draft of the manuscript was written by WS and MC, and all authors commented on the various versions of the manuscript. All authors read and approved the final manuscript.

References


Figures
Figure 1

The associations between depressive symptoms, stressors intensity, and disengaged coping, by age groups

A: The association between stressors intensity and depressive symptoms;
B: The association between disengaged coping and depressive symptoms

Supplementary Files

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