Self-compassion mediates the relationship between mindfulness and flourishing

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Abstract

Introduction: An important research avenue on flourishing is to understand the predictors and mechanisms associated with flourishing. Most evidence has been reported from western countries. However, little is known about whether the relationship between self-compassion and flourishing could be explained through mindfulness in a non-western country. Therefore, this study aimed to examine the mediating role of mindfulness in the association between self-compassion and flourishing in a sample of Arabic speaking adults.

Methods: A cross-sectional research design was used to collect data from 396 (50% females) Arab adults recruited from general public. Participants ranged in age between 19 and 59 years with a mean age of 30.7 years (SD = 10.3). Participants completed online versions of the Self-Compassion Scale – Short Form, the Freiburg Mindfulness Inventory, the Flourishing Scale.

Results: The results of correlation analysis indicated significant positive correlations among self-compassion, mindfulness, and flourishing. The results of mediation analysis showed that self-compassion significantly predicted mindfulness and flourishing. Mindfulness also significantly predicted flourishing. Mediation analysis supported the hypothesis that mindfulness played a mediating role between self-compassion and flourishing.

Discussion: The results suggest the importance of mindfulness in understanding the association between self-compassion and flourishing. Intervention efforts aimed at improving flourishing may benefit from increased mindfulness and self-compassion.

Take-home message: In this study, individuals with high levels of self-compassion experienced more mindfulness and flourishing in their lives.

Key words: Self-compassion; mindfulness; flourishing; positive psychology; Arab adults.
INTRODUCTION

Research has given excessive attention to the treatment of mental health issues and less attention to personal qualities and improvement of individuals to have a better life [1]. Researchers begin to highlight the importance of understanding what makes life worth living [2]. With the emergence of positive psychology, Seligman (2004) proposed that psychological studies should focus on the promotion of well-being and flourishing rather than repairing negativities in life [3]. Addressing psychological issues from a positive perspective contributes to a better understanding of the personal qualities, attributes, and traits that facilitate human flourishing. In this regard, self-compassion and mindfulness are two important positive psychological constructs that are closely associated with flourishing. This study addresses the question of whether self-compassion promotes flourishing through mindfulness.

Self-compassion involves treating gently towards oneself in difficult times by acknowledging failure, inadequacies, and pain which are considered important parts of life [4]. Self-compassion includes sentiments of caring and kindness towards oneself in the face of personal suffering and involves the recognition of one’s suffering. Various studies showed that self-compassion has a strong positive indicator of mental health outcomes such as emotional intelligence, social relationships, self-determination [5], psychological well-being, social support [6], social relatedness, life satisfaction [5], personal initiative, exploration, optimism, extraversion, positive affect, agreeableness, and conscientiousness [7]. Furthermore, studies highlighted that self-compassion is a significant source of happiness and psychological well-being [8]. For example, self-compassion was found to be a critical psychological source that promotes eudaimonic well-being [9]. Although hedonic well-being includes following up pleasure or avoiding pain, eudaimonic well-being involves discovering purpose and meaning in life [9].

Self-compassion does not only refer to avoiding pain but also embraces pain with kindness and goodwill which leads to a greater sense of well-being [10]. Previous research has reported that self-compassion positively correlated with the different components of human flourishing [11]. Evidence suggests that self-compassion is among the most important factors for human well-being that include purpose in life, a sense of self-mastery, low perceived stress, low negative affect, and high satisfaction with life [12]. For example, self-kindness, common humanity, and mindfulness components of self-compassion accounted for a significant amount of variance in social well-being, psychological well-being, and overall human flourishing [13]. Furthermore, studies have shown that self-compassion significantly predicted well-being indices such as life satisfaction, happiness, optimism, and self-esteem [14–16]. In addition, self-compassion was found to promote resilience and reduce stress, burnout, and emotional exhaustion [17]. Moreover, a greater sense of self-compassion was related to higher levels of mindfulness [18].

Considerable literature has grown up around the theme of mindfulness. Mindfulness is a natural quality that promotes adaptive human functioning [19]. Mindfulness is positively related to psychological wellbeing, self-compassion, personality traits [20], empathy, awareness of self and
others [21]. Several studies have shown that a stress-reducing program that emphasizes the importance of greater mindfulness might boost psychological well-being [22,23]. Likewise, empirical research provides sufficient evidence for the positive impact of mindfulness on physical and psychological health [24,25] such as reduced anxiety, depression, and stress [26], less social phobia [27], and increased positive mood [28]. Additionally, the evidence presented thus far supports the idea that both mindfulness and self-compassion serve as mediators for the promotion of emotional well-being [29].

The literature sketched above highlights the importance of understanding positive psychological characteristics in the promotion of well-being and flourishing. However, there is a scarcity of evidence regarding the role of mindfulness in the association between self-compassion and flourishing in non-western countries. Therefore, the present study aimed to examine the mediating role of mindfulness in the association between self-compassion and flourishing in an Arab country. To end that, we tested three hypotheses: (i) self-compassion would significantly and positively predict mindfulness and flourishing, (ii) mindfulness would significantly and positively predict flourishing, and (iii) mindfulness would serve as a significant mediator in the relationship between self-compassion and flourishing. The results obtained from this study would be useful to improve our understanding of the relationship between the employed variables alongside supporting psychological well-being practitioners to tailor and implement well-being interventions to promote flourishing and psychological well-being. The proposed structural model is depicted in Figure 1.

![Figure 1. Structural model indicating the relationship between the analyzed variables.](image)

**Note:** *p* < 0.05; **p** < 0.001

**METHODS**

**Participants and procedure**

The present study sample included 396 (50% females) participants in middle adulthood. They ranged in age between 19 and 59 years (*M* _age_ = 30.7±10.3). A random sampling technique was used to recruit Arab adults from the general public. Adults, aged 18 years and older, were able to take part in the study. The majority of participants had high school education and below (59.6%), 37.6% had bachelor’s degrees, and 2.8% had a post-graduate degree. Of the participants, 39.9% were single, 52% were married, and 8.1% were separated/divorced. This cross-sectional study was conducted via social networking sites. Participants were initially informed about the purpose of the study.

**Study measures**

**Self-compassion**

Self-compassion was measured by the Self-Compassion Scale – Short Form [30, 50]. The scale includes 12 items (e.g., “When I fail at something important to me, I become consumed by feelings of
inadequacy”) to assess self-compassion from multiple dimensions: self-kindness, self-judgment, common humanity, isolation, mindfulness, and over-identified. Each item was assessed on a 5-point scale ranging from 1 (almost never) to 5 (almost always). A total self-compassion score can be computed by summing all items following reversing the negative items. A high score indicates a high level of self-compassion. For the purpose of this study, the translation-back translation approach was used to adapt the scale in the Arabic language. In the present study, Cronbach’s alpha coefficient was .78.

**Mindfulness**

The Freiburg Mindfulness Inventory [31] was used to assess the level of mindfulness. It contains 14 items (e.g., “I am open to the experience of the present moment”) to measure the experience of mindfulness. Each item was answered on a 4-point Likert scale ranging from 1 (rarely) to 5 (almost always). One item was reverse scored. A higher total score presents a higher level of mindfulness. The scale was translated into Arabic by language experts. In addition, to ensure the validity of the translation, the translated scale was evaluated by an expert in the field of language. In the present study, Cronbach’s alpha coefficient was .77.

**Flourishing**

Flourishing was measured with the Flourishing Scale [32]. A sample item includes “I lead a purposeful and meaningful life.” Participants answered each item on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). A higher total score signifies a higher level of flourishing. The Arabic version of the scale was found to be reliable and valid [33]. In this study, Cronbach’s alpha coefficient was .82.

**Data analysis**

Descriptive statistics including tests of normality were reported for the main variables. Pearson coefficient was computed to explore the correlations between the variables in the proposed model. The mediation model was tested using PROCESS macro for SPSS, version 3.4. The bias-corrected bootstrapping approach was employed to test for the significance of the indirect effect [34]. This approach generated 95% confidence intervals (CI) for the indirect effect from 1,000 data resamples. If the CI for the variable did not contain zero, it suggested that the indirect effect was significant at $p < .05$ level.

**Ethical aspects**

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. The involvement in the study was anonymous, confidential, and voluntary. All participants gave informed consent before the participation. No incentives were provided to the participants. The study protocol used in this study was approved by the Salahaddin University-Erbil Research Ethics Committee.

**RESULTS**

Skewness and kurtosis statistics were used to test assumption of normality. The results showed that skewness varied from 0.01 to -0.76, and kurtosis ranged from 0.25 to -0.74, demonstrating that all variables had relatively normal distribution. The correlation coefficients between the analyzed variables are presented in Table 1. In the light of results, higher self-compassion was related to higher levels of mindfulness and flourishing. Mindfulness was positively correlated with flourishing. The hypothesis that self-compassion, directly and indirectly (via mindfulness) would predict the level of flourishing was tested using the PROCESS macro with Model 4. The results showed that self-
compassion was a significant predictor of mindfulness (β = .39, *p* < 0.001) by explaining 15% of the variance in mindfulness. The results also indicated that self-compassion (β = 0.08, *p* < 0.05) and mindfulness (β = 0.59, *p* < 0.001) significantly predicted flourishing by accounting for 40% of the variance in flourishing. Additionally, self-compassion had indirect effect on flourishing through mindfulness (effect = .18, 95%CI [.13 to .24]. Mindfulness partially mediated the effect of self-compassion on flourishing. Standardized total and indirect effects with 95% bias-corrected confidence interval concerning flourishing are presented in Table 2.

Table 1. Descriptive statistics and correlations.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Skew.</th>
<th>Kurt.</th>
<th>α</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Self-compassion</td>
<td>40.17</td>
<td>5.77</td>
<td>-0.12</td>
<td>0.25</td>
<td>.78</td>
<td>—</td>
<td>.39*</td>
<td>.32**</td>
</tr>
<tr>
<td>2. Mindfulness</td>
<td>50.67</td>
<td>6.40</td>
<td>0.01</td>
<td>0.74</td>
<td>.77</td>
<td>—</td>
<td>—</td>
<td>.63**</td>
</tr>
<tr>
<td>3. Flourishing</td>
<td>32.54</td>
<td>4.60</td>
<td>-0.76</td>
<td>0.61</td>
<td>.82</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

Note: **p < 0.01

Table 2. Unstandardized coefficients for the mediation model.

<table>
<thead>
<tr>
<th>Antecedent</th>
<th>Consequent</th>
<th>Coeff.</th>
<th>SE</th>
<th>T</th>
<th><em>p</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>X (Self-compassion)</td>
<td>M (Mindfulness)</td>
<td>.43</td>
<td>.05</td>
<td>8.45</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td>33.22</td>
<td>2.09</td>
<td>15.92</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td><em>R</em> = .15</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>F</em> = 71.46; <em>p</em> &lt; .001</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X (Self-compassion)</td>
<td>Y (Flourishing)</td>
<td>.07</td>
<td>.03</td>
<td>1.99</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>M (Mindfulness)</td>
<td></td>
<td>.43</td>
<td>.03</td>
<td>13.93</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td>8.27</td>
<td>1.62</td>
<td>5.10</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td><em>R</em> = .40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>F</em> = 129.76; <em>p</em> &lt; .001</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Standardized indirect effects

<table>
<thead>
<tr>
<th>Total effect</th>
<th>Effect</th>
<th>SE</th>
<th>BootLLCI</th>
<th>BootULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-compassion--&gt;Mindfulness--&gt;Flourishing</td>
<td>.25</td>
<td>.04</td>
<td>.18</td>
<td>.33</td>
</tr>
<tr>
<td></td>
<td>.18</td>
<td>.03</td>
<td>.13</td>
<td>.24</td>
</tr>
</tbody>
</table>

Note: SE = standard error. Coeff = unstandardized coefficient. X = independent variable; M = mediator variable; Y = dependent variable. Number of bootstrap samples for percentile bootstrap confidence intervals: 10,000

DISCUSSION

Recently, personal resources and psychological strengths have been extensively studied in relation to well-being, flourishing, and mental health. The concepts of self-compassion and mindfulness have been a central point of focus among researchers. In this study, the mediator role of mindfulness in the relationship between self-compassion and flourishing in Arabic-speaking adults was investigated.

The first hypothesis of this study was to test whether self-compassion is a significant predictor of mindfulness and flourishing. Supporting this hypothesis, the results showed that self-compassion significantly positively predicted mindfulness and flourishing. This result suggests that individuals having a high level of self-compassion experience more mindfulness and flourishing in their lives.
These results are supported by the findings reported in the extant literature [35,36]. Indeed, a causal link has been reported between self-compassion and mindfulness. While some studies showed that a high level of self-compassion leads to greater mindfulness, which consequently improves well-being and flourishing [35] others reported that mindfulness increases self-compassion which leads to better well-being [18]. This relationship has also been confirmed in longitudinal studies [37].

The second hypothesis of this study was to examine the role of mindfulness in predicting flourishing. The result indicated that mindfulness was a significant positive predictor of flourishing, confirming our hypothesis. Individuals having higher levels of mindfulness have higher levels of flourishing. There is a wealth of evidence in the literature that supports the contribution of mindfulness to flourishing [38,39]. In a longitudinal mediation analysis, Duan and Ho (2018) reported that mindfulness improves flourishing [40]. Another study found that mindfulness is positively associated with flourishing, subjective vitality, and positive emotions, and negatively related to negative emotions [41]. This shows the importance of the experience of mindfulness for the promotion of hedonic and eudaimonic aspects of well-being.

The main hypothesis of this study was to examine whether mindfulness has a mediating role in the relationship between self-compassion and flourishing. The results demonstrated that mindfulness has a partial mediator role in the relationship between self-compassion and flourishing. Self-compassion has both a direct effect and indirect effect, through mindfulness, on flourishing. That is, self-compassion influences mindfulness which in turn leads to greater flourishing. These findings support past evidence in the literature showing that those with high levels of self-compassion experience more mindfulness which ultimately leads to greater flourishing [42]. Self-compassion was found to reduce mental health problems through increased mindfulness [43]. Given those with self-compassion are likely to have experienced high flourishing through increased mindfulness, it may be also possible that those with high mindfulness tend to have a greater flourishing, satisfaction with life, and psychological well-being [18,44].

To the best of our knowledge, there is no available studies on the Arab population confirming direct support for the results of this study. The results of this study offer support for the burgeoning evidence of self-compassion-based and mindfulness-focused interventions aimed to promote flourishing. These findings are in line with the theory of compassionate mind training [45]. This theory suggests that despite early negative experiences, by practicing skills and attributes of mindful attention and self-compassion, people can replace negativity with positivity. That is, mental health problems such as anxiety, depression, stress, anger, and shame can be translated into an experience of greater well-being and flourishing by cultivating self-compassion and mindfulness [46]. Interventions can be designed by focusing on the development of the ability to switch attention from negativities to self-compassion and mindfulness for the promotion of flourishing.

This study is not without limitations. A cross-sectional design was employed to study the mediation effect of mindfulness in the relationship between self-compassion and flourishing. The direction and causal relationships among the variables cannot be warranted with such a design. Utilizing a longitudinal design to understand the changes in the relationship among the variables would be fruitful. The study variables were assessed by administering self-reported questionnaires which may have caused response biases. This study used convenience sampling which limits the generalizability of the findings due to the volunteer effect and the underrepresentation of younger and older people, socially disadvantaged, and less educated people.
Positive psychological factors have led to increased levels of well-being and flourishing of individuals, workplaces, and societies [47–58]. In this study, a high level of self-compassion was associated with greater flourishing. Moreover, mindfulness was found to partially mediate this association. Mindfulness possibly reflects self-kindness and common humanity leading to flourishing. Mindfulness around other important aspects of personal life may explain part of the association between self-compassion and flourishing that is not mediated by mindfulness. Psychotherapeutic interventions aiming to improve individuals’ capacity for self-compassion and mindfulness could be beneficial. Future research should endeavor to investigate this burgeoning topic in various contexts including social relationships, education, and parenting.

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Conflicts of Interest: None

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