Dealing with Intolerance of Uncertainty: Mediator Role of Online Social Support in Case of Psychological Inflexibility

Belirsizliğe Tahammülsüzlükle Başa Çıkmak: Psikolojik Esneksizlik Durumunda Çevrimiçi Sosyal Desteğin Aracı Rolü

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Abstract

Intolerance of uncertainty (IU) has been defined as a disposition resulting from negative beliefs about uncertainty and its implications. It also involves the tendency to react negatively uncertain situations and events in an emotional, cognitive, and behavioral level. Given that, one's psychological inflexibility (PI) is assumed to be related how one will be tolerant to unexpected events such as pandemic and restricted social isolation. Accordingly, this research aims to highlight the relationship between IU and PI, as well as the role of online social support (OSS) on the effect of relationship between PI and IU. Sample consisted of 238 university students from Turkey, aging from 18 to 27. Participants were completed Intolerance of Uncertainty Scale-12, Online Social Support Scale, Acceptance and Action Questionnaire-II. Mediation analysis performed by the PROCESS software revealed that the indirect effect of PI on IU was statistically significant. Results indicated that when controlling the effect of perceived OSS, PI remained to be a significant predictor of IU but with rather slight reduction in the unstandardized regression coefficient. This finding indicates the partial mediating effect of online social support.

Key words: Psychological inflexibility, intolerance of uncertainty, online social support, partial mediation

Öz

Belirsizliğe tahammülsüzlük (IU), belirsizlik ve etkileri hakkındaki olumsuz inançlardan kaynaklanan bir eğilim olarak tanımlanmıştır. Ayrıca duygusal, bilişsel ve davranışsal düzeyde belirsiz durumlara ve olaylara olumsuz tepki verme eğilimini de içerir. Bu göz önüne alındığında, kişinin psikolojik esneksizliğinin, COVİD-19 pandemisi ve bununla birlikte gelişen sosyal izolasyonu gerekli kılan yaşam tarzı gibi beklenmedik olaylara nasıl tolerans gösterileceğiyle ilişkili olacağı beklenmektedir. Bu araştırma, belirsizliğe tahammülsüzlük ve psikolojik esneksizlik arasındaki ilişkiyi ortaya çıkarmayı ve ayrıca çevrimiçi sosyal desteğin (OSS) IU ile Pl arasındaki ilişkinin etkisi üzerindeki rolünü vurgulamayı amaçlamıştır. Araştırma örneklemini yaşları 18 ila 27 arasında değişen üniversite öğrencileri oluşturmaktadır. Katılımcılara demografik bilgi formu, Belirsizliğe Tahammülsüzlük Ölçeği-12, Çevrimiçi Sosyal Destek Ölçeği, Kabul ve Eylem Formu-II'yi içeren bir soru paketi ulaştırılmıştır. PROCESS yazılımıyla yapılan aracılık analizi, psikolojik esneksizliğin belirsizliğe tahammülsüzlük üzerindeki dolaylı etkisinin istatistiksel olarak anlamlı olduğunu ortaya koymuştur. Bulgular, algılanan çevrimiçi sosyal desteğin etkisi kontrol edildiğinde, psikolojik esneksizliğin belirsizliğe tahammülsüzlükür. Bu durum online sosyal desteğin kısmı aracı etkisine işaret etmektedir.

Anahtar Kelimeler: Psikolojik esneksizlik, belirsizliğe tahammülsüzlük, çevrimiçi sosyal destek, kısmi aracılık

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Introduction

1.1. Intolerance of uncertainty and worry

Corona virus (COVID-19), starting from the end of 2019, turned into pandemic as it spread rapidly in many parts of the world by March 2020 (Horesh & Brown, 2020). Since then, various social and physical distancing precautions were taken to prevent the spread of disease by blocking chains of transmission of COVID-19 by securing physical distance between people (WHO, 2020). In this process, people had to abandon their daily habits (e.g., spending time with friends at outdoor spaces) and keep up with a new order in which the social distancing was encouraged such as closure of non-essential facilities, home-office work arrangements, distance learning, local or national movement restrictions, staying-at home measures. As a precaution, the Council of Higher Education (CHE) has also announced that all Turkish higher education institutions will be closed for three weeks starting from March 16 (CHE, 2020a). Following this official announcement, a new one was released as public and private universities will offer distant education starting from March 23 (CHE, 2020b). Most of the students had to turn back to their families by leaving the cities they studied university and their peer-oriented social support environment. Ultimately, all these precautions in question aimed to encourage and sustain virtual social connection within families and communities (WHO, 2020).

During the pandemic process, one situation many people had to handle was worrying about the uncertainty of what was going to happen in their lives. Some people were more intolerant to this situation than others, and this difference seemed to affect the way how they experienced whole process. The literature has identified this situation as intolerance of uncertainty (IU), which is a "cognitive bias that affects how a person perceives interprets, and responds to uncertain situations on a cognitive, emotional, and behavioral level" (Laugesen, Dugas & Bukowski, 2003, p. 56). Cognitive model of excessive worry displays IU as one of the four cognitive variables that are associated with the development and maintenance of excessive worry (Dugas, Gagnon, Ladouceur & Freeston, 1998). Both clinical and non-clinical studies have provided empirical supports for the role of IU as a main factor for worry (Akbari & Khanipour, 2018). High levels of IU were found to be positively associated with severity of worry (Buhr & Dugas, 2006). It has also found as a key component of anxiety related pathologies such as obsessive-compulsive disorder (OCD) (Tolin, Abramowitz, Brigidi & Foa, 2003; Dugas, Gosselin & Ladouceur, 2001), panic disorder (Dugas et al., 2001) and generalized anxiety disorder (GAD) (Dugas et al., 1998). Therefore, helping people to regulate their intolerance seems important to support them to handle with situations causing worry for uncertainty.

1.2. The acceptance-based model and psychological inflexibility

The concept of psychological flexibility, which is one of the core themes of the acceptance and commitment therapy (ACT) model, appears to have a role in how individuals experience the world. Accordingly, psychological flexibility is defined as "contacting the present moment as a conscious human being, fully and without defense" (Hayes, Pistorello & Levin, 2012, p. 985). Previous studies on psychological flexibility reveal its association with positive life outcomes (i.e., Masuda & Tully, 2012; Luoma, Drake, Kohlenberg & Hayes, 2011). On the other hand, psychological inflexibility (PI), which is considered as a psychopathology, is defined as narrowing of behavioral repertoire (Hayes, Luoma, Bond, Masuda & Lillis, 2006). In the ACT model, psychological flexibility includes an acceptance dimension, which includes the active and aware embrace of private experiences without unnecessary attempts to change their frequency or form (Hayes et al., 2006; Hayes et al., 2012; Hayes, Wilson, Gifford, Follette & Strosahl, 1996). On the other hand, PI includes an avoidance dimension, which indicates an unwillingness to remain in contact with private experiences (e.g., bodily sensations, emotions, thoughts, memories, behavioral predispositions) and efforts to alter the form or frequency of these events (Hayes et al., 2006; Hayes et al., 2006; Hayes et al., 2012; Hayes et al., 1996). This avoidance is often harmful (Blackledge & Hayes, 2001). Higher levels of PI were found to be related to greater levels of depression, anxiety, stress, and overall psychological distress (Bond et al., 2011).

1.3. Intolerance of uncertainty and psychological inflexibility

In case of IU, individuals tend to find uncertain situations stressful and to perceive unexpected events as negative and should be avoided (Laugesen et al., 2003). It manifests itself by an excessive tendency to think "the possibility of a negative event occurring unacceptable" (Carleton, Norton & Asmundson, 2007, p. 105). In fact, this was the way how some people experienced the pandemic process, especially considering the rapid shifts in their lives, such as changes in their social relations, work and family routines, or health related habits. However, as premised by acceptance-based models, a flexible approach to one's experiences is associated with health and well-being, even when those experiences are sometimes painful (Kashdan & Rottenberg, 2010). Cognitively reappraise, reframe, or find positive meaning in an adverse event is characteristic of many hardy and resilient individuals (Southwick, Vythilingam & Charney, 2005). Having an acceptant manner, in other words being psychologically flexible is considered as a key ingredient in ability to tolerate highly stressful circumstances (Southwick et al., 2005). Therefore, it seems PI has a role in increasing the severity of IU, as well as the way people tolerate and manage the uncertainty, especially in times of crises (i.e., pandemic process).

1.4. Why Is Social Support Important?

During the pandemic, large numbers of people worldwide were expected to show resilience to the profound loss, stress, and fear associated with COVID-19, the virus was likely to contribute to the stress-related symptoms Horesh & Brown, 2020). In this resilience to stress, social support one has received from immediate environment has a crucial role in maintaining physical and psychological health (Ozbak et al., 2007; Southwick et al., 2005). High levels of perceived social support found to be associated with low levels of depression and anxiety symptoms (Zimet, Dahlem, Zimet & Farley, 1988; Roohafza et al., 2014), psychological distress (Norris & Kaniasty, 1996), worry (Anari, Tahmassian & Fathabadi, 2011) and successful management of stress (Naveenraj & Wesley, 2018). In general terms, social support is the "support accessible to an individual through social ties to other individuals, groups, and the larger community" (Lin, Ensel, Simeone, & Kuo, 1979, p. 109). According to the theoretical models of social support, social network is typically described as having a structural dimension and a functional dimension (Wills & Fegan 2001). While the structural dimension refers to the size of social network or frequency of social interactions, the functional dimension is related to sharing fear and worries, feeling accepted and understood due to use of social network (Wills & Fegan 2001). With the restricted social isolation precautions during the pandemic period, the nature of the individuals' social network structure has also changed and the frequency of vivid social interactions with friends diminished. Thus, virtual social interactions became the primary mean of social communication and support. Yet, changing structure of social interaction does not necessarily indicate a labefaction in the function of it (Wills & Fegan 2001). Previous researches showed a positive relation between online social networking and perceived social support (Eastin & LaRose, 2005). In fact, it could significantly decrease feelings of loneliness and depression, and significantly increase perceived social support (Shaw & Gant, 2002).

1.5. Hypotheses of the Study

Cognitively reframing and finding positive meanings in adverse events are considered to be important features of resilient individuals (Southwick et al., 2005). Having a flexible approach to one's painful experiences is crucial for mental health and well-being (Kashdan & Rottenberg, 2010). Intolerance of uncertainty, on the other hand, is a cognitive bias toward the experience of events (Laugesen et al., 2003), thus involves the tendency to react negatively on an emotional, cognitive, and behavioral level to uncertain situations and events (Buhr & Dugas, 2009). From a perspective of ACT model, the extend of psychological inflexibility one displays is an important indicator of how this person accept or avoid from the experiences and reacts them (Hayes et al., 1996). Consistently, psychological inflexibility and intolerance of uncertainty are assumed to be associated concepts, therefore variables mediating their effects seem to be important as well. Accordingly, the purpose of this study is to examine whether social support perceived via online platforms is a potential mediator of the relationship of psychological inflexibility to intolerance of uncertainty. The principal two hypotheses are: 1) there will be significant positive correlation between psychological inflexibility and intolerance of uncertainty. Highlight of variables that mediate the relationship between psychological inflexibility and intolerance of uncertainty. Highlight of variables that mediate this relationship will be helpful in developing interventions for coping with negative effects of intolerance toward uncertainty in times of crises for individuals in case of psychological inflexibility. However, to our knowledge direct relationship between psychological inflexibility and intolerance of uncertainty has not been studied, yet.

2. Method

2.1. Sample Processing

The participants were 238 (195 female and 43 male) university students from different universities in Türkiye. Their ages ranged from 18 to 27 years, with a mean age of 20.89 (SD = 1.67) years. The sample was predominantly living with their families as a precaution against COVID-19 (91.2%). Most of the students were living at big cities (n = 171), followed by counties (n = 47), and smaller regions (i.e., village, town, hamlet) (n = 20). A significant group of participants reported that they worry to be infected and to show the symptoms (n = 88).

2.2. Measuring Tools

2.2.1. Intolerance of Uncertainty Scale-12: Participants' intolerance of uncertainty was assessed via the Intolerance of Uncertainty Scale-12 item version (IUS-12; Carleton, Norton, & Asmundson, 2007). The IUS-12 has demonstrated adequate evidence of internal consistency and criterion-related validity scores (Khawaja & Yu, 2010). The scale was adapted to Turkish by Sarıçam, Erguvan, and Akça (2014). The factor structure of original form was confirmed with 12 items in Turkish population (χ^2 = 147.20, df= 48, RMSEA=.073, CFI=.95, IFI=.95, GFI=.94, SRMR=.046) (Sarıçam et al., 2007). The scale consists of statements representing negative beliefs about the uncertain future and uncertainty-related negative beliefs that reduce one's ability to effectively handle intolerance of uncertainty related distress (e.g., "One should always look ahead so as to avoid surprises"). Participants rate the degree to which each of the items applies to them on a 5-point Likert scale from 1 (*not at all characteristic of me*) to 5 (*entirely characteristic of me*). The overall scale score, which

is estimated by summing the responses given for each item, ranges from 12 to 60, with higher scores indicating greater intolerance of uncertainty.

2.2.2. Online Social Support Scale: Participants' perceived social support they gained via online platforms was assessed by Online Social Support Scale (OSS) which was developed with Turkish population by Ünal and Güven (2019). The scale consists of 20 items (e.g., "Comments on my social media posts help me cope with difficulties", "direct or one-to-one communication on social media prevents me from feeling alone"). Participants rate the degree to which each of the items applies to them on a 5-point Likert scale from 1 (*completely disagree*) to 5 (*completely agree*). The overall scale score, which is estimated by summing the responses given for each item, ranges from 20 to 100, with higher scores indicating greater online social support.

2.2.3. Acceptance and Action Questionnaire-II: Participants' level of psychological inflexibility was assessed via the revised version of the Acceptance and Action Questionnaire-II (AAQ-II; Bond et al., 2011). The scale was adapted to Turkish by Yavuz et al. (2016) and the factor structure of the original form was confirmed in Turkish population (χ^2 /df= 3.7, RMSEA=.079, CFI=.97, GFI=.97, SRMR=.021) (Yavuz et al., 2016). The AAQ-II consists of 7 items tapping on a single dimension (e.g., "I worry about not being able to control my worries and feelings", "My painful experiences and memories make it difficult for me to live a life that I would value"). Participants rate the degree to which they agree with each statement on a 7-point Likert scale from 1 (*never true*) to 7 (*always true*). The scale score which is estimated by summing the responses given the items, ranges from 7 to 49. Since all items are negatively worded, higher scores received from the scale indicates higher levels of psychological inflexibility and increase in experiential avoidance.

2.3. Data Analysis

Statistical analyses were conducted using SPSS version 21.0 (Statistical Package for the Social Sciences) and PROCESS version 3.5 (Hayes, 2017). Prior to proceeding with the analyses, data were screened for homogeneity of distribution by using skewness/kurtosis values, z-score estimates. Mahalanobis distance estimates were calculated to clear data from multivariate outliers, and they were excluded from the study. Assumptions of tests, such as linearity, homoscedasticity and multicollinearity, were verified. Pearson r was used to examine the correlations between continuous variables. T-test was used to evaluate observed variables according to demographic characteristics.

2.4. Procedure

Data of this study was collected during COVID-19 pandemic process (April-May, 2020) when going out on the streets were restricted, distance education were taking place and intercity transportation was prohibited. Required permissions regarding the use of primary data collection measures were taken from the authors. Ethical permission to conduct the study was approved by Fatih Sultan Mehmet Vakif University Ethics Committee. Study was announced via online platforms. All the instruments were provided via online Google forms. Participants were provided informed consents prior to data collection, and they were asked for voluntary participation. They were not asked any information that can reveal their identity (i.e., name, surname etc.).

3. Results

3.1. Sample Characteristics

Participants' scores on measured variables were compared depending on their gender and worry for COVID-19 infection (Table 1). Results showed that there were no significant differences between male and female participants in terms of their PI (t(236) = .81, p > .05), IU (t(236) = .23, p > .05) and OSS they perceived (t(55,08) = .47, p > .05). When the participant were grouped depending on their worry to be infected by the virus, groups' PI, IU and OSS scores showed no significant differences (t(236) = -1.38, p > .05; t(236) = .07, p > .05; t(236) = -.69, p > .05, respectively). Correlation estimates were calculated depending on the participants worry for virus infection. The correlation between PI and IU in worried participants (r = .45, p < .01) was higher than the no-worry group (r = .33, p < .01). Also, the relationship between PI and OSS was stronger in worried participants (r = .39, p < .01) than the no-worry group (r = .27, p < .01).

	M±SD				
Grouping by gender	Female	Male	t	р	
Psychological inflexibility (PI)	4.07 ± 1.21	3.90 ± 1.33	.81	.417	
Online social support (OSS)	2.36 ± .82	2.43 ± .99	47	.643	
Intolerance of uncertainty (IU)	3.55 ± .66	3.57 ± .57	23	.817	
Grouping by worry for virus infection	No-Worry	Worry			
Psychological inflexibility (PI)	3.95 ± 1.21	4.18 ± 1.26	-1.38	.169	
Online social support (OSS)	2.34 ± .83	2.42 ± .89	69	.493	
Intolerance of uncertainty (IU)	3.55 ± .64	3.55 ± .66	.07	.945	

 Table 1. Group Differences for Measured Variables

Note. Grouping by gender: female (n = 195), male (n = 43). Grouping by worry to be infected by virus: no-worry (n = 150), worry (n = 88).

	No-worry (<i>n</i> = 150)			Worry (<i>n</i> = 88)		
Variables	1	2	3	1	2	3
1. PI	-			-		
2 . OSS	39**	-		27**	-	
3. IU	.33**	38**	-	.45**	13	-

Table 2. Correlation Estimates of Major Variables in Control of Worry

Note. PI = Psychological Inflexibility, OSS = Online Social Support, IU = Intolerance of Uncertainty, "p < .01, coding of worry (suspect to be infected by the COVID-19 virus): No = 1, Yes = 2.

Mean and standard deviation estimates of independent variable (PI), moderator variable (OSS) and the outcome variable (IU) of the study are presented in Table 3. All the constructs in the current study demonstrated high internal consistency as the internal reliability coefficients were all greater than the .70 threshold which indicated that the measures were reliable (Tabachnick & Fidell, 2013).

Measured					r	
Variables	М	SD	Cronbach's α	1	2	3
1. PI	4.04	1.23	.83	-		
2. OSS	2.37	.85	.95	34**	-	
3. IU	3.55	.64	.81	.38**	28**	-

Table 3. Descriptive Parameters of Major Variables of the Sample

N= 238, r= internal reliability coefficient, PI = Psychological Inflexibility, OSS = Online Social Support, IU = Intolerance of Uncertainty, * p<.01.

Results indicated that there were significant correlations between all significant at .01 level. The relationship was moderate and positive between PI and IU (r = .38), moderate and negative between PI and OSS (r = -.34), and weak and negative between OSS and IU (r = .28). Research results show that PI significantly predicts both OSS ($r^{2=}.12$) and IU ($r^{2=}.14$). In addition, OSS predicts IU ($r^{2=}.07$).

Mediation analysis performed by the PROCESS software (Model 4) revealed that the online social support partially mediated the relationship of psychological inflexibility to intolerance of uncertainty (Figure 1). The direct effect of psychological inflexibility on intolerance of uncertainty was positive and statistically significant, indicating that persons scoring higher on PI are more likely to receive higher scores on IU than those scoring lower on the measure, b = .20, SE = .03, t = 6.21, p = .000, 95% CI [.134, .258]. The indirect effect of psychological inflexibility on intolerance of uncertainty was statistically significant. b = .17, SE = .03, t = 4.99, p = .000, 95% CI [.099, .230]. To confirm the presence of partial mediation between variables, the null of 0 was controlled whether it falls outside the lower and upper bound of the 95% confidence interval. Results indicated that when controlling the effect of perceived online social support (mediator variable), psychological inflexibility remained a significant predictor of intolerance of uncertainty but with substantial reduction in the unstandardized regression coefficient. In other words, individuals who had lower psychological inflexibility seek more

online social support, b = -.24, SE = .04, t = -5.55, p = .000, 95% CI [-.318, .-151]. In turn, those who received greater online social support reported lower levels of intolerance of uncertainty, b = -.13, SE = .05, t = -2.76, p = .006, 95% CI [-.226, -.038].



Figure 1. Mediation Model

4. Discussion

This study aimed to investigate the mediator effect of university students' perceived online social support on the relationship between psychological inflexibility and intolerance of uncertainty. Study measures were assessed during COVID-19 pandemic period when going out on the streets were restricted and distance education were taking place. Considering the current situation, prior to data collection, we assumed that the participant' level of intolerance will be high due to the wearing effect of the pandemic process. As predicted, the mean score for IU was more than the average, indicating that the participants were experiencing intolerance. Findings supported the first hypothesis of this study that is there will be significant positive correlation between psychological inflexibility and intolerance of uncertainty. As predicted, findings confirmed that participants' level of intolerance increased as their psychological inflexibility scores increased. Studies on psychological inflexibility affirmed its positive relationship with negative life outcomes such as depression, anxiety, stress, and overall psychological distress (Bond et al., 2011). In previous research, it was also found to be positively correlated with neuroticism and negatively correlated with conscientiousness and marked by experiential avoidance accompanied by decreased daily functioning (Latzman & Masuda, 2013). Having an acceptant manner, in other words being psychologically flexible is considered as a key ingredient in ability to tolerate highly stressful circumstances (Southwick et al., 2005), Intolerance of uncertainty is also a maladaptive way of coping. It manifests itself as a tendency to rejection of negative events (Carleton et al., 2007). Given that, the finding that intolerance of uncertainty and psychological inflexibility has a positive relationship seems consistent with the evaluations in previous literature. Moreover, previous research on IU revealed its association with the severity of worry (Akbari & Khanipour, 2018; Buhr & Dugas, 2006). Consistently, degree of positive correlation of PI with IU was higher in worry group than no-worry group, indicating that the relationship between PI and IU was stronger among individuals who were worried about getting infected by the corona virus.

Confirming our first hypothesis, we aimed to contribute to the literature by examination of a variable that can mediate the adverse effect of PI on participants' intolerance against uncertainty. Considering the changing structure of the social interactions and the promotion of social isolation, the mediator effect online social support was aimed to be highlighted in the relationship between PI and IU. Findings indicated that with the mediator effect of OSS, PI remained to be a significant predictor of IU but with a reduced effect. PI included the avoidance and narrowing of behavioral repertoire (Hayes et al., 2006; Hayes et al., 2012). So, it seems consistent that high PI prevents one from getting contact with others. Given the negative regression coefficient between psychological inflexibility and online social support, it might be interpreted that those with low psychological inflexibility seek more online social support. In turn, given the negative regression coefficient between of uncertainty, those who had greater social support more efficiently handle with intolerance of uncertainty

Consistently, previous studies have confirmed the constructive effect of online social support in adaptive human functioning, such as feeling of belongingness and having access to many people (Pfeil, Zaphiris, & Wilson, 2009), positive affect and life satisfaction (Oh, Ozkaya, & LaRose, 2014), lower levels of depression-related thoughts and feelings (Cole, Nick, Zelkowitz, Roeder, & Spinelli, 2017). Our findings also contributed to the claims of theoretical models of social support

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in that changing structure of social interaction does not necessarily indicate a deterioration in the function of it. Accordingly, two dimensions of social support (structural dimension and functional dimension) are not supposed to be positively related (Wills & Fegan 2001), meaning that decline in one dimension does not necessarily mean decline in the other dimension. Individuals with relatively small network may still have available a large amount of functional support (Wills & Fegan 2001). It seems although the structure of individuals' social networks inevitably changed during the pandemic process (i.e., decrease in frequency of social gatherings, social isolation), it still provided functional support via online platforms.

Conclusion

In this study, participants' intolerance for uncertainty was purposefully determined as a variable, since many students were speaking out their struggles about uncertainties during the pandemic. Our findings support that psychological inflexibility has a predictive role on participants' intolerance toward uncertainty. This relationship was mediated by the online social support. It seems psychological inflexibility has a role in the increment of the severity of intolerance of uncertainty, as well as the way people tolerate and manage the uncertainty, especially in times of crises (i.e., pandemic process). Also, social support received from online platforms had a constructive role on individuals' intolerance in case of psychological inflexibility. It might be concluded that online social support might be a constructive way to diminish the effect of the relationship between psychological inflexibility and intolerance of uncertainty.

Limitations and Recommendations

Limitation of this study should be acknowledged. In this study, participants' worry for getting infected by the virus was assessed by a self-report question provided in demographic information form. Future research should include an assessment tool for the assessment of worry. This study is also limited about the number of mediator variables. This study only evaluated the effect of online social support on the interaction between psychological inflexibility and intolerance of uncertainty. Future research might also include different variables that could intervene with the effect of psychological inflexibility on intolerance of uncertainty. In this study, participants' online social support was evaluated by a self-report assessment tool. Future studies might focus on the effect of guided and structured online support programs.

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