PERCEIVED SOCIAL SUPPORT AND ANXIETY: THE MEDIATING ROLE OF SELF-COMPASSION AND THE MODERATING ROLE OF CULTURE

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Abstract

The aim of the study was to examine whether perceived social support is related to anxiety and whether self-compassion accounts for the relationship between perceived social support and anxiety, among Jewish and Arab in Israel. 520 participants (309 Jews, 211 Arabs; 49%; male, 51% female; M age=40.31, SD=12.03), filled an online questionnaire that included: Demographic information, self-compassion, social support and anxiety scales. Results showed that higher levels of perceived social support were associated with lower levels of anxiety. Self-compassion acted as a mediator between perceived social support and anxiety. In addition, culture had a moderating effect on the relation between perceived social support and self-compassion as well as on the relation between self-compassion and anxiety: The mediation effect is stronger for Arabs compared to Jews. The results confirm previous research of self-compassion as a mediator and add to the unfolding research of possible interaction between culture and self-compassion.

Keywords: Self-compassion, perceived social support, anxiety, culture.

1. Introduction

Perceived social support refers to individuals' beliefs regarding the availability of support within their social networks. Perceived social support has been positively linked to better psychological well-being (Alsubaie, Stain, Webster & Wadman, 2019; Harandi, Taghinasab, & Nayeri, 2017) and showed negative associations with anxiety (Metts et al. 2023), stress (Suwinyattichaiporn & Johnson, 2022; Hou, Zhang, Cao, Lei, & Liu, 2023), and depression (Suwinyattichaiporn & Johnson, 2022). Yet, these associations are not necessarily direct but rather mediated. Recent studies underscore self-compassion's role in mediating the relationship between perceived social support and negative psychological well-being. Wilson, Weiss & Shook, (2020) found that self -compassion was one of three factors that accounted for perceived social support and psychological wellbeing outcomes. Similarly, Chan, Yip & Tsui, (2023), investigated the impact of family support on the recovery of people with mental illness and explored the potential mechanisms underlying this impact. They found positive associations between family support and self-compassion. Moreover, self-compassion demonstrated a correlation with lower symptom severity, enhanced social and work functioning, more optimistic perceptions of recovery, and increased life satisfaction.

The concept of self-compassion, as defined by Neff (2022), comprises three interrelated components: acknowledging suffering and failure as inherent aspects of humanity, mindfully experiencing these challenges, and responding with kindness and understanding towards oneself. Self-compassion has emerged as an important factor in mental health. Extensive research has established connections between self-compassion and variables such as depression, anxiety, mental health, and self-rated health (de Souza, Policarpo & Hutz 2020; Kotera, Van Laethem & Ohshima, 2020).

Emerging research shows nuanced behavior of self-compassion across diverse cultures. Self-compassion exhibited a noteworthy correlation with elevated levels of subjective well-being and concurrently lower levels of depressive and anxiety symptoms in Hong Kong students. However, these associations were not significant among students in the United States (Fung et al., 2021). Conversely, German employees demonstrated lower levels of mental health problems coupled with higher levels of self-compassion in comparison to their South African counterparts with self-compassion as the strongest predictor for mental health problems in both countries (Kotera Mayer & Vanderheiden, 2021). Notably, in another study, self-compassion played a negative predictive role in mental health problems among Japanese employees, but not among Dutch employees (Kotera et al. 2020). This highlights the need to

consider cultural variations in understanding the impact of self-compassion on psychological well-being.

The aim of the current study was to examine whether perceived social support is related to anxiety and whether self-compassion mediates the relationship between perceived social support and anxiety, among Jews and Arabs in Israel.

Our main hypotheses were:
1. Self-compassion mediates the relationship between perceived social support.
2. The mediated effect of self-compassion on perceived social support and anxiety is moderated by culture.

2. Method

2.1. Participants

Participants included 520 adults recruited online using methods described ahead. Inclusion criteria were being between 20 and 60 years of age and speaking the language in which the survey was administered (Hebrew or Arabic). No exclusion criterion was applied. The sample comprised 309 Jews (58.8%) and 211 Arabs (49%) male (51%) was female. Participants' mean age was 40.3 (SD=12.02) years.

2.2. Procedures

The current study was based on data collected by the authors in a cross-sectional survey conducted in Israel. An anonymous online questionnaire using Qualtrics (https://www.qualtrics.com) was created. The survey was sent to participants online by iPanel (https://www.ipanel.co.il), a large Israeli panel service. The complete study protocol was approved by the College Institutional Review Board. Questionnaire completion was voluntary, and respondents were told that they could stop their participation at any point. Data from participants who completed the survey were excluded from the final analysis if their responses were implausible (e.g., they chose the same answer throughout the questionnaire). The final analysis included 520 participants.

2.3. Measures

2.3.1. Demographic. The demographics questionnaire included items on culture, parenthood, gender, age, residence, religion and education.

2.3.2. Perceived social support. The *Multidimensional Scale of Perceived Social Support,* (Zimet, Dahlem, Zimet & Farley, 1988; α=0.94). The 12-items instrument comprises of 3 subscales that measure support from family, friends and significant others. Responses are on a scale of 1 (Strongly disagree) to 7 (Strongly agree). The mean score computed such that a higher score reflects more support coming from the institution. The MSPSS was translated and adapted to Hebrew by Statman (1995), that reported high internal reliability (0.93 for the family subscale, 0.91 for the friends subscale and 0.91 for the significant others subscale). In the current study, the internal reliability (Cronbach's alpha) was 0.95.

2.3.3. Self-compassion. The *Self-Compassion Scale Short Form* (Raes et al., 2011) includes 12 items for evaluating self-compassion through 6 sub-scales: self-kindness, self-judgement, common humanity, isolation, mindfulness, and over-identification. Each represented by 2 items. Responses are on a scale of 1 (Almost never) to 5 (Almost always). To compute a composite score, the negative items were reversed scored, and the sum across all items was computed. Higher scores indicated greater self-compassion. In the current study, the internal reliability (Cronbach's alpha) was 0.78.

2.3.4. Anxiety. *The DASS-21* (Lovibond and Lovibond 1995; Hebrew version, retrieved from DASS21 website http://www2.psy.unsw.edu.au/dass/) includes 21 items for evaluating depression (7 items), anxiety (7 items), stress (7 items), and a total score (21 items). All items use a 4-point Likert scale, ranging from never (0) to most all the time (3). A score above 11 on the depression scale indicates severe depression; a score above 8 on the anxiety scale indicates severe anxiety; and a score above 9 on the stress scale indicates moderate or severe stress. In the current study, the internal reliability (Cronbach's alpha) was 0.91 for anxiety.

3. Results

3.1. Hypothesis 1: Testing for the mediation effect

In Hypothesis 1 we expected that self-compassion would mediate the relationship between perceived social support. To examine this hypothesis, we followed the four-step procedure to set up mediation effect (Baron & Kenny, 1986). Regression analysis revealed that. In the first step social support negatively predicted anxiety (see Model 1 of Table 1). In the second step, social support positively predicted self-compassion (see Model 2 of Table 1). In the third step, after controlled for social support, self-compassion negatively predicted anxiety (see Model 3 of Table 1). At last, after controlled for self-compassion, social support negatively predicted anxiety. On the whole, a mediation effect was found, thus supporting hypothesis 1.

Table 1. Testing the mediation effects of social support on anxiety.

Predictors	Model 1		Model 2		Model 3	
	β	t	β	t	β	t
Social support	-.36	-8.74***	.53	14.10***	-.21	-4.83***
Self-compassion					-.35	-8.07***
R^2_{change}	.13		.28		.10	
F_{change}	76.37***		198.70***		65.12***	

***$p < .001$

3.2. Hypothesis 2: Testing for the moderated mediation

In hypothesis 2, the present study assumed that the mediated effect of self-compassion on perceived social support and anxiety will be moderated by culture. To examine the moderated mediation hypothesis, the current study estimated parameters for three regression models with PROCESS macro (model 59) by Hayes (2013). The present study estimated the moderating effect of culture on: the relation between social support and anxiety (model 1); the relation between social support and self-compassion (model 2); the relation between self-compassion and anxiety (model 3). The specifications of each model are summarized in table 1.

Moderated mediation was established if either or both of two patterns existed (Hayes, 2013): the path between social support and self-compassion was moderated by culture, and/or the relation between self-compassion and anxiety was moderated by culture.

As shown in Table 2, in Model 1 there was a significant main effect of social support on anxiety and this effect was not moderated by culture. Model 2 showed that the effect of social support on self-compassion was significant, and this effect was moderated by culture. We plotted predicted self-compassion against social support separately for Arabs and Jews (Fig.1). Simple slope tests showed the association between social support and self-compassion was stronger for Arabs ($b_{simple}= 0.24$, $p < .001$) that for Jews ($b_{simple}= 0.16$, $p < .001$). Model 3 showed that the effect of self-compassion on anxiety was significant, and this effect was moderated by culture. We plotted predicted anxiety against self-compassion separately for Arabs and Jews (Fig.2). Simple slope tests showed the association between self-compassion and anxiety was stronger for Arabs ($b_{simple}= -3.44$, $p < .001$) than that for Jews ($b_{simple}= -2.11$, $p < .001$).

Table 2. Testing moderated mediation effects of social support on anxiety.

Predictors	Model 1		Model 2		Model 3	
	b	t	b	t	b	t
Social support	-.37	1.83***	.24	9.05***		
Social support ✖ Culture	-.09	-.35	-.07	-2.19*		
Self-compassion					-3.44	-7.48***
Self-compassion ✖ Culture					1.34	2.24*
R^2_{change}	.00		.01		.01	
F_{change}	.12		4.80*		5.02**	

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

Figure 1. Self-compassion as a function of social support and culture. Functions are graphed for two levels of culture: Arabs and Jews.
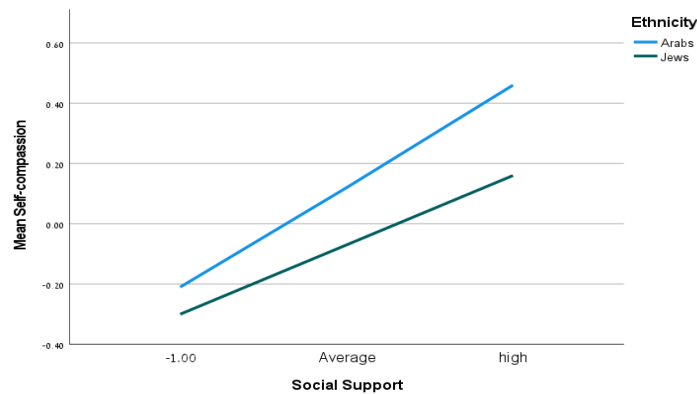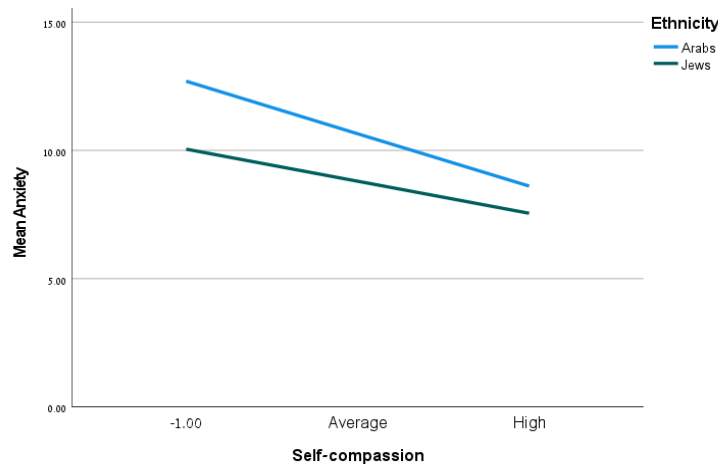

Figure 2. Anxiety as a function of self-compassion and culture. Functions are graphed for two levels of culture: Arabs and Jews.

4. Discussion

Emerging research has shown that self-compassion has significant associations with different psychological wellbeing facets and that these associations may differ from one culture to another. Based on data collected from Jews and Arabs in Israel, our results showed that self-compassion mediated the relationship between perceived social support and anxiety. The mediation effect is in line with previous research accenuating the role of self-compassion as a mediator between percieved social support and wellbeing aspects, (Chan, et al., 2023; Wilson et al. 2020). This indicates that individuals who are offered greater support through their different social relationships are more likely to be compassionate to themselves and as a result have a more positive wellbeing.

In addition, we found that the mediation effect is stonger for Arabs as compared with Jews. The association between perceived social support and self-compassion was stronger for Arabs. This implies that perceived social support can play an important role in empowering self-compassion in the Arab society and consequently contribute to their psychological wellbeing. Also, the association between self-compassion and anxiety was stronger for Arabs. This aligns with contemporary research, which highlights varying correlations between self-compassion and well-being factors across diverse cultures (Fung et al., 2021; Kotera et al., 2020). These findings underscore the need for additional cultural investigations into self-compassion and psycho-cultural factors that may contribute to these observed differences. Further understanding of self-compassion across cultures can be significant for facilitating psychological wellbeing across diverse populations.

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