

The Relationship Between Personality Traits, Resilience And Somatic Symptoms Through The Covid-19 Pandemic

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ABSTRACT

Introduction: The Covid-19 pandemic has significantly affected the emotional, mental and behavioral sphere endangering the psychological well-being of individuals. The aim of this study, therefore, is to examine the relationship between personality traits according to the Big Five model with resilience and somatic symptoms, with a focus on the local context during the COVID-19 pandemic period. Specifically, the aim of the study is to create a model in which the relationship and influence of personality traits on somatic symptoms is described, mediated by resilience.

Methodology: for the purposes of this study, a total sample of 200 respondents from the Kosovar population, aged 18-59 years, was used. The method used in this research is the survey method, through self-report questionnaires. Due to the pandemic conditions in Kosovo, data collection was carried out in two methods, in physical form and in online form through google forms. Personality Inventory (BFI), used to classify personality traits, Short Residence Inventory (BRS), used to measure respondents' level of resilience, the World Health Organization (WHO) Welfare Index (WHO-5) is used to measure the general psychological well-being of the respondents, while the Adult Self-Reporting Questionnaire (ASR) was used to identify the somatic symptoms of the respondents. This research is quantitative with correlational design.

Results: The results of this study were analyzed through the Statistical Package for Social Sciences (SPSS) and the statistical program R. The study presents a significant correlation between personality traits such as extraversion and neuroticism with resilience and somatic symptoms. At the same time, this research presents a significant correlation between the construct of resilience and somatic symptoms. The study also provides data on gender differences in the level of resilience, with men reporting a higher level of resilience than women. Another finding of the study shows that there is also a significant correlation between resilience and the general level of psychological well-being of respondents during the pandemic period. The study also highlights the part of the mediation model in which resilience has been found to be a significant mediating factor in the relationship between personality traits and somatic symptoms. **Conclusion:** the findings highlighted that resilience is a significant mediating factor in the relationship between personality traits and somatic symptoms.

Keywords: Personality, Resilience, Somatic Symptoms, BFI, BRS, WHO, ASR, Covid-19.

INTRODUCTION

Mental health with no clinical symptomatology is an important component of our health and well-being. Our psychological well-being represents

just one of the most affected components by the Covid-19 pandemic period, over the past two years and the current year worldwide, including Kosovo. Limitations in daily life and uncertainty about the duration of emergency measures cause

different reactions in the population. The way people perceive and cope with the situation caused by COVID-19 can have an impact on their mental and physical health and on their willingness to take an active part in necessary actions. It is therefore urgent to investigate predictors of adaptive and inappropriate psychological responses to COVID-19 (Brailovskaia & Margaf, 2020). Given that the genesis of COVID-19 and its potential consequences have caused a variety of psychological concerns such as fear, anxiety and distress among people around the world (Ahorsu, Lin, Imani, Saffari, Griffiths, & Pakpour, 2020). It is important to understand the basic mechanism that has helped individuals to overcome all challenges more easily as a result of fighting the pandemic, among which the mechanism includes resilience.

Previous studies have shown that resilience has a positive impact on a wide range of mental health functions and well-being outcomes (Arslan, 2019; Yıldırım & Belen, 2019; Hu, Zhang, & Wang, 2015; McDonnell & Semkowska, 2020). In a study on Turkish adults, Yıldırım found that resilience was positively associated with life satisfaction, positive well-being, and that it was negatively associated with the negative impact of traumatic events (Yıldırım, 2019). It has also been suggested that resilience may negatively impact the negative impact of traumatic events and the development of posttraumatic stress disorders (Lee, Ahn, Jeong, Chae, & Choi, 2014). Moreover, resilience has also been positively associated with well-being and mediated the relationship between coping strategies and well-being (Tomás, Sancho, Melendez, & Mayordomo, 2012).

It has also been identified by many researchers that throughout the pandemic period, as a result of many external factors individuals have been so concerned about their health that they have experienced various somatic symptoms, thus directly affecting their psychological well-being and putting them in

persistent suspicion of Covid-19 virus infection. Somatic symptoms are one of the most prevalent issues in primary health care and subspecialty settings. There is a comprehensive list of symptoms such as pain, shortness of breath, palpitations, numbness and gastrointestinal problems without specific affinity for a particular medical specialty (Mostafaei Kabir, Kazemnejad, Feizi, Mansourian, Hassanzadeh Keshteli, Afshar, Arzag Rasekhi Dehkordi, Adibi & Ghadirian, 2019). There is ample information on the interrelationships between physical and mental health in psychosomatic conditions. According to these data, there must be an organ dysfunction or a psychological explanation for such symptoms (Watten, Vassend, Myhrer, & Syversen, 1997). Several studies found that 66% of employees with somatization symptoms attributed their symptoms to psychological and physical factors. Psychological anxiety is a known mediator of somatization. In addition to the cognitive-affective components, one of the most important predictors of psychological distress in somatic symptoms are personality traits. It was found that 52.6% of subjects with somatization and psychological distress have higher levels of neuroticism and lower extroversion. One hypothesis states that one of the most clinically obvious problems of the patient with somatization is personality dysfunction (Mostafaei et al., 2019). The estimated comorbidity of somatization and personality dysfunction varies from 48 to 72%. Somatic symptoms are therefore estimated to play a key role in the psychological well-being of individuals and also in various personality traits (Folkman, 2000).

In the Kosovar context, a study was conducted by Berxulli and Arenliu aims to report the findings of an online study with students of the University of Prishtina "Hasan Prishtina" on the level of psychological stress as a result of restricting the movement of citizens during the COVID pandemic -19 (Berxulli and Arenliu, 2020). As a result of this study, the following

findings were generated, such as: staying online or watching movies are the most preferred coping mechanisms for respondents, who also reported a higher percentage of moderate or pronounced psychological distress compared to them, who report talking to someone at home or online. Therefore, given the findings of this study, it is recommended that in addition to public health interventions or measures that focus on preventing COVID-19 virus infections, interventions to protect public mental health in these challenging periods are also very important (Bexullli & Arenliu, 2020).

The purpose of this current research is to study the correlation between personality traits with resilience and somatic symptoms in the Kosovar population aged 18-59 years during the Covid-19 pandemic period by testing research questions and confirming the hypotheses presented. So it will be identified how the construct of resistance affects the relationship between personality traits and somatic symptoms. Thus, the hypotheses of this study assume that there is a significant correlation between personality traits, resilience and somatic symptoms, while based on mediation analysis it is assumed that resilience serves as mediating factors influencing personality traits and the onset of somatic symptoms.

2. MATERIALS AND METHODS

2.1 Designs and Setting

The research is quantitative, cross-sectional in nature, and correlational research.

2.2 Participants

In this study the sample consisted of 200 respondents of the general population from the Republic of Kosovo. Participants were recruited through self-report questionnaires randomly, in two forms, physical and online throughout the pandemic time. The age of the participants ranged

from 18 to 59 years old, and the gender included 106 females (53%) and males (47%), with a mean age of 29.1 years.

2.3 Instruments

In this study, data were collected from self-report instruments. To identify individuals who are infected or not infected with Covid-19, some questions were created by the researcher. The first instrument used for the purposes of measuring personality traits is the Big Five Inventory which is the short version of Neo-Pr. **The Big Five Inventory** is a short version of the NEO-P-R instrument (Costa, McCrae, & Dye, 1991) and contains 44 statements. Every aspect in this inventory is measured on a Likert scale (1-5), ranging from 1 (strongly disagree), 2 (strongly disagree), 3 (neutral), 4 (strongly disagree), and 5 (strongly agree). **The Short Resilience Inventory** (BRS; Smith et al., 2008) was used to measure resistance. The BRS consists of 6 items, which are evaluated using a Likert scale response format with five points from 1 (strongly disagree) to 5 (strongly agree). The result is used to generate a total score ranging from 6 to 30, so a higher score indicates greater consistency. The Turkish version of the BRS demonstrates good reliability and validity among university students (Doğan, 2015). The Cronbach's alpha of the BRS in this study is 0.78. **The World Health Organization** (WHO) Welfare Index (WHO-5; Staehr, 1998) was used to assess the subjective well-being of respondents. WHO-5 is a general scale that includes 5 articles related to vitality, positive mood and general interests. Each item is rated on a 6-point Likert scale ranging from 0 (no time) to 5 (all the time). Satisfactory psychometric characteristics of the scale were reported in Turkish (Eser, Çevik, Baydur, Güneş, Esgin, Öztekin & Özyurt, 2019). The Cronbach alpha coefficient of WHO-5 represents a value of 0.88.

Meanwhile the last instrument used to measure the construct of emotional problems is

the **Adult Self-Reporting Questionnaire (ASR)**, (ASEBA, 2021). This list included normative scales for adaptive functioning, empirically based syndromes, substance use, general, external, and internal problems. This list is also seen effectively in the measurement and assessment of mental health in adults, used in family therapy, forensics, counseling, medicine, in substance abusers and other environments of a similar nature. an orientation from DSM-5 (which includes problems with anxiety, depression, somatic problems, aggression, attention problems, emotional problems), and that serve for each gender, and ages 18-35 and 36-59.

The BFI questionnaire was used to measure personality traits, the ASR questionnaire was used to measure somatic symptoms, and the abbreviated resilience inventory was used to measure resilience. The BFI questionnaire showed an acceptable consistency scale, as determined by Cronbach's Alpha value of .66. The ASR questionnaire showed a degree of good consistency, as determined by Cronbach's Alpha's value of .87. And the abbreviated resilience inventory has shown a degree of good consistency, as determined by Cronbach's Alfa value of .82.

2.4 Procedure

To provide data for this study, we used self-report questionnaires for participants. Initially the self-report questionnaires were shared with all participants and all had the free will of all parts of the study. After the participants' choices, the decision of the study goals, and the confirmation of the cooperation by the participants, the questionnaires were administered. Participants were instructed to read the questions carefully and to choose the answers that best suit them and not to leave the questions unanswered. They were informed about their purpose, duration, ethical issues. Completion of physical questionnaires was done in those spaces where participants were not hindered by each other. The whole process

took about 30-35 minutes. The studies involving human participants were reviewed and approved by the Heimerer College. The participants provided their written informed consent to participate in this study. Overall, ethics is a sensitive point which for no reason should be overlooked. Participants were informed of the purpose of the study, were explained that participation is voluntary, and were assured of maintaining the anonymity and confidentiality of their data. It was also emphasized that they have the right to withdraw from participation and there will be no disadvantage or penalty in this case.

2.5 Data Analysis

After completing the questionnaires, the data entered in the database, and the application of the necessary statistical analysis. As for the entry of participants' data in the database, there are two different data with two forms of data analysis. First, data to measure personality traits and resilience were entered and analyzed in the SPSS database, while ASR questionnaire data was entered and analyzed in the ADM (Application Data Management) software database. The software also provided an overview of the division of clinical and non-clinical respondents into diagnostic criteria according to the DSM.

First descriptive analyzes of the research sample were performed, then cronbach alpha for the reliability of the research questionnaires. In the case of the correlation between the variables of this research, personality traits, resilience and somatic symptoms, the Pearson Correlation was used. Also of interest in this research was the research of gender differences in terms of resilience construct, where T-Test analysis was used. These above-mentioned analyzes were performed through the statistical program SPSS. Meanwhile, to understand how the construct of resilience as a mediator has an impact on the relationship between personality traits and somatic symptoms, it was used the statistical analysis Mediation Analysis of the program R.

3. RESULTS

Previous infection with COVID-19 shows that 79 participants (39.5%) were previously infected, while 121 (60.5%) were not infected. Whereas from the current infection with COVID-19, it is seen that only 5 (2.5%) were currently infected, and 145 (97.5%) were not currently infected. Here, the results show the correlation between the research variables, where according to the results we see in the table, it can be seen that extraversion has a strong negative correlation with somatic symptoms, $r(200) = -.306, p = .000$, and somatic complains $r(200) = -.299, p = .000$. Another important result is the correlation between

resistance and the trait of neuroticism, $r(200) = -.236, p = .001$, where we can conclude that people who score higher levels on the trait of neuroticism, tend to have low level of resilience. On the other hand it is seen that persons who score high levels on the extroversion trait, are more likely to have higher levels of resilience.

Also from the results of the table can be seen the significantly high positive correlation between resilience and psychological well-being, $r(200) = .451, p = .000$, which means that the higher the score in resilience, it is more likely to have higher psychological well-being (see Table 1).

Table 1. Correlation between research variables

	Resilience	Somatic Complains	Somatic Symptoms
Extroversion	.185**	-.299**	-.306**
Neuroticism	-.236**	.213**	.169*
Resilience	1	-.309**	-.281**
Psychological Wellbeing	-.349**	-.423**	-.393**

* The correlation is significant at the .05 level

** The correlation is significant at the .01 level

Here are the results of the T-Test, which show gender differences, where it is shown the differences in the level of resilience in females and males. According to the results it is seen that there are significant differences between females

and males in the occurrence of resistance, $t(198) = -3.451, p = .001$., where it is seen that males are more predisposed to show higher levels of resistance ($3.38 \pm .806$) in relation to females ($3.01 \pm .732$) (see Table 2).

Table 2. Gender differences in the resilience construct, T-Test

Gender	N	Mean	Standard Deviation	T-Test	p
Male	94	3.38	.806	-3.451	.001
Female	106	3.01	.732	-3.451	.001

Mediation analysis showed a significant direct effect between extraversion trait and

somatic symptoms ($\beta = -.355, p < .01$) in which case we conclude that extroverts are less likely to

experience somatic symptoms. On the other hand the results of this analysis show a significant indirect effect between resilience as a mediating factor in the relationship between extraversion and somatic symptoms where the highest points on extraversion and resilience are associated with lower levels of somatic symptoms ($\beta = .172$, $p < .05$). The model showed a significant direct influence between neuroticism and somatic symptoms ($\beta = .162$, $p < .05$). However, when resistance was introduced as a mediating factor in the relationship between neuroticism and somatic symptoms, where the highest points of neuroticism and the lowest points of resistance, resulted in a higher level of somatic symptoms ($\beta = -.278$, $p < .001$).

The other part analyzed in this model, is also the feature of openness to experiences which has given a significant direct positive effect on the

occurrence of somatic symptoms ($\beta = .161$, $p < .05$), however, had no significant indirect impact of resilience between the relationship of openness trait to somatic experiences and symptoms. Meanwhile, the mediation analysis yielded another important result of the impact of resilience between the feature of consciousness and somatic symptoms, partially predicting the relationship between them. Thus by including resilience as a mediating factor in the association between consciousness and somatic symptoms ($\beta = -.163$, $p > .05$), implying that persons who are more conscious and less resilient are not always more predisposed exhibit somatic symptoms. Conformity trait, on the other hand, had no direct or indirect effect on the association with somatic symptoms even when it had a resilience factor as a mediator (see Figure 1).

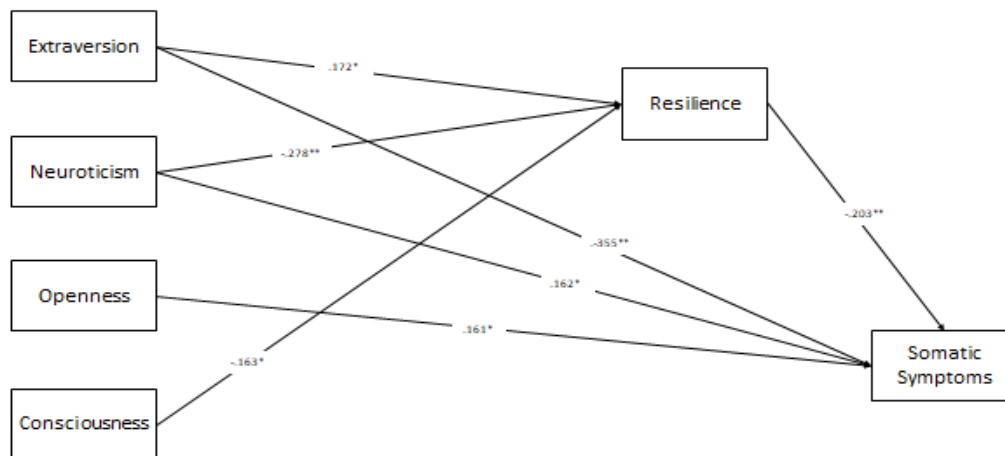


Figure 1. The model of the relationship between personality traits, resilience and somatic symptoms

Note: $X^2=71.05$, $df=11$, $p<.000$, $CFI=1.00$, $TLI=1.00$, $RMSEA=.000$

4. DISCUSSION

The aim of the research was to emphasize the correlation between personality traits with resilience and somatic symptoms, trying to understand the pattern of mediation of resilience in the other two constructs, in which case seven main hypotheses were raised. The first hypothesis of this research, divided into several hypotheses

including (H1b, H1c, H1d and H1e) which were supported by many studies reviewed, was also confirmed by the results of this study. According to correlation analysis, extraversion has a significant positive correlation with resilience ($r(200) = .185$, $p = .000$), a result that supports the first hypothesis of H1 research, while neuroticism has a significant negative correlation with resilience ($r(200) = -.236$, $p = .000$), which

supports the H1b hypothesis. Resilience as a construct is associated with a pattern of measured, optimistic, cooperative, and open behaviors whose features correspond to the feature of extraversion, which are the opposite of the feature of neuroticism defined by a maladaptive psychological functioning. In support of the results of these results of this study, there are also those (Kocjan, Kavacic & Avsec, 2020; Campell, Cohan & Stein, 2006; Froutan, Mazlom, Melekzadeh & Mirhaghi, 2017) who have concluded that resilience is related positively with extraversion where it is thus likely to reflect the benefits of positive affective style, the ability for interpersonal closeness, and a high level of social interaction. So people who score high on the extroversion trait are more resilient versus people who score higher on the neuroticism trait who are less resilient.

Among other things, resilience also has a significant negative correlation with somatic symptoms, so that from the correlation analysis it has supported ($r(200) = -.309, p = .000$) the H1c hypothesis. Since a host of studies support the fact that resilience allows people to be more aware of the state of their body and how they feel and why they feel in a certain form, which automatically results in a minimized level of experiencing somatic symptoms. In the other hand, it is the fact that people with somatic problems find it more difficult to experience positive emotions making it more difficult to manage stress and other emotional problems that then give greater focus to experiencing somatic symptoms. In line with this argument of the results of this study, are also the studies of the authors Shangguan, Zhou, Qian, Zhang, Liu and Zhang, which study has tried to assess the relationship between resistance and somatization in the context of pandemics and infectious diseases (Shangguan, Zhou, Qian, Zhang, Liu & Zhang, 2021). And consequently the study has concluded that persons who exhibited higher scores on resilience exhibited fewer somatic symptoms, and vice versa. In support of the third hypothesis (H1c) of the

present study, there is also the study conducted by Ran, Wang, Ai, Kong, Chen and Kuang, whose purpose was to identify the link between mental health by specifying the somatism and resilience of Chinese population during the Covid 19 pandemic period, also concluding that the most resilient individuals exhibit low scores on the onset of somatic symptoms (Ran, Wang, Ai, Kong, Chen & Kuang, 2020).

The current study also aimed to look at the relationship between personality traits with somatic symptoms. Thus his results show us that extraversion has a significantly strong negative correlation with somatic symptoms ($r(200) = -.306, p = .000$), and somatic disorders ($r(200) = -.299, p = .000$). The rationale behind this result lies in the very fact that extroverted types are surrounded and focused on the social circle, which does not mean that they do not experience somatic symptoms, but their social aspect and focus outside their body on being open with others, affects the lower experience of somatic symptoms. This is also due to the fact that they do not prefer isolation with themselves, which increases the predisposition to focus and identify somatic experiences.

In line with this finding, the other H1e hypothesis is supported where it turned out that neuroticism has a significant positive correlation with somatic symptoms ($r(200) = .213, p = .000$) this because neurotics are generally more predisposed to experience health problems, including emotional problems with anxiety, depression, somatism, and self-esteem. These results are also supported by studies of (Mostafaei, Kabir, Kazemnejad, Feizi, Mansourian, Hassanzadeh Keshteli & Ghadirian, 2019; Christina, Caroline & Sidney, 1997; Wongpakaran & Wongpakaran, 2014) where researchers have tried to identify the correlation between somatization symptoms through mental health and personality traits in the Iranian population and in the elderly. Thus the results of these studies are in support of the H1e hypothesis, concluding that more neurotic persons have

exhibited more somatic symptoms and also that high scores on neuroticism affect the onset of somatic symptoms. In support of the H1d and H1e hypotheses of the current study is also the study of Bijari, Peivastegar and Sadr, whose main purpose was to study the relationship between resilience, five personality dimensions and clinical disorders (anxiety, depression and somatization) (Bijari, Peivastegar & Sadr, 2015), concluding that extroverted persons are less likely to exhibit somatic symptoms, whereas neurotic persons are more likely to exhibit somatic symptoms.

Another important result of this study is the significantly high positive correlation between resilience and psychological well-being, $r(200) = .451, p = .000$. In line with the current study, are the findings of Yildirim and his collaborators, who studied the correlation between resilience, preventive behavior and subjective well-being of the general population during the early phase of COVID-19 (Yildirim et al., 2020). Among the various results of this study, it was concluded that psychological resilience and well-being have a significant positive correlation, and that resilience had a significant and direct predictive effect on subjective well-being and psychological health.

This study also comes with another interesting finding that aims to identify gender differences in terms of the emergence of resilience, respectively the ability to deal with stressful situations more easily. The finding of this study, lets us know that there are gender differences in the occurrence of resilience, resulting in significant differences between women and men in the occurrence of resilience, $t(198) = -3.451, p = .001$. So males are more prone to exhibit higher levels of resilience ($3.38 \pm .806$) than females ($3.01 \pm .732$). Aspects of psychological functioning that are thought to support the ability to cope effectively with stressful situations often include differences in their expression in both women and men. Women across generations have been shown to have

lower self-esteem and lower self-efficacy compared to men. Pearlin and Schooler assessed the resilience of different psychological resources and role-based coping responses (Pearlin & Schooler, 1978). They concluded that men are endowed with more psychological resources (e.g., self-esteem and mastery) than women, concluding that in addition to other reckless factors, socializing better equips men with effective psychological resources. As a result they are even more resilient than women. Another explanation of the gender difference in the appearance of resilience is the fact that women are socialized and relationship-oriented, while men are socialized but more independent. Women are therefore thought to be more sensitive to the problems faced by their friends and family (Kessler & McLeod, 1984; Maciejewski et al., 2001), and as a result may be less resilient.

The results of this study, based on the analysis of the resilience-mediated mediation model in personality traits and somatic symptoms, have found that there is a significant direct influence between neuroticism and somatic symptoms ($\beta = .162, p < .05$), giving us proved that neurotic persons are more prone to experience somatic symptoms, the finding of which is consistent with the H2b hypothesis. However, when resilience was introduced as a mediating factor in the relationship between neuroticism and somatic symptoms, where the highest points of neuroticism and the lowest points of resilience, resulted in a higher level of somatic symptoms ($\beta = -.278, p < .001$), letting us know that the more neurotic an individual is and the less resilient he is, the more prone he is to exhibit somatic symptoms. Based on the description of neurotic persons according to Costa and McCrae, they are characterized by a range of unpleasant emotions and many emotional disturbances including the highest predisposition in experiencing problems with anxiety, depression and somatism (Costa & McCrae, 1992). Since somatism is also characterized by an extreme concentration on somatic symptoms such

as pain and fatigue and major functional disturbances, this implies that neurotic persons are more predisposed to exhibit more somatic symptoms (Dimsdale, 2017). As a result, a neurotic person who exhibits more somatic symptoms, results in a lower level of resilience, as they have a negative perception of the body and health making it impossible to feel a range of positive emotions and a mechanism to protect the personality from internal and external concerns.

Also in support of H2 hypothesis, mediation analysis showed a significant direct effect between the feature of extraversion and somatic symptoms ($\beta = -.355$, $p < .01$) in which case we can conclude that extroverts are less prone to experience somatic symptoms. On the other hand the results of this analysis show a significant indirect effect between resilience as a mediating factor in the relationship between extraversion and somatic symptoms where the highest points on extraversion and resilience are associated with lower level of somatic symptoms ($\beta = .172$, $p < .05$), implying that the more extroverted and resilient a person is, the less likely he or she is to experience somatic symptoms. Looking also from the findings of international studies, extroverts and resilient persons are less likely to experience great emotional distress and a higher concentration on physical pain, leaving us to imply that they exhibit fewer somatic symptoms.

The other part analyzed in this model is the feature of openness to experiences which has given a significant direct effect on the appearance of somatic symptoms, so that high points in the opening to experiences result in a higher level of somatic symptoms ($\beta = .161$, $p < .05$), implying that the more open a person is to experiences, the more likely he or she is to show somatic symptoms. However, there was no significant indirect effect of resilience between the relationship of openness trait to somatic experiences and symptoms. Meanwhile, the mediation analysis yielded another important result of the impact of resilience between the

feature of consciousness and somatic symptoms, partially predicting the relationship between them. Thus with the inclusion of resilience as a mediating factor in the relationship between consciousness and somatic symptoms, where high scores on the consciousness trait and low scores on resilience resulted in higher scores on somatic symptoms ($\beta = -.163$, $p > .05$), implying that not always persons who are more conscious and less resilient are more predisposed to exhibit somatic symptoms.

Similarly, the studies reviewed prove that resilience as a mediating factor influences personality traits and somatic symptoms. One of these studies, which supports the second hypothesis H2 and H2b, is the study of Bijari, Peivastegar and Sadr, whose main purpose was to study the relationship between resilience, five personality dimensions and clinical disorders (anxiety, depression and somatization) (Bijari, Peivastegar & Sadr, 2015). Since the study of Bijari et al. claims that resilience affects the change of personality traits and the appearance of somatic symptoms, but it is not specified exactly in which traits, the current study concludes that high scores on the feature of extraversion and resilience negatively affect the onset of somatic symptoms, so high scores on the neuroticism trait and low scores on resilience positively affect the onset of somatic symptoms (Bijari, Peivastegar & Sadr, 2015). We must look at all these results carefully, as the relationship between the variables has been analyzed in a sensitive pandemic period in Kosovo, and as a result the results may be influenced by the current emotional and psychological state of the population which has been affected.

5. LIMITATIONS OF THE STUDY

Despite the positive results and confirmation of our hypotheses, however, we need to mention some limitations of our research, so that they can be addressed in subsequent research. The online administration of the half-sample questionnaire of this study poses a limitation because it limits

researchers' control over how respondents understood the instructions and how they completed them, and may also raise concerns about the reliability of the responses. Another limitation of this study is the lack of inclusion of the clinical sample which would have further enriched the results and recommendations to health professionals for working with clients / patients. Another limitation of this research, the addressing of which could further enrich our study and focus on much-needed interventions currently in the Kosovar population, is the exclusion of older generations as they have been the most targeted and most targeted age group affected by the Covid-19 pandemic and not only in the Kosovar population. A final limitation would include the test battery, where recruits were subjected to a large number of questions which may also have had an impact on the answers given to them.

6. RECOMMENDATIONS

Our findings initially recommend that currently focusing on the provision of alternative methods of mental health services by making mental health the focal point in the methods of providing services more adequately for all age groups without distinction specifically for this pandemic period which has affected the well-being of all individuals regardless of gender, age or other socio-demographic status. In the framework of this more comprehensive recommendation, it is recommended that other socio-demographic variables be identified in other studies and that they be included as an influential factor in the relationship between the key variables of this study which are: personality traits, resilience and somatic symptoms. In line with the latter, it is recommended that other studies identify more other individual or contextual factors influencing the increase in resilience levels, to work more on preventing the onset of somatic problems or other problems whether emotional or behavioral, and to identify methodologies for enhancing and

strengthening protective factors and coping mechanisms against these mental health phenomena.

Given that we are currently still in a difficult pandemic situation, for subsequent studies of interest in studying the pandemic in the psychological well-being of the Kosovar population, it is recommended to highlight more factors that have affected pandemic situations including quarantine experiences (isolation) and physical and social distance, and behavioral problems including preventive behaviors such as disinfection, washing food, use of masks and gloves.

In other studies it would be recommended to take a larger sample which would be more representative of our population, including the clinical sample which is considered to be of great interest in this type of research, and to administer the questionnaire in physical form so that the responses of the most controlled respondents are as samples. In the context of the most representative sample, it is considered very important that the following studies include the most advanced age groups in this type of study, since they were the most targeted and affected age groups including the high mortality rate due to the Covid pandemic 19.

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Conflict of Interest: We declare that we do not have any conflict of interest in this paper and elsewhere.

Funding: NA

Acknowledgements and/or Authors' Contribution

Greta Imeri: Designed the study, gathered the data, and participated in the discussion

Florim Gallopeni: Designed the study, Methodology and participated in results section

Donjeta Gashi: Gathered the data, Results.

Bujar Obertinca: Methodology and Discussion.

Data availability

1. The datasets generated during and/or analysed during the current study are available in the Greta Imeri work and it is not a part of any link.

2. The datasets generated during and/or analysed during the current study are available from the corresponding author professor Bujar Obertinca on reasonable request.

4. The datasets generated during and/or analysed during the current study are not publicly available due to the unpublished dataset but are available from the corresponding author on reasonable request.

5. Data sharing not applicable to this article as no datasets were generated or analysed during the current study.

Ethical Statement

Before the implementation of the study, it was sent to Ethical committee of Heimerer College and was approved.

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