The Relationship between Personality Traits and Compliance with the COVID-19 Preventive Measures in Kosovo

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Abstract: The COVID-19 pandemic urged systematic restrictive measures in order to avoid the spread of the virus. Different countries applied different restrictive measures; however, their efficacy was vastly dependent on the willingness of the people to comply with them. How people perceived the pandemic yielded different adaptive behavior to preventative measures. In this direction, individual characteristics (i.e., personality) seem very important. The current study aimed to map a relationship between personality structure as postulated within the five-factor model of personality with the tendency to comply with preventive measures, as mediated by perceived stress and concerns over coronavirus. In a sample of 3252 adults, we found that the traits of openness, agreeableness, and conscientiousness directly and positively predicted compliance. However, concerns over coronavirus partially but positively mediated the relationship between agreeableness and conscientiousness on compliance. Perceived stress, on the other hand, was not a significant mediator, although it was significantly and positively predicted by neuroticism but negatively by extraversion. These findings showed that different personality traits have different direct effects on compliance with preventative measures.

Keywords: COVID-19; five-factor personality structure; concerns over coronavirus; perceived stress; compliance

1. Introduction

On 11 March 2020, the COVID-19 acute respiratory disease was declared a global pandemic by the World Health Organization [1]. Due to the highly transmissible nature of COVID-19, various countries implemented different restrictive measures in order to flatten the curve. Most of the measures included case isolation at home, voluntary quarantine, the social distancing of risk groups, general social distancing, lockdown of schools and universities, closed borders, face masks in closed rooms and public transport and washing hands frequently [2]. According to [1], these measures can effectively prevent the spread of the virus; however, their efficacy is vastly dependent on the willingness of the people to comply with them [1]. Behavioral studies that explored the level of compliance with preventive measures in different countries were conducted which revealed differences among countries [3,4]. For example, the populations of Spain and Italy were more likely to stay home, in comparison to the populations of Sweden and Singapore [5]. The Italian population had higher rates of hand washing, while the Chinese population had the lowest [5]. Although these differences in behaviors depend on the restrictive measures taken in their countries, further studies that aim to explain why such behaviors occur are needed.

1.1. The Context of Kosovo

The first case of COVID19 in Kosovo was registered on 12 March 2020. As the number of cases started increasing drastically, governmental bodies introduced restrictive measures

ranging from the obligation to put on masks and social distancing, to complete isolation and partial curfews, which have been in place until the beginning of 2022. The total number of infections is around 13% of the total population between the onset of the pandemic (March 2020) and May 2022 is (228,000), while more than 3130 deaths have been registered so far. As of May 2022, more than 46% of the total population has been vaccinated with two doses of the anti-COVID vaccine, although only a small number of people (<60,000, 0.34%) have opted for a third dose [6].

1.2. Perceived Stress, Concerns over Coronavirus, and Compliance

Literature suggests that those who perceive the COVID-19 pandemic as a negative situation comply more with the preventative measures implemented by governments [7,8]. Further studies also suggest the same links between perceived danger and fear with adaptive behavioral modifications [9,10]. Specifically, high levels of anxiety and fear resulted in more compliance with authority decisions overall, but also with pandemic preventive measures [11,12]. Moreover, [13] identified that among fear of the virus [14], moral foundations, and political orientation, only fear of the virus was a significant predictor of respecting health measures. That being said, an increase in the level of perceived stress in relation to the situation, will bring forth the evaluation of coping responses to overcome that stress, which, according to the health belief model (HBM), will eventually follow with the activation of certain coping health behaviors [15]. The integration of complex emotions and thinking into producing appropriate behavior, requires a certain mental skill on the part of the individual [16], whereas strong emotional experiences persistent in time, play an active and dynamic role in influencing behavior through activation of certain developmental pathways [17]. In the case of COVID-19, higher levels of perceived stress are related to compliance with proposed health measures [18,19]. However, the matters of studying perceived stress and concerns over a certain situation become crucial once the feeling of stress paralyzes the individual in the face of danger [20]. Positive effects of perceived stress on compliance with preventive measures were maintained for a prolonged period, which leads to a state of learned helplessness [20]. According to the Health Belief Model [21], health related risk susceptibility and risk severity are effective motivators in dealing with stressful situations only if levels of self-efficacy (perceived confidence of an individual to successfully perform a behavior) are high [15]. To further illustrate this in the current pandemic context, when levels of perceived stress and concern over coronavirus are high, but self-efficacy is low, individuals will feel overwhelmed which will immobilize them to protect themselves in the face of danger [16]. Therefore, as research shows, it is very important to understand how perceived stress and concerns over a negative situation may facilitate or inhibit individuals to react with appropriate behaviors, such as preventive measures against coronavirus. According to [22], one of the many factors that can influence the evaluation of stress and one's ability to cope with danger is personality.

1.3. Personality and Compliance

Considering the fact that compliance with COVID-19 guidelines aims at protecting oneself and others from harm and even death, this complaint behavior is congruent with the definitions set forth by the HBM model describing healthy behavior; therefore, compliance with the COVID-19 guidelines can be categorized as a healthy behavior [15]. Even though health behaviors depend on a lot of factors, some of them have been found to play a more decisive role in this issue [15]. One of these factors is self-efficacy, which was shown to be the strongest predictor of good health behaviors [21]. In other words, as Von Ah and colleagues [23] explained in their paper, in order to continue participating in healthy behaviors, one must think that it makes a difference. Another contributing factor in predicting good health behaviors is personality [22]. Due to its cross-cultural reliability and validity [24], the Five-Factor Model of personality—which consists of openness, conscientiousness, extraversion, agreeableness, and neuroticism [25]—is often used to study the role different personality traits play in various social and psychological settings.

When analyzed collectively, these five factors predicted road safety rules compliance in Nigeria [26]. On the other hand, personality traits have been shown to independently predict health behaviors [27]. To begin with, conscientiousness exhibited the strongest relationship with health-promoting behaviors, with high-scoring individuals adhering to their diet and exercise plans because this personality trait has shown to consistently prefer plans and routines [28]. In contrast to conscientiousness, extraversion has displayed a moderate, negative relationship with healthy behaviors. Studies have found correlations between extraversion with alcohol and tobacco consumption [29]. This relationship can be explained by the social nature of extraverted individuals, and the presence of alcohol and tobacco in social gatherings. Trait agreeableness, neuroticism, and openness showed discrepancies regarding their relationship with health behaviors. Neurotic individuals tend to vary in their health behaviors depending on the approach they take to deal with stressful situations. They can manage their stress by implementing good health habits, such as oral hygiene [30–32]; or they can resort to substance use [33]. Similarly, agreeableness showed an inverse correlation between smoking and healthy diets [34,35]. Lastly, openness to new experiences was found to have a positive relationship with the consumption of fruits and vegetables [36]. However, a different study found no relationship between openness and health behaviors [29].

The relationship between the big five model and compliance with preventive measures against COVID-19 was also considered [7,27,37]. Results showed that conscientiousness was significantly correlated with social distancing in comparison to agreeableness and neuroticism which showed negative correlations [7]. Other studies concluded that extraversion was negatively correlated with respecting pandemic measures, specifically not respecting social distancing due to the socializing nature of this trait [38,39]. Furthermore, studies show that individuals high in agreeableness, openness, and conscientiousness take more health precautions and are more likely to give health recommendations to people around them [39]. The same patterns of behavior were found during the COVID-19 pandemic [40]. Conscientiousness was significantly correlated with social distancing in comparison to agreeableness and neuroticism which showed negative correlations [7]. Although the dependent variable was different in these studies, the existing evidence regarding these models is unclear. Thus, digging deeper into the traits of the big five personality model in relation to behavioral adaptation during the COVID-19 pandemic was proposed [37]. Findings showed that people who scored highly on the dark triad traits (e.g., Machiavellianism, psychopathology, and narcissistic rivalry) did not respect health measures proposed by the government in comparison to individuals with low scores [40].

Even though the previously mentioned studies provide a significant contribution to the existing literature in understanding individual differences in response to the COVID-19 pandemic, as with any new studies, there are a few limitations. The studies conducted thus far have built correlations between the structure of personality and compliance with preventive measures in the light of risk aversion or a sense of responsibility [41]. The current study contributes to the literature by proposing a new model in which personality traits predict preventive measures compliance through perceived stress and concerns over coronavirus.

2. Materials and Methods

2.1. Participants and Procedure

We used a subsample from the COVIDiSTRESS Global Survey dataset [4]. Thus, all the instruments used were similar to the original paper. The consortium involved research from 39 countries that collated data online in 47 languages and dialects between March and May 2020. The total sample size was 125,306 participants who met the inclusion criteria (e.g., above 18 years old). Our subsample consisted of 3252 participants (52.3% females, 29.6% males, and 18.2% did not specify). All the participants were from Kosovo with a mean age of 29.22 years old (*SD* = 10.06). The relative majority of the participants (47%) had a university degree and 35.7% of them were employed. At the time of data collection,

43.7% of the participants were isolated due to the spread of COVID-19. All the instruments were translated and back-translated from English to Albanian. For all the details please refer to [3,4]. We selected the participants from Kosovo because, in low- to middle-income countries such as Kosovo, less data are available, and usually, these data are not considered for implications. Thus, this study will inform both policies and practical implications for similar national situations in the future.

2.2. Measures

2.2.1. Personality Traits

To measure participants' personality traits, which were the independent variables, we used a short version of the Big Five Inventory with 15 items [42]. The scale consists of five traits: (1) neuroticism, (2) extroversion, (3) openness, (4) agreeableness, and (5) conscientiousness. Each trait was measured with three items (e.g., "I see myself as a person who is often concerned") ranging on a six-point Likert scale ranging from 1 (Strongly disagree) to 6 (Strongly agree)

2.2.2. Perceived Stress

To measure perceived stress, we used Perceived Stress Scale [43]. This is a 10-item (e.g., "In the last month, how often have you been upset because of something that happened unexpectedly?") one-dimensional instrument designed to measure the degree to which situations in one's life are appraised as stressful. This factor was used as a mediator.

2.2.3. Concerns over Coronavirus

As a second mediator, we measured concerns over coronavirus with five self-reported items on 6-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree). The items (e.g., "How much do you agree, that you are you concerned about the consequences of the Coronavirus for.") were developed by [3] to measure concerns about the consequences of the coronavirus for (1) participants, (2) participant's family, (3) participant's close friends, (4) participant's country, and (5) other countries across the globe.

2.2.4. Compliance with Preventive Measures

Two self-developed items that measure compliance as the dependent variables were employed. The item "I have done everything I could possibly do as an individual to reduce the spread of coronavirus" was used to measure general compliance with preventive measures (hereinafter compliance 1) and the item "I have done everything I could possibly do to keep physical distance to others" was used to measure physical distancing (hereinafter compliance 2) which was a mandatory preventative measure in every country. We used these two items as the dependent variables because these were basically the general preventative measure taken from most of the countries and also Kosovo.

2.3. Analytic Strategy

We first started with checking the internal consistency of the employed measures using multiple items, the Big Five Inventory, PSS-10, and Concerns over coronavirus measure. Then, we conducted confirmatory factor analysis (CFA) to examine whether the measurement structure of each measure was well supported. While interpreting the outcome from CFA, we referred to model fit indices, the root-mean-square error of approximation (RMSEA), the comparative fit index (CFI), the Tucker–Lewis index (TLI), and the standardized root-mean square residual (SRMR). RMSEA < 0.08 was considered to indicate an acceptable model fit. In addition, CFI and TLI values of 0.90 or above and SRMR values of <0.08 were used to indicate an acceptable model fit [44,45].

As the result from CFA was unsatisfactory because all the fit indices did not meet the cut-off criteria, we conducted the residual network model (RNM) implemented in psychonetrics to search for an improved measurement model that can suffice the aforementioned criteria [46]. When the RNM is performed, residual covariances, which are

set to be zero in conventional CFA, are freed; in this process, the best residual covariance network is identified with an algorithm implemented from network analysis, graphical LASSO [47]. After performing the RNM, we examined the model fit indicators again to examine whether the modified measurement model was acceptable, except for the SRMR, which was not provided by psychonetrics. In fact, previous studies have also demonstrated that the RNM was capable of estimating a measurement model with a better model fit and generalizability compared with previously used analysis methods, such as the modification indices, exploratory SEM, bifactor CFA, etc. [48,49].

Given that the modified model might be overfitted to the data used for the RNM, we conducted cross-validation to examine whether overfitting occurred [50,51]. For cross-validation, the whole dataset was randomly separated into the training (50%) and validation datasets. We performed the RNM only with the training dataset. Then, we examined model fit indicators after entering the validation dataset, which was not originally used for the RNM. When the resultant model fit indicators were deemed acceptable, we concluded that the RNM-modified measurement model was not overfitted to the data; therefore, it was appropriate to use the model for further analyses. For the measures with a measurement model modified by the RNM, we used factor scores calculated by psychonetrics in lieu of composite scores [52].

To analyze the data, we estimated a path analysis, which requires several steps. The first step was to calculate the factor scores by calculating the mean score of each of the factors. Then, the five traits of the personality were used as the independent variable, concerns with coronavirus and perceived stress as the mediators, and factors of measures abiding (compliance 1 and compliance 2) as the dependent variables. Perceived stress and concerns over coronavirus are determining factors regarding compliance with the preventive measure taken. Thus, they mediate the effects of personality traits on compliance [4]. Model fit was tested using the maximum-likelihood ratio-test statistics and indices of model fit, including the RMSEA, CFI, and SRMR. The standardized regression coefficients were used as effect size measures, with $\beta < 0.10$ indicating a small effect, a β of ≈ 0.20 a medium-sized effect, and $\beta > 0.30$ indicating a large effect [53].

3. Results

3.1. Measurement Testing

The internal consistency of each measure was examined with Cronbach α. The overall internal consistency in terms of α was 0.62 for the Big Five Inventory, 0.69 for the PSS-10, and 0.74 for the concerns over coronavirus measure. Our CFA indicated that only the concerns over coronavirus measure demonstrated acceptable model fit, RMSEA = 0.00, CFI = 1.00, TLI = 1.00, SRMR = 0.00. However, both the Big Five Inventory, RMSEA = 0.08, CFI = 0.69, TLI = 0.59, SRMR = 0.07, and PSS-10, RMSEA = 0.06, CFI = 0.90, TLI = 0.87, SRMR = 0.05, did not show acceptable model fit.

Hence, we performed the RNM for the Big Five Inventory and PSS-10. In the case of the Big Five Inventory, the RNM-modified model reported acceptable model fit, RMSEA = 0.02, CFI = 0.99, TLI = 0.98. When cross-validation was conducted, both the training dataset result, RMSEA = 0.02, CFA = 0.99, TLI = 0.98, and the validation dataset result, RMSEA = 0.04, CFI = 0.96, TLI = 0.92, demonstrated acceptable model fit; thus, the modified measurement model was not overfitted to the data. Therefore, we concluded that the model was appropriate to use for factor score calculation and further analyses.

The RNM also improved the measurement model of the PSS-10. The resultant model fit indicators suggested acceptable model fit, RMSEA = 0.01, CFI = 1.00, TLI = 1.00. Furthermore, cross-validation was also successful as both the training dataset, RMSEA = 0.03, CFI = 0.98, TLI = 0.98, and the validation dataset, RMSEA = 0.04, CFI = 0.97, TLI = 0.96, were well fitted to the modified model. Given the result from the cross-validation, we deemed that the model was appropriate for further use.

3.2. Main Results

Tables 1 and 2 are summary tables which includes means, standard deviations and the correlations among all the variables measured.

Table 1. Demographic Information.

Variables	Frequencies	Percentages
Number of participants	3252 participants	
Male		52.3%
Female		29.6%
Did not specify		18.2%
Mean Age	29, 22 Years Old	
University Degree		47%
Employed		35.7%

Table 2. Means, Standard Deviations, and Correlations of all the Variables Measured.

Variable	*M*	*SD*	1	2	3	4	5	6	7	8
1. Concerns over Coronavirus	4.35	1.05								
2. Perceived Stress	0.01	0.60	0.14 **							
3. Compliance 1	5.33	0.87	0.16 **	−0.01						
4. Compliance 2	5.23	0.86	0.18 **	0.00	0.56 **					
5. Extraversion	−0.01	0.88	0.05 *	−0.14 **	0.10 **	0.10 **				
6. Neuroticism	0.01	0.48	−0.03	0.20 **	−0.12 **	−0.10 **	−0.19 **			
7. Openness	<0.01	0.69	0.06 **	−0.05 *	0.19 **	0.19 **	0.30 **	−0.19 **		
8. Agreeableness	−0.01	0.60	0.12 **	−0.06 **	0.20 **	0.21 **	0.25 **	−0.26 **	0.33 **	
9. Conscientiousness	<0.01	0.69	0.12 **	−0.09 **	0.25 **	0.23 **	0.29 **	−0.24 **	0.37 **	0.48 **

Note. *M* = Mean Score, *SD* = Standard Deviation. * <0.05, ** <0.01.

To test our hypothesis, we estimated a path model in which five personality traits predict two factors of compliance with preventive measures through concerns over coronavirus and perceived stress. In other words, these two factors were used as mediators. Furthermore, we also investigated if five personality traits predicted compliance with preventive measures directly. The model showed an acceptable model fit. As shown in Figure 1, extraversion predicted negatively perceived stress ($\beta = -0.104$, $p < 0.001$) but not concerns over coronavirus. On the other hand, neuroticism positively predicted perceived stress ($\beta = 0.182$, $p < 0.001$), but not concerns over coronavirus. The rest of the personality traits did not significantly predict perceived stress. Furthermore, agreeableness positively predicted concerns over coronavirus ($\beta = 0.091$, $p = 0.001$), but not perceived stress. The same was found for conscientiousness, which positively predicted concerns over coronavirus ($\beta = 0.074$, $p = 0.009$) but not perceived stress. The only personality trait which did not show any significant association with these two mediators was openness.

In addition, significant positive direct effects of three personality traits (openness, agreeableness and conscientiousness) on measures abiding were found. Openness showed a direct significant effect on compliance 1 ($\beta = 0.094$, $p < 0.001$), and compliance 2 ($\beta = 0.099$, $p < 0.001$). So did agreeableness on compliance 1 ($\beta = 0.069$, $p = 0.010$), and compliance 2 ($\beta = 0.081$, $p = 0.002$). Lastly, conscientiousness showed similar effects on compliance 1 ($\beta = 0.170$, $p < 0.001$), and compliance 2 ($\beta = 0.137$, $p < 0.001$). The rest of the personality traits did not show a direct significant effect on compliance 1, nor in compliance 2.

Furthermore, concerns over coronavirus were found to positively predict compliance 1 ($\beta = 0.125$, $p < 0.001$) and compliance 2 ($\beta = 0.151$, $p < 0.001$). However, perceived stress did not significantly predict either compliance 1 or 2. In summary, this may suggest that the effects of agreeableness and conscientiousness on compliance 1 and 2 are partially mediated by concerns over coronavirus. On the other hand, the relationship between openness and compliance was not significantly mediated; however, a direct effect of openness on compliance 1 and 2 was found. Lastly, no significant direct nor mediating

effects of extraversion and neuroticism through 2 mediators on compliance 1 and 2 were found. In other words, we found that the higher the agreeableness and consciousness, the higher the concerns over coronavirus will be, which may result in higher compliance with the restrictive measures that were taken.
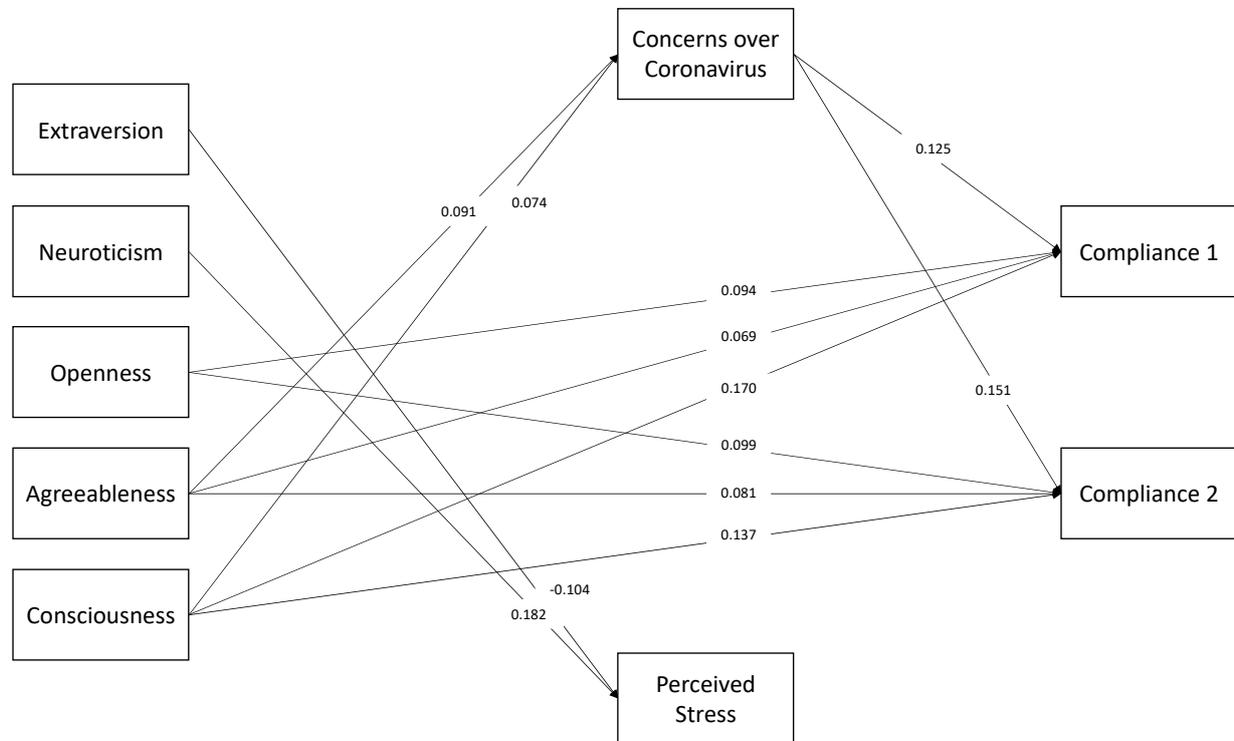
Figure 1. Prediction of measures abiding by the five personality traits through concerns over coronavirus and perceived stress. Note. Estimates provided are standardized coefficients. Solid lines indicate significant paths. Residual terms, factor loadings, and the correlations between the independent variables were not provided for the sake of clarity.

4. Discussion

While facing the COVID-19 pandemic, it became everyone's responsibility to play a role in maintaining the public health of their respective countries by following medical guidelines. A study from the University of Sydney found that around 90% of the populations of the US, UK, Australia, and Canada were compliant with the restrictive measures put forth by governmental bodies, while 10% refused to do so [54]. The level of compliance was mostly dependent on the stringency of the governmental measures and personality factors [55]. The latter, with the addition of concerns over the coronavirus and perceived stress, were the main focal points of this study.

Our findings and others [56–59] found that extroverted people are not very stressed over the pandemic due to social connectivity [60], which is associated with their lower perceived stress of an event through a higher participation in social communication [61]. Stress, on the other hand, has been found to decrease the competency for efficacious coping with difficult situations such as a pandemic [3,62], because facing high levels of stress and anxiety drains energy which could be utilized for effective coping with the ongoing situations [63].

Furthermore, neuroticism was positively associated with perceived stress but showed no direct relationship with any of the compliance measures. Neuroticism in itself is related to a higher propensity to experience high levels of stress [64–66] and concerns over any situation [67]. Such a relationship was corroborated in the case of the COVID-19 pandemic as well [22]. The positive relationship between perceived stress and neuroticism oftentimes is attributed to the negative impact that neuroticism has on one's capabilities to manage

and control internal distress [68]. Moreover, according to Vollrath [69], neuroticism not only negatively influences the experience of emotionally loaded situations, but it can also have a negative effect on the cognitive evaluation of them as well as on the effective behavioral coping with such situations.

Openness to experience, in similarity to other studies [70] did not predict concerns over coronavirus or perceived stress but showed a direct positive effect on compliance 1 and 2, i.e., the personal engagement in preventing the spread of the virus and keeping physical distance. These findings lead us to the assumption that individuals high on intellect—one of the main facets of openness [25]—manage to develop a systemic understanding of new situations and manage to adapt better to them. In the same direction, Eysenck [71] showed that openness predicts adjustments to environmental changes, which was the case with COVID-19 preventive measures [57]. Consequently, the link between openness and compliant behavior falls in line with the propensity of high openers for environmental concern and adaptation to new environments and circumstances [72].

Agreeableness, on the other hand, was positively correlated with compliant behavior while the association was mediated by concern over the virus. The contribution of agreeableness in compliance with restrictive measures [37,56,57] is no surprise given that highly agreeable people invest vastly in prosocial behavior [25]. Highly agreeable people like high openers, demonstrate respect and adherence to social contracts and rules [73] and demonstrate resistance to social rules breaching [74].

Conscientious individuals in our study and others [22,75], were concerned over the coronavirus, but at the same time complied more with restrictive measures. In general, conscientiousness is portrayed as the opposite of careless behavior, while other studies relate it to self-discipline [64] and rule-abiding behavior [66]. Given that complying with preventive measures was highly advertised by state institutions and medical bodies, highly conscientious people could have found the inner impetus for self-control and rule-abiding to follow the recommendations [76].

Lastly, concerning the positive relationship between concern over the coronavirus and compliance to restrictive measures, similar to Liebroth et al. [3], concern about coronavirus positively predicted compliance to restrictive measures. Concern about the virus is closely associated with a state of psychological distress and a state of perceived pressure, which can predict a higher tendency to abide by compliance measures. Turk [77], found that concern of infecting others with the virus is the best predictor of compliant behavior. High levels of concern produce a fear-like state, which also increases the likelihood of compliance with restrictive measures [78]. Overall, studies have found that people have experienced high levels of concern and stress over the pandemic situation, whereas the severity and contagiousness of the virus, followed by the length of quarantine and financial complications were the most common stressors [79]. The findings in this study and the previous findings suggest the mediating role of concerns over the virus in explaining the association between personality traits and compliance with the preventative measure. Our case may provide novel evidence of why concern about specific risks can predict behavior.

Nonetheless, the COVID-19 pandemic is a global unexpected situation, credible medical bodies gave clear guidelines on how to defend against it. Our findings, in line with previous studies, demonstrate that individual and personality differences play a significant role even in such unusual circumstances. Moreover, findings reveal that concerns about the unfortunate situation other than being dependent on our personality structure, could facilitate our effective reaction to it; however, being stressed about such situations does not associate positively with effective coping to them.

Study Limitations and Implications for Further Research

Although we extended research on the relationship between personality traits and compliance through perceived stress and concerns over coronavirus, the findings should be interpreted in light of some limitations. The first limitation is the cross-sectional nature of the study design, which limits the clear conclusion of the direction of associations and

does not allow to identify the leading factor. In this direction, there is increasing evidence that cross-sectional mediation can misrepresent how mediation processes develop over time [80]. This is not a fatal flaw by itself; however, replication studies are recommended. Additionally, future longitudinal studies can help draw the appropriate conclusions about the bidirectional relations over time. Additionally, adding qualitative measures (e.g., in-depth questionnaires and interviews) would help to inform better policies and interventions. The second limitation is regarding the measurement of the personality scale. We had to let some of the residuals correlate due to the bad behavior of the scale using standardized procedures—including cross-validation.

5. Conclusions

Lastly, depending on their personality traits, individuals perceive global threats differently. Three of the personality traits openness, agreeableness and consciousness link positively to compliance to restrictive measures with regard to COVID19 pandemic. Extraversion has a negative link with perceived stress, while neuroticism has a positive link with the latter; however, perceived stress does not directly associate with compliant behavior. Agreeableness and consciousness positively associate with concerns over the virus, while the latter also positively associates with both compliance measures. However, only those types of personality that are more concerned comply significantly with the preventative measure taken by the government. Thus, we suggest taking into consideration the differences in personality before taking national measures in the future.

Medical guidelines in the future aiming for compliance with restrictive measures should attempt to present a clear picture of the ways that a virus affects the health of the organism and the damages it could cause. In this way, people could be more alert of the situation and, consequently, demonstrate proactive concerns, which, according to this study, leads to healthier behaviors.

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