Research Article

Well-being and Pandemic Lockdown: The Role of Emotional Intelligence, Self-compassion and Rumination

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Abstract

The COVID-19 pandemic and its accompanying restrictions, apart from the destructive global economic and social impact, brought negative psychological consequences to the world. The aim of the current study is to investigate the factors that help individuals maintain psychological well-being under the condition of self-isolation, a global restriction against the spread of the pandemic. Specifically, the role of trait emotional intelligence, self-compassion, and rumination was explored in order to determine how these variables relate to psychological well-being. According to the results, trait emotional intelligence and self-compassion positively correlate with psychological well-being, while rumination is negatively correlated. Self-compassion mediates the relationship between emotional intelligence and well-being. The relationship between rumination and well-being is affected by emotional intelligence and self-compassion: Self-compassion mediates the relationship between depression related rumination and well-being, while self-control and emotionality factors of trait emotional intelligence moderate the relationship between reflection rumination and well-being. The findings of the current study provide insight about self-compassion, rumination, and emotional intelligence as different contributing factors to the individuals' well-being in self-isolation, suggesting further implications about the use of these strategies to help people cope with this stressful situation.

Keywords: emotional intelligence; self-compassion; rumination; psychological; well-being; self-isolation.
It has already been a year since COVID-19 became the most commonly discussed topic in the world. The pandemic and its accompanying restrictions introduced an entirely new way of living and created new challenges in people’s daily lives across the globe. Although there is no specific answer as to how the quarantine, self-isolation, and other pandemic-related restrictions have changed the quality of life, one thing is for sure - the impact is not positive.

Apart from the destructive global economic and social impact, self-isolation has brought negative psychological results as well. For instance, according to the latest studies, COVID-19 has a significant effect on the quality of life (Panayiotou et al., 2021; Solomou & Constantinidou, 2020). Also, both centralized isolation and home isolation negatively influence the improvement of psychological distress levels in patients (Ju et al. 2021), the pandemic-related factors increase anxiety and depression in pregnant women (Fan et al., 2021), and have a negative impact on subjective well-being (Paredes et al., 2021).

In line with the current challenges in today’s world, it’s interesting to study the stressful situations caused by COVID-19 and the psychological factors that take part in this process. Self-isolation is a type of situation like this. It’s a global restriction against the spread of the pandemic and means the limitation of relationships with society. Distance from others can actually be an
essential factor in reducing the risk of spreading the virus, but it’s accompanied by feelings of uncertainty and confusion, leading to negative psychological consequences. For example, self-isolation can induce stress and lead to the use of coping strategies such as rumination and self-compassion. However, the role of these strategies has not been studied in self-isolation.

Considering the current worldwide situation, scientists have already started to intensively study the role of emotion regulation strategies in dealing with the pandemic (e.g., Brehl et al., 2021; Fernández et al., 2020; Tyra et al., 2021; Wang et al., 2021). Generally, effective emotion regulation strategies reduce negative emotions, facilitate work-family balance, and maintain overall psychological well-being (Restubog et al., 2020). According to studies (e.g., Peña-Sarrionandia, et al., 2015), individuals with effective emotion regulation skills have high emotional intelligence and can understand and control both their own and others’ emotions (Mayer & Salovey, 1997). Besides, emotional intelligence plays a specific role in adapting to stressful situations (Matthews & Zeidner, 2000) and significantly determines well-being (Bowen et al., 2016; Di Fabio & Kenny, 2016; Zeidner & Olnick-Shemesh, 2010) and the quality of life (Min, 2013). Also, emotional intelligence is positively related to positive affect and predicts low-intensity fear, anxiety, and sadness (Kong et al., 2019; Kousha et al., 2018; Moroń & Biolik-Moroń, 2020). So, based on previous studies, it makes sense to assume that emotional intelligence can play an essential role in emotion regulation during a pandemic.

However, the relationship between emotional intelligence and well-being may not be direct but mediated by various factors that lead people with different emotional intelligence to psychological well-being. For example, people with high emotional intelligence (EI) usually have more effective coping strategies that increase well-being (Salovey et al., 2008). On the other hand, rumination can be considered as a destructive strategy that hinders emotion regulation (Kircaburun et al., 2019), which is why it is likely that rumination might have a negative impact on psychological well-being. Studies suggest that people with high emotional intelligence are less likely to have repeating negative thoughts (Lanciano et al. 2012; Liu & Ren 2016; Petrides et al. 2007) because adults with high emotional intelligence try to solve their everyday problems with adaptive strategies. On the other hand, people with low EI are characterized by non-adaptive coping strategies such as rumination, whose positive relationship to negative emotional states has been consistently confirmed in studies (Michl et al., 2014; Newman &
Nezlek, 2017; Yalvaç & Gaynor, 2021). However, the researchers also note that an alternative strategy for responding to stress is self-compassion (Neff et al., 2007), a much more adaptive strategy with a long-term effect. The reason for this effect is that accepting negative emotions and working on them raises hope that one can effectively cope with negative events in the future and increases positive emotions (Odou & Brinker, 2014).

**Emotional Intelligence and Well-being**

Trait emotional intelligence is a constellation of emotion-related self-perceptions and dispositions located at the lower levels of personality hierarchies (Petrides & Furnham, 2001). As studies show (Görgens-Ekermans & Brand, 2012; Marks et al., 2016), emotional intelligence is a useful construct related to real-life outcomes. For instance, emotional intelligence is associated with well-being (Extremera et al., 2011), which is defined as optimal human functioning (Diener et al., 2009) and is related to concepts, such as having meaning and purpose in life, valuable relationships, feelings of competence, and self-acceptance (Diener et al., 2009).

People with high EI better acknowledge their emotions and, therefore, are able to regulate them more effectively, experiencing lower levels of distress and higher levels of well-being (Zeidner & Olnick-Shemesh, 2010). Many studies prove the significant contribution of emotional intelligence to increasing psychological well-being (e.g., Di Fabio & Kenny, 2016). In general, good emotional skills can lead to emotional growth and well-being (Extremera et al., 2011). Furthermore, a higher level of emotional intelligence is related to positive mood and self-esteem, which in turn leads to psychological well-being (Schutte et al., 2010).

**Rumination and Well-being**

Rumination is defined as “intrusive thoughts or images about past mistakes or failures that cause negative feelings when they occur” (McLaughlin et al., 2007, p. 27). Rumination is often referred to as a stress response strategy (Lanciano et al., 2012), although in Nolen-Hoeksema’s Response Styles Theory (Nolen-Hoeksema, 1991), rumination is also associated with distress and is defined as “behaviors and thoughts that focus one’s attention on one’s depressive symptoms and the implications of these symptoms” (Nolen-Hoeksema, 1991, p. 569). People who turn to rumination stay fixated on their problem and the feelings associated with it without
taking any action, and this is why rumination is referred to as a maladaptive strategy of emotion regulation that contributes to negative affect (Kircaburun et al., 2019; Marcus, et al., 2008). Considering this, it’s not surprising that the relationship between rumination and well-being is negative. Particularly, rumination is associated with reduced well-being (Newman & Nezlek, 2017). Therefore, an understanding of rumination as a maladaptive coping strategy is shared in the study in order to discuss its maladaptive role concerning emotional intelligence and well-being.

**Self-compassion and Well-being**

Self-compassion is a healthy and adaptive attitude towards oneself, occurring when one is having a difficult time and includes openness, caring, and kindness; understanding non-judgmental attitude towards negative traits, and being aware that negative experiences are natural and similar to others’ experiences (Neff, 2003). According to this definition, this construct includes three distinct elements: Self-Kindness, Common Humanity, and Mindfulness, which create a continuum with Self-Judgment, Isolation, and Over-Identification.

Self-compassion positively correlates to factors such as life satisfaction (Neff, 2003), happiness (Neff & Vonk, 2009), optimism (Neff et al., 2007), positive affect (Neff et al., 2007), emotional intelligence (Castilho et al., 2017; Di Fabio & Saklofske, 2021; Heffernan et al., 2010; Neff, 2003) and coping skills (Neff et al., 2005). Besides, unlike rumination, self-compassion improves mood by reducing negative affect (Gilbert & Procter, 2006). This is because accepting negative emotions and expressing self-compassion increases positive feelings, leading to well-being (Bluth & Blanton, 2014). Consequently, self-compassion is positively associated with psychological well-being (Neff et al., 2007). Therefore, one can assume that self-compassion mediates the relationship between emotional intelligence and well-being.

**Present study**

Research consistently shows that emotion related personality traits play a crucial role in dealing with stress. There are two ways to respond to stress within the framework of Response Styles Theory (Nolen-Hoeksema, 1991): rumination and distraction. Both strategies are considered maladaptive in terms of long-term outcomes and correlate with negative emotional states. However, at the same time, studies (Odou & Brinker, 2014) pointed out that self-compassion is
an alternative way to respond to stress and it leads individuals to well-being. Thus, the aim of the study is to investigate the role of emotional intelligence, self-compassion, and rumination in maintaining well-being in a stressful situation on the sample of individuals living in a lockdown and to answer the following questions: Does emotional intelligence help individuals to maintain well-being in stressful situations? Do self-compassion and emotional intelligence facilitate the relationship between rumination and well-being? It was expected that emotional intelligence would be positively related to self-compassion as well as to well-being and negatively to rumination; Emotional intelligence will lead individuals to high self-compassion and consequently, to high well-being; and finally, it was assumed that emotional intelligence would facilitate the relationship between rumination and well-being.

Method

Participants and Procedure
The sample was composed of 120 self-isolated individuals between the ages of 18 and 59 (convenience snowball sample; $M = 24.67$; $SD = 9.06$). Among them, 94 were women (77.7%), and 26 - men (21.5%). 86.8% of the participants reported having higher education or being students, while the rest had secondary (7.4%) or vocational (5%) education. The majority of the participants (38.8%) were psychology faculty students. The remaining professions included law (9.9%), economics (5%), sociology (6.6%), business (6.6%), medicine (5.8%), information technology (4.1%), etc. As for the marital status, 83.5% of participants are single, while the rest are either married (12.4%) or divorced (3.3%).

The participants had been in self-isolation as a result of the two-month state of emergency (21.03.2020 - 22.05.2020) for the first time in the country of Georgia due to the pandemic. They were restricted from leaving the home. Authorities announced a nighttime curfew. Educational institutions and jobs were closed. All recreational and entertainment activities were stopped. Public transport was banned in the country and people were restricted to move. As a consequence, the main activities of participants switched to online.

Since moving between cities and within the city was limited, participants spent their time at home, surrounded only by family members, having restricted social contact with others. The fact that they didn’t have clear information about when self-isolation would finish and when they
would be able to return to normal activities made this stressful situation even more severe. Besides, COVID-19 was an entirely new and unexplored virus by this time. Consequently, the research participants did not have enough information about the virus, its aspects, and coping methods. This uncertainty further increased the stress during self-isolation.

The criteria for inclusion in the sample were the following: Participants should have been in self-isolation for at least three weeks and should not have left the house (unless vitally necessary occasions); they had no physical contact with anyone (except people with whom they lived in the household) and interacted with people through social networks and similar forms of communication.

All participants have been informed about the goal of the study and the possibility to drop out at any time without any explanation. Informed consent was obtained from all of them. After receiving informed consent, the participants received an online version of the questionnaire (Google forms) via e-mail or social platforms alongside instructions. Participants filled out the questionnaires on a voluntary basis and did not receive a refund or any kind of reward. Participation in the study was anonymous, and the data was interpreted confidentially.

**Research Instruments**

In order to assess emotional intelligence, the Georgian version (Martskvishvili et al., 2013) of the Trait Emotional Intelligence Questionnaire (TEIQue; Petrides, 2009) was used. It’s a self-report inventory consisting of 153 items and 15 distinct facets that create 4 factors: Emotionality ($\alpha = .76; n = 4$), sociability ($\alpha = .83; n = 3$), well-being ($\alpha = .86; n = 3$), and self-control ($\alpha = .81; n = 3$). These factors make up the global score of trait emotional intelligence ($\alpha = .88$).

For measuring well-being, the Psychological Well-being Scale (PWB; Diener et al., 2009) was used. This tool is an 8-item and 7-point Likert self-report scale that assesses important aspects of human functioning, including positive relationships, a sense of competence, and meaning in life, and provides an overall score of psychological well-being ($\alpha = .89$).

Rumination was assessed with the Ruminative Response Scale (RRS; Nolen-Hoeksema, 1991). It’s a self-report scale consisting of depression related ($\alpha = .87; n = 10$), brooding ($\alpha = .76; n = 5$), and reflection rumination ($\alpha = .79; n = 5$). Respectively, the tool allows us to
calculate three types of rumination scores. All the scores of this 4-point and 22-item Likert scale were summarized to determine the final score (α = .92; n = 22).

A 26-item Self-Compassion Scale (SCS; Neff, 2003) was used to measure self-compassion. The construct of self-compassion contains 6 factors that create 3 dimensions. Therefore, the scale has 6 sub-scales from which Self-Kindness (α = .75; n = 5) and Self-Judgment (α = .69; n = 5) create the first dimension, Common Humanity (α = .61; n = 4) and Isolation (α = .75; n = 4) create the second, and Mindfulness (α = .65; n = 4) and Over-Identification (α = .64; n = 4) for the third. By reversing and summing up the scores of these subscales, a total self-compassion score (α = .86; n = 26) was computed.

Analysis plan
To investigate the factors affecting psychological well-being, first, correlations among study variables were analyzed. Then it was checked whether emotional intelligence, rumination, and self-compassion predict psychological well-being using multiple regression analysis. The moderation (Conditional Process Modeling by Hayes, 2018; Model 1) and mediation analyses (Model 4) were used to test the effects of self-compassion on the relationship between emotional intelligence and psychological well-being, on the one hand, and the effects of emotional intelligence and self-compassion on the relationship between rumination and psychological well-being, on the other.

Results
The results of the correlational analysis show that emotional personality traits positively correlate with psychological well-being as well as with self-compassion variables, while the correlations between emotional intelligence and rumination scales are negative, with only one exception: reflection rumination positively correlates with the sociability factor of emotional intelligence. Similarly, correlations between self-compassion and rumination factors are negative (see Table 1 for the correlations and descriptives of the study variables).
Table 1. 
Descriptive statistics and intercorrelations of study variables

<table>
<thead>
<tr>
<th>Emotional Intelligence</th>
<th>M(Sd)</th>
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<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
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<td>Emotionality (1)</td>
<td>4.82 (0.88)</td>
<td>.55**</td>
<td>.41**</td>
<td>.32**</td>
<td>.76**</td>
<td>-.21*</td>
<td>.06</td>
<td>-.30**</td>
<td>-.23*</td>
<td>.07</td>
<td>.10</td>
<td>-.04</td>
<td>.20*</td>
<td>.15</td>
<td>.17</td>
<td>.16</td>
<td>.47**</td>
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<tr>
<td>Sociability (2)</td>
<td>4.83 (0.83)</td>
<td>.47**</td>
<td>.31**</td>
<td>.75**</td>
<td>-.14</td>
<td>.19*</td>
<td>-.22*</td>
<td>-.13</td>
<td>.16</td>
<td>.05</td>
<td>-.07</td>
<td>.16</td>
<td>.29*</td>
<td>.18*</td>
<td>.19*</td>
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<td>Well-being (3)</td>
<td>4.79 (1.07)</td>
<td>.53**</td>
<td>.80**</td>
<td>-.42**</td>
<td>-.12</td>
<td>-.64**</td>
<td>-.54**</td>
<td>.44**</td>
<td>.45**</td>
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<td>.53**</td>
<td>.40**</td>
<td>.51*</td>
<td>.63**</td>
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<td>Self-control (4)</td>
<td>4.25 (0.85)</td>
<td>.70**</td>
<td>-.59**</td>
<td>-.12</td>
<td>-.61**</td>
<td>-.57**</td>
<td>.22*</td>
<td>.26**</td>
<td>.07</td>
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<td>.37**</td>
<td>.62*</td>
<td>.50**</td>
<td>.42**</td>
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<td>Global EI (5)</td>
<td>4.65 (0.67)</td>
<td>-.44**</td>
<td>-.02</td>
<td>-.59**</td>
<td>-.49**</td>
<td>.27**</td>
<td>.27**</td>
<td>.03</td>
<td>.45**</td>
<td>.37**</td>
<td>.48*</td>
<td>.47**</td>
<td>.71**</td>
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<tr>
<td>Rumination</td>
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<td>Brooding (6)</td>
<td>13.11 (3.37)</td>
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<td>.48**</td>
<td>.77**</td>
<td>.87**</td>
<td>-.21*</td>
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<td>Reflection (7)</td>
<td>14.86 (3.19)</td>
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<td>.49**</td>
<td>.69**</td>
<td>.04</td>
<td>-.34**</td>
<td>.12</td>
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<td>.08</td>
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<td>Depression related (8)</td>
<td>30.93 (7.93)</td>
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<td>.95**</td>
<td>-.27**</td>
<td>-.41**</td>
<td>-.03</td>
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<td>.52**</td>
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<td>-.37**</td>
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<tr>
<td>Rumination total (9)</td>
<td>58.90 (12.67)</td>
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<td>-.22*</td>
<td>-.45**</td>
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<td>Self-compass</td>
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<td>Self kindness (10)</td>
<td>14.36 (3.99)</td>
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<td>Self judgment (low) (11)</td>
<td>11.70 (3.65)</td>
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<td>Common humanity (12)</td>
<td>12.88 (3.14)</td>
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<td>Isolation (low) (13)</td>
<td>11.60 (3.83)</td>
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<td>Mindfulness (14)</td>
<td>14.27 (2.89)</td>
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<td>Over-identification (low) (15)</td>
<td>10.11 (3.49)</td>
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<td>Self-compass total (16)</td>
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<tr>
<td>Psychological Well-being (17)</td>
<td>5.28 (1.03)</td>
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Note: *p < .05; **p < .01
The multiple linear regression analysis was used to test whether emotional intelligence, rumination and self-compassion factors predict psychological well-being (see Table 2).

First, the model for combined emotional intelligence factors and psychological well-being PWB was tested. This explained 52% of the variance and significantly predicted PWB ($R^2 = .52$, adjusted $R^2 = .51$), $F(4, 115) = 31.69, p < .000$) with sociability ($\beta = .25$, $t = 3.07$, $p < .01$) and trait well-being factors ($\beta = .46$, $t = 5.52$, $p < .001$) as significant positive predictors of PWB.

The model for combined rumination factors explained 25% of the variance and significantly predicted PWB ($R^2 = .25$, adjusted $R^2 = .22$), $F(3, 116) = 12.54, p < .000$) with reflection ($\beta = .32$, $t = 3.36$, $p < .01$) as a significant positive predictor of PWB and depression related rumination ($\beta = -.69$, $t = -5.38$, $p < .001$) as a significant negative predictor of PWB.

Combination of self-compassion variables explained 19% of the variance and significantly predicted PWB ($R^2 = .19$, adjusted $R^2 = .14$), $F(6, 13) = 4.30, p < .01$) with only mindfulness ($\beta = .27$, $t = -2.49$, $p < .05$) as significant predictors of PWB.

Finally, the model for combined total scores of emotional intelligence, rumination and self-compassion was tested. This combination of factors explained 51% of the variance and significantly predicted PWB ($R^2 = .51$, adjusted $R^2 = .50$), $F(3, 116) = 40.77, p < .001$) with only global emotional intelligence as a significant positive predictor of PWB ($\beta = .76$, $t = 9.64$, $p < .001$).

Table 2. Predictors of Psychological Well-being.

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>SE</th>
<th>$\beta$</th>
<th>95% CI</th>
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<td><strong>Emotional Intelligence</strong></td>
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<tr>
<td>Emotionality</td>
<td>.15</td>
<td>.09</td>
<td>.13</td>
<td>-0.03, 0.33</td>
</tr>
<tr>
<td>Sociability</td>
<td>.31</td>
<td>.10</td>
<td>.25**</td>
<td>0.11, 0.51</td>
</tr>
<tr>
<td>Well-being</td>
<td>.45</td>
<td>.08</td>
<td>.46***</td>
<td>0.29, 0.60</td>
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<tr>
<td>Self-control</td>
<td>.07</td>
<td>.09</td>
<td>.06</td>
<td>-0.12, 0.25</td>
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<tr>
<td>$R^2$</td>
<td>.52</td>
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<tr>
<td>$F$</td>
<td>31.69***</td>
<td></td>
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<tr>
<td><strong>Rumination</strong></td>
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<tr>
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<td>.04</td>
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<td>.03</td>
<td>.32**</td>
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<td>.02</td>
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<tr>
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<td>.03</td>
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<td>.27*</td>
<td>[0.02, 0.17]</td>
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<td>.18</td>
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<td>.76***</td>
<td>[0.92, 1.40]</td>
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<tr>
<td>Rumination</td>
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<td>.01</td>
<td>.14</td>
<td>[-0.00, 0.02]</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Self-compassion</td>
<td>.00</td>
<td>.01</td>
<td>.04</td>
<td>[-0.01,0.01]</td>
<td></td>
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<td></td>
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<tr>
<td><strong>R^2</strong></td>
<td></td>
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<td>.52</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>4.77***</td>
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*Note: PWB=Psychological well-being; EI=Emotional Intelligence; *p <.05; **p < .01; ***p < .001.*

Mediation and moderation analyses were performed to get deeper insights into the direct and indirect relationships between emotional intelligence factors, rumination, and psychological well-being in order to underline the mechanism of the relationship between these variables and find out whether the connection between two certain variables depends on the value of the third. Specifically, mediation analysis was applied (Conditional Process Modeling by Hayes, 2018; Model 4) to study whether the relationship between emotional intelligence factors and PWB or between rumination and PWB was mediated by self-compassion. Examining the role of self-compassion as a mediator in the relationship between emotional intelligence factors and psychological well-being indicates that there is a significant indirect effect of the sociability factor of emotional intelligence on psychological well-being through self-compassion ($R^2 = .36$, $F(2, 117) = 33.05$, $p < .005$. $b = .04$; $se = .02$; BCa CI [.00, .09]). The total effect of the sociability factor of EI on PWB is significant ($b = .55$, $se = .10$, $t = 7.21$, $p <.005$). When controlling for the mediator, the direct effect of sociability on PWB remains significant ($b =.51$, $se = .09$, $t = 6.76$, $p < .005$) (see Figure 1), meaning that self-compassion is a significant mediator variable in the relationship of sociability factor of EI and well-being.
Then, it was checked whether rumination (depression related) leads to low self-compassion and decreases psychological well-being. Since mediation analysis offers an opportunity to find out if the relationship between two variables can be significantly affected by the participation of the third, mediator variable, the mediational analysis (Conditional Process Modeling by Hayes, 2018; Model 4) was used and the role of self-compassion as a mediator in between rumination and psychological well-being was tested. The results indicate that there is a significant indirect effect of depression related rumination on psychological well-being through self-compassion ($R^2 = .16$, $F(2, 117) = 11.55, p < .005$. $b = -.10; se = .04; BCa CI [-.19, -.02]$. The total effect of depression related rumination on PWB is significant ($b = -.37; se = .01; t = -4.29; p < .005$). When controlling for the mediator, the direct effect of depression related rumination on PWB remains significant ($b = -.27; se = .01; t = -2.74 p = .04$) (see Figure 2). The results suggest that self-compassion significantly mediates the relationship between depression related rumination and PWB.

Figure 1. The Indirect Effect of Sociability Factor (EI) on Psychological Well-being

![Figure 1](image-url)
Afterwards, moderation analysis (Conditional Process Modeling by Hayes, 2018; Model 1) was used to determine whether the relationship between rumination and psychological well-being depends on the value of certain factors of emotional intelligence and whether EI has a significant effect on the connection between those two variables. The results of moderation show that emotionality and self-control factors of EI moderate the relationship between reflection rumination and PWB. Specifically, the moderation model, including the emotionality factor (EI) as a moderator in the relationship between reflection rumination and PWB, is significant ($F (3, 116) = 17.12; p < .005 R^2 = .22$). For average scores on an emotionality factor, there is no relationship between reflection rumination and PWB ($b = .02; t = .87; p = .38$). For low ($b = .11, t = 3.14, p = 0.002$) and high scores on the emotionality factor ($b = -.07, t = -2.04, p = .04$), the relationship between reflection rumination and PWB becomes significant (see Figure 3). Table 3 presents the regression results.

**Figure 2. The Indirect Effect of Self-compassion on Psychological Well-being**
### Table 3.
Regression Results from Moderation Analysis

<table>
<thead>
<tr>
<th></th>
<th>b</th>
<th>SE</th>
<th>t</th>
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<tbody>
<tr>
<td>Constant</td>
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<td>-2.38</td>
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<tr>
<td>Reflection</td>
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<td>3.75</td>
</tr>
<tr>
<td>Emotionality</td>
<td>2.04</td>
<td>0.42</td>
<td>4.91</td>
</tr>
<tr>
<td>Emotionality x reflection</td>
<td>-0.09</td>
<td>0.03</td>
<td>-3.68</td>
</tr>
</tbody>
</table>

$\Delta R^2 = .31$. ***$p < .001$, *$p < .05$.

---

**Figure 3.** Simple slopes of reflection (ruminaton) predicting PWB for 1 SD below the mean of emotionality factor (EI), the mean of emotionality (EI), and 1 SD above the mean of emotionality (EI). Notes. PWB=psychological well-being; EI= emotional intelligence

Self-control, the factor of emotional intelligence, is also a significant moderator of the relationship between reflection rumination and PWB ($F (3, 116) = 11.12; p < .005 R^2 = .22$). The conditional effect of reflection rumination was tested at three levels, low, average, and high levels of self-control in order to get comprehensive information about the mechanism of moderation. For low ($b = .08, t = 2.55, p = .01$) scores on the self-control factor, there is a significant relationship between reflection rumination and PWB. While for average ($b = .04, t = 1.55, p = .12$) and high scores on the self-control factor ($b = -.00, t = -0.25, p = .80$) the
relationship between reflection rumination and PWB is not significant (see Figure 4). Table 4 presents the regression results from the moderation analysis.

Table 4. Regression Results from Moderation Analysis.

<table>
<thead>
<tr>
<th></th>
<th>b</th>
<th>SE</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-1.12 [8.12, 10.73]</td>
<td>1.75</td>
<td>-0.63</td>
</tr>
<tr>
<td>Reflection</td>
<td>.27[-0.76, -0.27]</td>
<td>0.11</td>
<td>2.47*</td>
</tr>
<tr>
<td>Self-control</td>
<td>1.36 [1.37, 3.14]</td>
<td>0.40</td>
<td>3.40 ***</td>
</tr>
<tr>
<td>Self-control x reflection</td>
<td>-.05 [-0.29, -0.04]</td>
<td>0.03</td>
<td>-2.15 *</td>
</tr>
</tbody>
</table>

\( \Delta R^2 = .22. \) ***p < .001, *p < .05.

Figure 4. Simple slopes of reflection (rumination) predicting PWB for 1 SD below the mean of self-control (EI), the mean of self-control (EI), and 1 SD above the mean of self-control (EI).

Notes. PWB=psychological well-being; EI= emotional intelligence.

Discussion

The results of correlation and regression analyses show a strong positive association between emotional intelligence and psychological well-being, which is in line with the great part of the scientific literature (e.g., Extremera et al., 2011; Sánchez-Álvarez et al., 2015; Zeidner & Olnick-Shemesh, 2010). It turns out that emotional intelligence is an important contributor to
maintaining well-being in the case of self-isolation. This can be explained by the fact that people with high EI are more likely to use effective coping strategies in stressful situations (Enns et al., 2018; Hajisabbagh et al., 2019; Prentice et al., 2020).

The predictive value of certain emotional intelligence factors for well-being can be explained by the characteristics of the stressful situation. The sociability factor, which implies feeling comfortable in social contexts, being self-confident and open to social situations, predicts well-being in self-isolation - in restricted social and replaced with online communication conditions. Also, the predictive value of the trait well-being factor, which measures how one can enjoy life, expect positive things to happen to her/him and remain confident in the face of adversity, is completely reasonable.

As was expected according to research (Newman & Nezlek, 2017), there is a negative correlation between well-being and rumination. These outcomes are consistent with other studies where rumination is considered as a less effective strategy for increasing PWB (Peuters et al., 2019). However, a study (Páez et al., 2013), where rumination is not referred to as a maladaptive coping strategy, contradicts the results. But it can be assumed that the only effective role that rumination can play is that of reflection rumination, which can help people cope with stress by increasing positive affect.

One more important result is a relationship between trait EI and rumination. Emotional intelligence negatively correlates with rumination, which is in line with the above-mentioned hypothesis. Correlational analysis revealed a negative relationship between trait EI and the total score of rumination. Among the key factors of emotional intelligence, rumination is most strongly correlated with the trait well-being factor and self-control. This result is supported by reviewed studies according to which EI is a protective factor against rumination (Abdollahi & Talib, 2015), and people with low EI use rumination for coping (Kircaburun et al., 2019). Therefore, rumination may play an essential role during self-isolation and reduce psychological well-being.

Furthermore, depression related rumination has a strong negative correlation with the main factors of emotional intelligence (trait well-being and self-control). This can be explained by the fact that depression related rumination is defined as concentrating on signs of depression and acting according to these signs (Nolen-Hoeksema, 1991) and, therefore, is an ineffective strategy for coping. Other studies also consider rumination as a maladaptive coping strategy
that leads to reduced well-being (Newman & Nezlek, 2017). As for reflection rumination, it
doesn’t relate significantly to emotional intelligence either. However, it’s considered a better
coping strategy compared to other types of rumination, as it involves re-evaluating past and
present events, feelings, and behaviors.

It’s important to note that emotional intelligence moderates the relationship between rumination
and well-being. However, unlike depression related rumination, reflection rumination has a
predictive effect on self-control and emotionality, which act as moderating variables between
reflection rumination and well-being. While for low scores on the self-control factor, there is a
significant relationship between reflection rumination and well-being, the relationship between
reflection rumination and well-being is not significant for average and high scores on the self-
control factor. Self-control is defined as the effective regulation of one’s own emotions and the
ability to cope with environmental stressors easily (Petrides, 2009). Therefore, at the low level of
self-control, reflection rumination helps self-isolated individuals to cope with a stressful situation.
It can be speculated that the reason why the relationship between reflection rumination and
well-being is not significant for average and high scores on self-control could be that the
participants were more likely to avoid using this strategy because, with the help of self-control,
they perceived the situation as less stressful. Therefore, people who have high scores on the
self-control scale, cope with the conditions of self-isolation effectively and there’s no need to use
other strategies like reflection rumination.

Similar to this, a low level of emotionality leads to a positive association between rumination and
well-being, and in this case, the participants used rumination to cope with stress. But reflection
rumination had a negative impact on well-being in the case of high scores on the emotionality
scale. This result can be explained by the fact that emotionality can be defined as the
perception and expression of emotions and the understanding of other people’s viewpoints and
taking their feelings into account (Petrides, 2009). Conscious thinking about their own and
others’ emotional states during stressful situations may prevent people high on emotionality to
remain calm and consequently, it results in a low level of well-being. This interpretation is
supported by the idea that high EI can be detrimental to its possessor and there might also be
an intrapersonal dark side of EI (Austin, 2018). In fact, EI and specifically, emotion perception, is
associated with an increased stress reaction (Bechtoldt & Schneider, 2016). Therefore, emotion
perception and even empathy towards others can be damaging for high EI individuals in stressful situations.

Another interesting outcome is that while reflection rumination is a positive predictor of well-being, depression related rumination is negative, as already noted. However, this result can be interpreted by self-compassion which acts as a mediator variable between depression related rumination and PWB. Depression related rumination probably reduces self-compassion, and since self-compassion is an effective strategy for well-being (Bluth & Blanton, 2014), reduced self-compassion leads to lower PWB. Therefore, the relationship between depression related rumination and psychological well-being and the effect of self-compassion as a mediator is very interesting to study further in the future.

In line with the research hypothesis, self-compassion plays an important role in the process of maintaining well-being in a stressful situation. Particularly, self-compassion positively predicts psychological well-being, which is consistent with previous studies (Neff et al., 2007; Odou & Brinker, 2014). Among the variables of self-compassion, mindfulness is the only significant predictor of well-being. Besides, the scales and factors of emotional intelligence relate positively to self-compassion. This result is consistent with previous studies (e.g., Neff, 2003). The results also showed that emotional intelligence positively relates to each scale of self-compassion. Considering this, it could be concluded that self-compassion can act as an effective coping strategy in stressful situations like self-isolation.

The role of self-compassion as a mediator between emotional intelligence and well-being is also very interesting. The results showed that self-compassion and emotional intelligence affect the relationship between rumination and well-being. Probably, people with high emotional intelligence who use the self-compassion strategy, cope with self-isolation better, and as a result, the negative effect of rumination is reduced. Also, the results showed that the sociability factor has a significant indirect effect on well-being through self-compassion. This means that high emotional intelligence leads self-isolated people to high self-compassion and, consequently, to psychological well-being. Even though the direct relationship between sociability and well-being is also statistically significant, it’s likely that sociability helps people who use the self-compassion strategy to cope with self-isolation and maintain a high level of well-being.
Conclusion

To sum up, the study shows the positive effect of emotional intelligence and self-compassion on the one hand and the negative effect of rumination on the other in maintaining psychological well-being during self-isolation. It turns out that both trait emotional intelligence and psychological well-being are negatively correlated with rumination, meaning that rumination can play a significant role in reducing well-being and it’s a less effective coping strategy for self-isolated people, while self-compassion positively predicts well-being. However, the relationship between depression related rumination and well-being can be moderated by emotional intelligence factors. Trait EI factors moderate the relationship between reflection rumination and PWB, but this type of rumination positively predicts well-being. Consequently, reflection rumination can be a positive coping strategy for self-isolated people, unlike depression related rumination, which reduces self-compassion and leads to lower PWB as a result.

Considering these results, it can be concluded that self-isolated people with higher EI are more likely to use self-compassion for coping in this stressful situation and have better psychological well-being, while the use of rumination complicates coping with self-isolation.

Since the pandemic goes on and the future situation of the related restrictions can’t be predicted, these results could be used to help self-isolated people effectively cope with stressful situations like self-isolation and avoid using maladaptive strategies such as rumination which can significantly reduce psychological well-being. Instead, attention could be focused on self-compassion and study its positive role in maintaining well-being in comparison with rumination.

Limitations and Future Directions of the Study

The study has some limitations. First, the sample size is not big enough and a large proportion of it consists of psychology students. However, the main criterion of the sample was to select participants whose lifestyle was dramatically changed by the potentially stressful event, as they had to stay in self-isolation for at least three weeks and they had to have restricted interaction with other people. Nevertheless, in the future, it’s more optimal to use a bigger and more diverse sample. Besides, the cross-sectional design that is used in the study doesn’t allow us to make conclusions about causality. It’s difficult to determine whether psychological well-being is a direct outcome of self-compassion and emotional intelligence or exposure. But future research should be focused on getting the longitudinal data about the causal connection between the
variables. Another limitation is related to using solely the positive indices for studying emotional state. Although the main focus of the study was to examine the factors that help people maintain psychological well-being in stressful situations, still, it would be better to evaluate the symptoms of psychological distress too. Notwithstanding these restrictions, the current study sheds light on the mechanisms of how emotional intelligence might lead to well-being. It enhances existing knowledge about the factors helping individuals to maintain psychological well-being in a stressful situation and uncertainty.

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**References**


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