



Emotional distress among the Bedouin Arab and Jewish elderly in Israel: The roles of gender, discrimination, and self-esteem



Sarah Abu-Kaf^{a,*}, Ora Nakash^{b,c}, Tsachi Hayat^d, Michal Cohen^b

^a Conflict Management & Resolution Program, Department of Interdisciplinary Studies, Ben-Gurion University of the Negev, Israel

^b Baruch Ivcher School of Psychology, Interdisciplinary Center, Herzilya, Israel

^c School for Social Work, Smith College, Northampton, MA, United States

^d Sami Ofer School of Communication, Interdisciplinary Center, Herzilya, Israel

ARTICLE INFO

Keywords:

Emotional distress
Discrimination
Self-esteem
Elderly
Bedouin Arab

ABSTRACT

Mental-health problems are common among older adults, especially those who are members of disadvantaged ethnic minorities. We explored ethnic and gender differences in emotional distress, perceived discrimination, and self-esteem among elderly Bedouin Arab and Jewish individuals in Israel, as well as the moderating role of discrimination in the association between self-esteem and emotional distress among Bedouin Arabs. The sample included 256 older adults (60 years old and above): 147 native-born Israeli Jews and 109 Bedouin Arabs. Participants completed self-report questionnaires that assessed emotional distress, perceived discrimination, self-esteem, and sociodemographic factors. Israeli Jews reported lower levels of emotional distress than Bedouin Arabs. Bedouin Arab women reported more emotional distress than Bedouin Arab men. Among the Bedouin Arabs, gender differences were found in the associations of perceived discrimination and self-esteem with emotional distress. Among the Bedouin men, discrimination and self-esteem were found to be significant predictors of emotional distress. Among the Bedouin women, we found a similar association between self-esteem and emotional distress. However, the protective role of self-esteem disappeared in the context of higher levels of daily discrimination. This study underscores how gender can affect the moderating role of discrimination in the association between self-esteem and emotional distress among the elderly.

1. Introduction

The world's population is aging and many countries are rapidly becoming more culturally diverse. According to the World Health Organization (WHO, 2017), between 2015 and 2050, the proportion of the world's older adults (over the age of 60) is estimated to almost double, from 900 million to 2 billion people. Moreover, based on UN projections, by 2025, about a fifth of Europeans (107 million) will be elderly migrants and members of ethnic minority groups (UN, 2015).

Although they tend to decline with age, mental-health problems such as mood and anxiety disorders remain very common among older adults (Parkar, 2015). In terms of gender differences, older women have been found to score higher than older men on measures of common mental-health problems (for a review, please see Girgus et al., 2017; Gronning et al., 2018; Perkins et al., 2016; Steptoe et al., 2011).

Older people, in general, and those from ethnic minorities, in particular, face special physical and mental health challenges, which

should be recognized. Research on the experiences and mental-health problems of older people who are members of ethnic-minority groups remains limited, thus the main aim of this study was to shed light on associations between emotional distress, discrimination, and self-esteem among the Bedouin Arab and Jewish elderly in Israel. Previous studies have shown no differences in the prevalence of emotional distress among elders of ethnic minority vs. ethnic majority groups (Biafora, 1995; Harralson et al., 2002; Jimenez et al., 2010; Kim et al., 2000). Others have shown that the incidence of emotional distress is even lower among ethnic-minority elders (Callahan and Wolinsky, 1994; Harralson et al., 2002; Murrell, 1983, 1989; Willging et al., 2018; Zhung et al., 1998). However, some studies have pointed to elderly members of some disadvantaged ethnic minorities, such as American Indians and Alaska Natives elders, as being particularly vulnerable to the development of mental-health problems (Garrett et al., 2015; Kramer, 1991; Willging et al., 2018).

The Bedouin Arabs in Israel belong to the country's Arab minority,

* Corresponding author at: Conflict Management & Resolution Program, Department of Interdisciplinary Studies, Ben-Gurion University of the Negev, P.O. Box 653, Beer Sheva, Israel 8410501.

E-mail address: aks@bgu.ac.il (S. Abu-Kaf).

<https://doi.org/10.1016/j.psychres.2020.113203>

Received 16 January 2020; Received in revised form 3 June 2020; Accepted 5 June 2020

Available online 09 June 2020

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which comprises 21% of the entire population (CBS, 2019). The Bedouin Arab population in the Negev region of Israel numbers 250,000 and comprises 23% of the population of the Negev (Amara and Yiftachel, 2014). This ethnic minority group faces enormous difficulties in the social, cultural, political, and financial domains of everyday life (Abu-Kaf, 2019). This minority differs from the Jewish Israeli majority in terms of language, religion, and other cultural characteristics (Abu-Kaf, 2019; Al-Haj, 2000). Bedouin Arab culture is highly collectivistic, patriarchal, and authoritarian (Peleg-Popko et al., 2003). This cultural context accepts a hierarchical order in which inequalities based on gender and age are common (Abu-Kaf, 2019; Haj Yahia-Abu Ahmad, 2006).

Bedouin Arab elders represent about 4% of the Bedouin Arab population in Israel (CBS, 2019). This population is considered to be a disadvantaged minority suffering from very low education levels (the vast majority of adults are illiterate) and high levels of poverty (about 60% of the families live below the poverty line; CBS, 2019). In addition to these difficulties and challenges, Bedouin individuals are currently experiencing rapid changes in cultural values and social structure. These changes strongly affect both cultural values, such as respect for elders, and power relations (i.e., elders as the head of the family; Abu-Kaf, 2019). As a result of those difficulties and challenges, previous research has shown that Bedouin Arab individuals are particularly vulnerable to emotional distress (Abu-Kaf, 2019; Abu-Kaf and Braun-Lewensohn, 2015; Abu-Kaf and Shahar, 2017; Braun-Lewensohn et al., 2019). Importantly, research to date on Bedouins is scarce and has largely been conducted among young and middle-aged individuals and, to the best of our knowledge, there has been no research conducted on the Bedouin Arab elderly. Thus, the current study attempts to fill this gap and assess the levels of emotional distress among this understudied population.

1.1. Discrimination and emotional distress among the elderly

Discrimination refers to a behavioral manifestation of a negative attitude, judgment, or unfair treatment of individuals from a specific group (Banks et al., 2006; Richman et al., 2007; Williams et al., 1999). Perceived discrimination implies a rejection or exclusion of the targeted group and its members, which can undermine psychological well-being by threatening the fulfillment of needs for inclusion and acceptance (M.T. Schmitt et al., 2014). Reviews have documented strong and consistent associations between self-reported experiences of discrimination and physical health, mental health, and psychological well-being (Lewis et al., 2015; Pascoe and Richman, 2009). Previous research has found a positive association between experiences of discrimination and emotional distress (for an extensive review, see Lewis et al., 2015; M.T. Schmitt et al., 2014; Wallace et al., 2016). In their meta-analysis, Schmitt and his colleagues found that the mean weighted effect of discrimination on psychological well-being was significantly negative. Moreover, this effect has been shown to be significantly negative, even in longitudinal studies that controlled for prior levels of psychological well-being. For example, Brown and colleagues (2000) found that greater reports of discrimination at a particular point in time predicted higher levels of depression at a second assessment conducted one year later. Conversely, greater levels of depression at the earlier time point did not predict more reports of discrimination at the second time point, providing some evidence that discriminatory experiences precede elevated rates of depression (Brown et al., 2000).

Studies have found that the association between perceived discrimination and emotional distress is stronger among groups of disadvantaged status than it is among groups of advantaged status, for example, for Black Americans as compared to White Americans, women as compared to men, those of low socioeconomic status as compared to those of high socioeconomic status, and those with lower levels of education level as compared to those with higher levels of education (M.T. Schmitt et al., 2014). However, perceptions of group

discrimination suppress the negative consequences of perceived personal discrimination because group discrimination conveys that one is not alone in the rejection and thus contributes to successful coping (M.T. Schmitt et al., 2014). In addition, an analysis of cross-sectional studies has shown that controllable and invisible stigmas have stronger negative effects and that the negative association is weaker for racism and sexism than it is for other stigmas (i.e., mental illness, sexual orientation, physical disability, weight or HIV status; M.T. Schmitt et al., 2014).

Previous studies have consistently found that elderly African-American and Hispanic adults in the US report lower levels of discrimination than their middle-aged and young-adult counterparts (Lewis et al., 2015). Although older individuals are less likely to report perceived discrimination than younger people, about 70% of older people still indicate that they experience everyday discrimination (Kessler et al., 1999). Specifically, older people are more likely than younger adults to report perceived age discrimination. "Ageism is defined as a process of systematic stereotyping of, and discrimination against people because they are old, just as racism and sexism accomplish this for skin color and gender" (Butler, 1987, p. 22).

Research has shown that changes in perceived discrimination are significantly associated with changes in depressive symptoms over time and that self-perceptions of aging mediate the relationship between perceived age discrimination and depressive symptoms. Thus, it seems that the negative effect of age discrimination on self-perceptions of aging can be a risk factor for the development of emotional distress among elders (Han and Richardson, 2015). In the current study, we assessed the different experiences of discrimination based on age, sex, and ethnic/cultural group and examine the associations of these factors with the emotional distress of elders from a disadvantaged ethnic minority.

1.2. Self-esteem and emotional distress among the elderly

Self-esteem has been defined as the "individual's subjective evaluation of his or her worth as a person" (Donnellan et al., 2011, p. 718). Longitudinal studies have assessed the self-esteem trajectory across the lifespan in samples from US (Orth et al., 2010, 2012). These studies found that a trajectory with an inverted U-shape best fit the data; self-esteem increased from adolescence to middle adulthood, peaked at about age 50 to 60 years, and then decreased in old age. Furthermore, in some studies, the decline in self-esteem was strong (Orth et al., 2010, 2012); whereas other studies found only small decreases (Orth et al., 2015; Wagner et al., 2013; J. 2014, 2015). Potential explanations for this decrease include the fact that the transition to old age frequently involves negative changes in social roles. Transitions in old age not only affect social roles, but may also lead to negative changes in social relationships. Longitudinal research has shown that decline in cognitive abilities and perceived control, as well as increasing loneliness, may contribute to lower self-esteem in old age (Wagner et al., 2013, 2015).

Given that relationships are one of the most influential factors affecting self-esteem, significant loss of relationships might lead to reduced self-esteem in old age. Elderly people often experience negative changes regarding other sources of self-esteem, for example, financial resources and physical health, which might negatively affect self-esteem. Empirical evidence suggests that differences in socioeconomic status and health moderate the trajectory in old age. In other words, older adults with stable incomes and good health experience smaller decline in their self-esteem (Orth et al., 2010).

Regarding gender differences in self-esteem, a large number of studies have provided evidence that across cohorts, samples, and measures, men tend to have higher self-esteem than women. Furthermore, there are no gender differences in the trajectory in old age (Orth, 2017; Orth et al., 2010).

Concerning ethnic differences in self-esteem, previous research has found that individuals from non-Western/collectivistic cultural contexts

report lower levels of self-esteem than do those from Western/individualistic cultural contexts (Schmitt and Allik, 2005; Sedikides et al., 2003, 2005). The source of these differences has been associated with cultural differences and the subcomponents of self-esteem (i.e., self-competence and self-liking). In their review, Schmitt and Allik (2005) pointed to solid evidence that the subcomponents of self-esteem vary systematically across cultures. For example, low levels of self-competence are more common among more collectivistic cultures. Taken together, cultural differences in global self-esteem reflect differences in the evaluation on self-competence.

A cross-cultural examination of gender and age differences in self-esteem was conducted using a large internet sample ($N = 98,593$; Bleidorn et al., 2016). Across 48 nations, that study found age-related increases in self-esteem from late adolescence to middle adulthood, as well as significant gender differences, with males reporting higher self-esteem than females. Despite this similarity between Western and non-Western countries, there were also cultural differences. Western countries were marked by larger gender gaps in self-esteem, which tend to decrease throughout early and middle adulthood and old age. In contrast, collectivistic countries are marked by smaller gender gaps, which tend to increase throughout early and middle adulthood and old age (Bleidorn et al., 2016).

Self-esteem is predictive of a person's success and well-being in important life domains (Orth et al., 2012; Sowislo and Orth, 2013; Trzesniewski et al., 2006). Concerning the implication of self-esteem on emotional distress, the available research suggests that low self-esteem may be a risk factor for negative outcomes. Reviews conducted in 2009 and 2013 provide support for the vulnerability model, in which low self-esteem is considered a risk factor for the development of depression and anxiety at all stages of adulthood, including old age (Orth et al., 2009; Sowislo and Orth, 2013).

The results of a review conducted by Sowislo and Orth (2013) suggest that the strength of the vulnerability effect of low self-esteem on emotional distress is not moderated by gender or age. Thus, although there are gender and age-group differences in levels of self-esteem and emotional distress (Hyde et al., 2008; Kessler et al., 1992; Kling et al., 1999; Lewinsohn et al., 1991; Orth et al., 2010, 2012; Robins et al., 2002), the structural relations between self-esteem and emotional distress are unaffected by gender or age.

While people of all backgrounds may be prone to developing low self-esteem, people of less privileged social status are often victims of discrimination, which may result in elevated levels of psychological stress. For people of color, in particular, many studies have found that the more discrimination is experienced, the less self-esteem a person will possess (Nadal et al., 2014). A negative association has been found between racial and ethnic microaggressions, which are subtle forms of racial discrimination, and self-esteem (Nadal et al., 2014). In the current study, we examined the associations between perceived discrimination, self-esteem, and emotional distress among Bedouin Arab elders, who are members of a disadvantaged ethnic group in Israel.

1.3. The current study

The main aim of the current study was to assess the levels of emotional distress among Bedouin elders, as compared to native-born Israeli Jewish elders (aged 60 years old and above). This study is also designed to explore gender differences in emotional distress, discrimination, and self-esteem. We were also interested in testing the associations between emotional distress, discrimination, and self-esteem among elderly Bedouin Arab and Jewish individuals in Israel. In this paper, special attention is directed to the exploration of the moderating role of discrimination in the association between self-esteem and emotional distress, particularly among Bedouin Arabs.

In accordance with the study aims, four research hypotheses were formulated:

- 1 We expected to find ethnic differences in emotional distress, discrimination, and self-esteem. We expected that the Bedouin elders would report higher levels of emotional distress and discrimination than the Jewish elders (Garrett et al., 2015; Kramer, 1991; Willging et al., 2018). We also expected that the Bedouin elders would report lower levels of self-esteem (Schmitt and Allik, 2005; Sedikides et al., 2003, 2005).
- 2 We expected to find gender differences in emotional distress, discrimination, and self-esteem such that female elders would report higher levels of emotional distress and discrimination than male elders (Girgus et al., 2017; Gronning et al., 2018; Perkins et al., 2016; M.T. Schmitt et al., 2014; Sowislo and Orth, 2013; Steptoe et al., 2011). We also expected that female elders would report lower levels of self-esteem (Bleidorn et al., 2015; Orth, 2017; Orth et al., 2010).
- 3 We expected to find a positive association between discrimination and emotional distress and a negative association between self-esteem and emotional distress (Orth et al., 2009, 2012; Sowislo and Orth, 2013; Trzesniewski et al., 2006).
- 4 We expected that discrimination would play a moderating role in the association between self-esteem and emotional distress (Nadal et al., 2014).

2. Methods

2.1. Sample and procedure

A convenience sample of 256 older adults participated in this study. We recruited participants using various methods, to increase the ethno-national and sociodemographic diversity of the sample. Participants were recruited using direct person-to-person solicitation in social clubs and community centers for elderly people in various locations across central and southern Israel. Finally, we used snowball-sampling techniques to increase recruitment. Inclusion criteria included an age of at least 60 years. The sample included participants from two ethno-national groups: native-born Israeli Jews ($N = 147$) and Bedouin Arabs ($N = 109$). Participants were recruited by research assistants who were fluent in their native language (i.e., Hebrew or Arabic). After participants signed informed-consent forms, they completed self-report questionnaires in their native language. Among the Bedouin Arab sample, the questionnaire items were read out loud for the participants with lower levels of education. The study was approved by the Ethics Committee of the Interdisciplinary Center, Herzliya, Israel.

2.2. Measures

2.2.1. Sociodemographic questionnaire

A self-report questionnaire was used to collect sociodemographic information. Questions included items concerning gender, age, years of formal education, and marital status (i.e., single; married/living with a partner; divorced/separated; widowed; for Bedouin Arab men, married to more than one women; and for Bedouin Arab women, married to man who is married to more than one woman.)

2.2.2. The general health questionnaire (GHQ-12; goldberg, 1978)

This commonly used questionnaire assesses emotional distress over the preceding month. The questionnaire consists of 12 items, which are each rated on a 4-point Likert scale (e.g. "Have you recently been able to concentrate on whatever you are doing?" and "Have you recently been able to manage your problems?"). The final score was calculated as the sum of the scores for all of the items, with higher scores indicating greater emotional distress. This measure has been validated for use in many countries, including Israel (Kessler and Ustun, 2008; Nakash et al., 2014). In the current study, we used the Arabic and Hebrew version (Nakash et al., 2014). For both samples, Israeli Jews and Bedouin Arabs, internal reliability of the scale was good (Cronbach's $\alpha = 0.84$,

0.87, respectively).

2.2.3. *Everyday discrimination questionnaire (EDQ; williams et al., 1997)*

This nine-item self-report measure assesses the frequency of experiences of routine, minor acts of discrimination. Participants were asked to rate their experiences on a 6-point scale, ranging from *never* (1) to *almost every day* (6). Examples of items included “*You are treated with less respect than other people*” and “*People act as if they think that you are not smart.*” Final scores were the mean scores for all items. In the current study, we used the Hebrew and Arabic versions of this instrument. For both samples, Israeli Jews and Bedouin Arabs, internal reliability of the scale was good (Cronbach’s $\alpha = 0.88, 0.85$ respectively).

2.2.4. *Single-Item self-esteem scale (SISE; robins et al., 2001)*

This measure, which provides a practical alternative to the Rosenberg Self-Esteem Scale (Rosenberg, 1965), was used to assess participants’ self-esteem. Participants were presented with the following statement: “*I see myself as a person with high self-esteem.*” They were then asked to rate their level of agreement with that statement on a 9-point scale ranging from *strongly disagree* (1) to *strongly agree* (9).

3. Results

3.1. *Differences in sociodemographic variables and main study variables*

The sociodemographic characteristics of the sample by group are presented in Table 1. Participants’ ages ranged from 60 to 93 years old ($M = 70.46; SD = 7.44$). Most of the participants were female (58.2%). In order to investigate differences between ethnic groups and gender, we performed a series of 2×2 (ethnic group \times gender) univariate ANOVA tests (see Table 1).

In our sample, the Bedouin Arab women were younger than the Bedouin Arab men and both the male and female Jewish participants. In addition, the male and female native-born Israeli Jews were more educated than the Bedouin Arabs. The Bedouin Arab women had the fewest years of formal education.

Regarding the main study variables, there were significant differences between the groups in terms of emotional distress. Specifically, the male and female Israeli Jews reported less emotional distress than the Bedouin Arabs. Bedouin Arab women reported greater emotional distress than Bedouin Arab men. There were no significant differences between the groups in terms of perceived discrimination or self-esteem.

3.2. *Associations between emotional distress, discrimination, and self-esteem among Bedouin Arab men and women*

Table 2 presents the associations between study key variables among Jewish and Bedouin participants. While, there were no significant association between gender and emotional distress among the native-born Israeli Jews ($r = 0.03, n.s$), among Bedouin Arabs gender was significantly associated with emotional distress ($r = 0.24, p < .05$).

We next proceeded to conduct regression analyses only among the Bedouin men and women. In the regression analyses we attempted to identify the role of perceived discrimination and self-esteem in the

association between gender and emotional distress. Since this association was not significant among the Jewish participants we did not proceed with additional analyses among Jewish men and women.

We performed two separate linear regressions for the male and female Bedouin Arab participants. In both regressions, in the first block, we entered the control variables (sociodemographic variables). In the second block, we entered the main independent variables separately (self-esteem and discrimination) and, in the third block, we entered the interaction term between the main independent variables. Emotional distress (i.e., GHQ score) was the dependent variable.

For Bedouin Arab men, the model was significant, predicting 50.4% of the variance in emotional distress. As can be seen in Table 3, discrimination and self-esteem were associated with emotional distress, suggesting that greater discrimination was associated with greater emotional distress (partial $r = 0.58, p < .001$); whereas higher self-esteem was associated with less emotional distress (partial $r = -0.37, p < .01$).

For the Bedouin Arab women, the model was significant, predicting 24.1% of the variance in emotional distress. As can be seen in Table 3, self-esteem was associated with emotional distress, suggesting that higher self-esteem was associated with less emotional distress (partial $r = -0.35, p < .01$).

Most importantly, the analysis revealed a significant interaction between discrimination and self-esteem (partial $r = 0.3, p < .05$), suggesting that the association between self-esteem and emotional distress varies with the level of exposure to discrimination. Simple slopes for the association between self-esteem and emotional distress were tested for different levels of discrimination. The analysis revealed a significant negative correlation between self-esteem and emotional distress in the presence of low ($b = -3.63, SEb = 1.13, \beta = -0.52, p < .01$) and medium ($b = -2.14, SEb = 1.03, \beta = -0.31, p < .05$) levels of discrimination, with a stronger correlation in the presence of low-level discrimination. However, there were no significant correlations between self-esteem and emotional distress in the presence of a high level of discrimination ($b = 44, SEb = 1.79, \beta = 0.06, n.s.$).

4. Discussion

The main aim of the current study was to shed light on associations among emotional distress, discrimination, and self-esteem among elderly Bedouin Arab and Jewish individuals in Israel. This study was designed to explore ethnic and gender differences in emotional distress, discrimination, and self-esteem. In this work, we were also interested in exploring the moderating role of discrimination in the association between self-esteem and emotional distress, particularly among Bedouin Arabs.

Our results show that Israeli-born Jews, women and men, had lower levels of emotional distress than Bedouin Arabs. This finding does not support those of previous studies that have shown no significant differences in point prevalence of emotional distress between ethnic-minority elders and elders from the majority ethnic group (Harralson et al., 2002; Kim et al., 2011; Kubzansky et al., 2000), as well as other studies that have shown that the point prevalence rate of emotional distress is even lower among ethnic-minority elders (Callahan and Wolinsky, 1994; Harralson et al., 2002; Murrel et al.,

Table 1
Sociodemographic and clinical characteristics of the sample by group.

	Native Israeli Jews		Bedouin Arab		Statistic
	Men	Women	Men	Women	
Age	71.21 (8.1)	72 (7.11)	71.26 (7.6)	67.08 (6.11)	$F(1252) = 7.14, p < .01$
Education	14.07 (3.25)	14.24 (3.32)	4.62 (5)	1.42 (3.22)	$F(1223) = 12.26, p < .01$
Discrimination	1.52 (0.09)	1.33 (0.08)	1.32 (0.10)	1.4 (0.13)	$F(1219) = 2.13, n.s.$
Self-Esteem	4.02 (0.16)	4.1 (0.15)	4.27 (0.18)	4.21 (0.22)	$F(1220) = 0.22, n.s.$
Emotional Distress	6.51 (5.41)	6.68 (4.87)	11.56(7.23)	15.54 (8.22)	$F(1218) = 4.3, p < .05$

Table 2
Bivariate Correlations Between Independent and Dependent Variables by Ethnicity.

Variable	Native Israeli Jews				Bedouin Arab			
	1	2	3	4	1	2	3	4
1. Gender	–	–0.16	.00	.03	–	.06	–0.05	.24*
2. Discrimination		–	–0.21**	.34**		–	–0.11	.29**
3. Self-Esteem			–	–0.48**			–	–0.39**
4. Emotional Distress				–				–

Note. For gender, male = 0, female = 1. All correlation coefficients represent Pearson's *r*.

* $p < 0.05$.

** $p < .01$.

Table 3
Hierarchical linear model examining the moderating role of discrimination in the association between self-esteem and emotional distress.

	Bedouin Women (<i>N</i> = 63)			Bedouin Men (<i>N</i> = 46)		
	B	SE	β	B	SE	β
Step 1						
Age	.17	.18	.14	.16	.17	.17
Education	.30	.37	.12	–0.36	.26	–0.24
Step 2						
Discrimination	1.36	1.4	.14	6.95	1.61	.52***
Self-Esteem	–2.56	1.04	–0.34*	–1.85	.75	–0.33*
Step 3						
Discrimination \times Self-Esteem	3.16	1.56	1.49*	.19	1.21	.07

* $p < .05$. ** $p < .01$. *** $p < .001$.

1983; Smallegan, 1989; Willging et al., 2018; Zhung et al., 1998). Our finding does support the findings of previous studies that reported particular vulnerability to the development of mental-health problems among elderly members of some disadvantaged ethnic minorities, such as American Indians and Alaska Natives (Garrett et al., 2015; Kramer, 1991; Willging et al., 2018). Our results suggest that Bedouin Arab elders in Israel should also be considered as particularly vulnerable to emotional distress. This vulnerability may be the result of the unique characteristics of Bedouin society, as the society of a disadvantaged minority suffering from relatively high levels of poverty and experiencing rapid changes in cultural values and social structure. These changes strongly affect cultural values and power relations, such as respect for elders and the role of elders as the head of the family (Abu-Kaf, 2019).

Contrary to our initial expectations, we did not find significant ethnic differences in reported exposure to discrimination and self-esteem. The lack of difference in reported discrimination may be explained by the low tendency of elders among minorities to report experiences of discrimination (Lewis et al., 2015). In addition, among both groups, older people are more likely than younger adults to report perceived age discrimination (Kessler et al., 1999).

The similar levels of self-esteem do not support previous findings that individuals from non-Western/collectivistic cultural contexts report lower levels of self-esteem than do those from Western/individualistic cultural contexts (Schmitt and Allik, 2005; Sedikides et al., 2003, 2005). The source of those differences in self-esteem has been associated with cultural differences in the self-competence component (but not the self-liking component) of self-esteem (Schmitt and Allik, 2005). In Bedouin Arab society, the vast majority of elders live with their extended families, which may lead to higher levels of the self-liking component of self-esteem (e.g., one's feelings of being loved, likable, and socially worthy; Tafarodi and Swann, 1995).

We also found gender differences in emotional distress, but only among the Bedouin Arab sample. The gender differences found between Bedouin female elders and Bedouin male elders confirm previous research, which found strong empirical evidence for higher emotional distress among women aged 60 and above. Older women have been found to score higher than older men on measures of common mental-health problems (for a review, please see Girus et al., 2017;

Gronning et al., 2018; Perkins et al., 2016; Steptoe et al., 2011). In the context of the Bedouin Arab minority, the higher levels of emotional distress observed among older women may be related to the fact that Bedouin Arab culture is quite patriarchal and traditional norms govern the household division of labor. Takeda and colleagues (2004) observed that the patriarchal family structure may affect the emotional distress level of women. For example, women in multigenerational households have significantly higher caregiving concerns than women living with only their husband. Moreover, there is a very low level of education (Braun-Lewensohn et al., 2019) and a low employment rate among Bedouin women, as well as a gender income gap (Farjoon, 2018). It is important to note that the majority of the Bedouin women elders in the current study reported being a homemaker and being financially dependent on their husbands or other family members, which may impose additional types of stress and increase their vulnerability to develop emotional distress.

Gender differences among Bedouin Arab elders were found not only in the levels of emotional distress, but also in the associations of perceived discrimination and self-esteem with emotional distress. Among the Bedouin Arab men, discrimination was significantly positively associated with emotional distress. This finding supports previous research, which has found a positive association between experiences of discrimination and emotional distress (Lewis et al., 2015; M.T. Schmitt et al., 2014; Wallace et al., 2016). Schmitt and his colleagues (M.T. 2014), in their meta-analysis, examined correlations between perceived discrimination and psychological well-being (e.g., depression, anxiety, psychological distress, life satisfaction). They found that the mean weighted effect of discrimination on psychological well-being was significantly negative, indicating harm. Importantly, this effect has been shown to be significantly negative even in longitudinal studies that controlled for prior levels of well-being.

In addition, among older Bedouin Arab men, self-esteem was significantly negatively associated with emotional distress, with higher levels of self-esteem associated with lower levels of emotional distress. This finding confirms previous research on the associations between self-esteem and symptoms of depression and anxiety (for reviews, see Orth, 2017; Orth et al., 2009; Sowislo and Orth, 2013). Possible explanations for this association have been suggested, including a possible intrapersonal process in which low self-esteem increases rumination

and the use of nonadoptive coping strategies (Kuster et al., 2012), which, in turn, may affect mental health. Another possibility is that low self-esteem may motivate social avoidance, which reduces the availability of social support and which, in turn, may affect emotional distress (Orth, 2017).

Among the Bedouin Arab women, we found a similar association between self-esteem and emotional distress, with higher self-esteem associated with lower levels of emotional distress. Among these women, we found evidence that discrimination moderates the association between self-esteem and emotional distress. In other words, in the presence of different levels of discrimination, the association between self-esteem and emotional distress among these women varied. Our results revealed a significant negative correlation between self-esteem and emotional distress only in the presence of low or medium levels of discrimination. There was no significant correlation between self-esteem and emotional distress in the presence of a high level of discrimination. However, it is important to note that, among the elderly Bedouin Arab women, the protective role of self-esteem disappeared in the context of higher levels of daily discrimination.

4.1. Limitations and directions for future research

The current study had some limitations and there are areas that warrant further attention in future research. First, our findings were based on self-report measures. Therefore, results could have been skewed by social desirability. In future studies with similar designs, it would be prudent to include a measure of social desirability to test the degree to which this variable may bias the results. In addition, further research using other methods of data collection (e.g., interview techniques, diaries, observer ratings) would be beneficial and important for evaluating the validity of the obtained findings. Second, the study is cross-sectional and thus we cannot make any claims of causality. We cannot totally exclude the possibility that emotional distress may lead to lower self-esteem (through lowered motivation and high levels of avoidance and withdrawal) and to high levels of perceived discrimination (through oversensitivity in social contexts and negative interpretation of social events). Future studies with longitudinal designs may provide us with clear answers regarding the claim of causality and the direction of the association. An additional limitation is related to the small size of the Bedouin Arab sample. Future research should include larger numbers of male and female Bedouin elders. Another avenue for future research might be to extend the present model by incorporating additional demographic variables, such as family structure (polygamy vs. monogamy) and the type of community (old towns vs. new, recognized villages vs. unrecognized villages) and/or by examining variables such as stress levels and different types of stress (e.g., financial, political, social, interpersonal, and familial). All of these variables may be important factors in emotional distress in Bedouin Arab cultural contexts (Abu-Kaf, 2019).

Funding

This Study was supported by the Israeli National Institute for Health Policy and Health Services Research [2016/22].

Declaration of Competing Interest

We wish to confirm that there are no known conflicts of interest associated with this publication and there has been no significant financial support for this work that could have influenced its outcome.

Supplementary materials

Supplementary material associated with this article can be found, in the online version, at [doi:10.1016/j.psychres.2020.113203](https://doi.org/10.1016/j.psychres.2020.113203).

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