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The Mediating Role of Metacognitions in the Relationship Between the Need for Absolute Truth and Psychopathological Symptoms Among University Students

Üniversite Öğrencilerinin Mutlak Gerçek İhtiyacı ile Psikopatoloji Göstergeleri Arasındaki İlişkide Üst Bilişlerin Aracılık Rolünün İncelenmesi

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ABSTRACT

This study examines the mediating role of metacognition in the relationship between university students' absolute real need and psychopathological indicators including depression and anxiety. Metacognition supports psychological resilience by increasing individuals' capacity to interpret and manage conflicts arising from unmet needs. In this case, the existence of maladaptive thinking styles and beliefs affects university students' mental health problems. Therefore, metacognition processes play an important role in mental health problems that an individual may experience in his quest to find the absolute truth about himself. The study was conducted with 375 university students. The data collection tools of the study are the Need for Absolute Truth Scale, the Metacognition scale, the Brief Symptom Inventory Depression Subscale and the Brief Symptom Inventory Anxiety Subscale. The Structural Equation Model proposed in the study was tested using LISREL 8.71. The study reveals that high absolute need for truth leads to a significant increase in psychopathological symptoms. However, it has been found that metacognitive skills such as awareness and thought management play a full mediating role in this relationship. As a result of the analyses, it was determined that metacognitions act as full mediators between the individual's absolute real needs and psychopathology indicators.

Keywords: Anxiety, Depression, Metacognition, Need for absolute truth, Psychopathology

ÖZ

Bu çalışma, üniversite öğrencilerinin mutlak gerçek ihtiyacı ile depresyon ve kaygıyı içeren psikopatolojik göstergeler arasındaki ilişkide üst bilişin aracılık rolünü incelemektedir. Üst biliş, bireylerin karşılanamayan ihtiyaçlardan kaynaklanan çatışmaları yorumlama ve yönetme kapasitelerini artırarak psikolojik dayanıklılığı desteklemektedir. Bu durumda uyumsuz düşünme stillerinin ve inançlarının varlığı üniversite öğrencilerinin ruh sağlığı sorunları yaşamasına etki etmektedir. Dolayısıyla bireyin kendi hakkında mutlak gerçeği bulma arayışında yaşayabileceği ruh sağlığı sorunlarında üstbiliş süreçleri önemli bir rol oynamaktadır. Araştırma, 375 üniversite öğrencisi ile

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yürütülmüştür. Araştırmanın veri toplama araçları Mutlak Gerçek İhtiyacı Ölçeği (MGİÖ), Üstbiliş ölçeği ve Kısa Semptom Envanteri (KSE) Depresyon Alt Ölçeği ve Kısa Semptom Envanteri (KSE) Kaygı Alt Ölçeği'dir. Araştırmada önerilen Yapısal Eşitlik Modeli LISREL 8.71 kullanılarak test edilmiştir. Araştırma, yüksek mutlak gerçek ihtiyacının psikopatolojik belirtilerde önemli bir artışa yol açtığını ortaya koymaktadır. Ancak, farkındalık ve düşünce yönetimi gibi üst biliş becerilerinin bu ilişkide tam aracılık rolü oynadığı bulunmuştur. Analizler sonucunda üst bilişlerin, bireyin mutlak gerçek ihtiyacı ile psikopataloji göstergeleri arasında tam aracılık görevi gördüğü belirlenmiştir.

Anahtar Sözcükler: Anksiyete, depresyon, üstbiliş, mutlak gerçek ihtiyacı, psikopataloji

INTRUDUCTION

At the stage of self-discovery and identity development, individuals want to obtain absolute information about who they are (Baymur, 1994). Şimşek (2013) states that individuals who want to obtain full truth and full information about themselves analyse themselves with a high level of abstract orientation and puts forward this tendency, which is a high-level representation of the self, as the real and over-general, high-level, valid in all situations, which is the real and over-general, high-level, valid in all situations in the emergence of the self or in the background of personal experiences, as the 'need for absolute truth' (NAT).

The need for absolute truth can be defined as individuals' quest to make sense of themselves, to develop a life purpose and to find answers to existential questions. This concept is closely related to the human's effort to reduce the state of 'ontological insecurity' (Laing, 1960). Frankl's (1985) logotherapy theory emphasised the effects of individuals' search for meaning on psychological health and revealed that failure to meet this need is associated with psychopathological symptoms such as depression and anxiety.

In order to find the absolute truth about oneself, people can constantly analyse themselves and strive to reach more and other information about themselves (Tacı, 2017). Akcan and Öztürk (2018), who think that individuals with high NAT have low clarity of self-concepts because they aim to obtain higher level, abstract and valid information about themselves, argue that the person may discover negative and inadequate aspects of himself/herself due to excessive self-focus in order to reach the absolute truth about himself/herself. Study has revealed that maladaptive thinking styles and beliefs affect mental health disorders and another factor that plays an important role in the individual's mental health problems is the individual's metacognition processes (Gupta & Kumarı, 2023; Wells, 2009). For this reason, considering that the metacognition process leads to the onset and continuation of psychological problems, it is a very important point to determine how individuals experience their thoughts and beliefs.

The concept of metacognition can be expressed as a person's knowledge and thought about what he/she knows and thinks or his/her judgement about his/her own cognitive process (Tosun & Irak, 2008). The metacognition system has an important role in the functional and harmonious functioning of the person's cognitive processes. For this reason, any deviation in metacognition has been determined to be an important factor in the emergence of many psychopathologies. The effect of metacognition is observed in psychological problems manifested by dysfunctional thinking and coping styles (Boğar, 2018).

The effort to reach absolute reality means spending a lot of time thinking. Campbell et al. (1996) found that excessive self-focus was negatively related to the clarity of self-concept. In support of this information, Şimşek (2013) found that NAT was positively associated with mental health-related problems such as depression and anxiety, and negatively associated with positive mental health symptoms such as self-esteem, clarity of self-concept and insight. Butzer and Kuiper (2006) stated that having more contradictions about one's self increases the tendency to seek the truth about oneself due to intolerance of uncertainty.

Metacognition refers to the ability of individuals to perceive, regulate and control their own thoughts (Flavell, 1979). This concept has a critical role especially in the management of psychopathological symptoms (Wells & Matthews, 1994). It is known that individuals with high levels of metacognition exhibit more effective coping skills with stressful situations or situations that cause meaning crisis. This suggests that metacognitions may be a mediating mechanism in the relationship between university students' search for meaning and their psychological well-being.

Studies have concluded that metacognitions play a role in psychopathological indicators such as anxiety disorder, depression, obsessive-compulsive disorders (Wells, 2009), psychoses, post-traumatic stress disorder (Bacon et al., 2001). It was also found that metacognitions had a significant positive relationship with pathological anxiety symptoms (Wells & Papageorgiou, 1998). In another study in which metacognition scale was used, it was determined that negative beliefs about one's thoughts distinguished patients with generalised anxiety disorder from patients with other anxiety disorders (Cartwright-Hatton & Wells, 1997). It has been determined that there is a relationship between the need for absolute truth and depression and anxiety (Moberly & Watkins 2010). Harvey et al. (2004) state that, according to cognitive models of psychopathology, distortions in cognitive processes such as attention, memory and interpretations support the onset and maintenance of emotional problems. The constant search for information about oneself may cause confusion and anxiety. In addition, seeing the negative and negative sides of the person can lead to depression by arousing a feeling of inadequacy (Akcan & Öztürk, 2018; Tacı, 2017). Psychopathology refers to patterns of behaviour and thought that lead to impairments in an individ-

ual's mental and emotional health. University students can be defined as a group sensitive to life events combined with developmental and academic pressures (Arnett, 2000). Especially depression, anxiety disorders and stress-related symptoms are common among university students (Hunt & Eisenberg, 2010). This situation significantly interacts with individuals' search for meaning in their lives and the cognitive mechanisms that support this search.

The unique value of conducting this study on university students stems from the fact that this group is in a special developmental and psychological period (Brito & Soares, 2023). The university period is a period in which individuals go through critical life experiences such as identity formation, future planning and coping with social-psychological pressures. In this process, the effective use of the search for meaning and metacognitive mechanisms can support both academic and psychological well-being of individuals.

The aim of the study is to understand the cognitive and emotional mechanisms supporting the search for meaning in this group and to examine the effects of these mechanisms on psychopathology indicators. These findings may be useful both in individual counselling processes and in developing psychological support programmes in the university environment.

The importance of this study comes to the fore with the contributions it can make to the psychological health and general well-being of university students. The university period is a time when individuals are under intense academic, social and emotional pressure and go through critical developmental processes such as identity formation and planning for the future. The difficulties brought by this process can significantly affect individuals' search for meaning and their ability to use their metacognitive mechanisms effectively.

The unique value of this study stems from the fact that it examines the complex relationships between the need for absolute truth, psychopathological indicators and metacognitions in the case of university students and comprehensively examines the interaction dynamics of these three dimensions. This study has the potential to provide a theoretical basis for psychological support programmes to be developed for students in the university environment, as well as to provide meaningful solutions in individual counselling processes.

Although previous studies have shown that the need for absolute truth (NAT) is associated with negative psychological outcomes such as depression, anxiety, self-concept confusion, and stress (Akcan & Öztürk, 2018; Şimşek, 2013; Tacı, 2017), the mechanisms through which NAT influences mental health remain largely unexplored. More specifically, no empirical study has yet examined whether metacognitive processes account for, explain, or alter the relationship between NAT and psychopathological symptoms. Existing research has focused either on the direct associations of NAT with mental health indicators (Şimşek et al., 2013) or on the independent contribution of metacognitions to emotional disorders (Wells, 2009; Wells & Matthews, 1994), but has not integrated these two domains within a single model. As a result, the literature lacks a theoretically grounded and empirically tested explanation for how the search for absolute self-knowledge may contribute to depression and anxiety through metacognitive mechanisms. Addressing this gap, the present study investigates whether metacognitions function as a mediating mechanism between NAT and psychopathological symptoms among university students. By clarifying this pathway, the study aims to contribute to clinical and counseling psychology by identifying a cognitive mechanism that may either exacerbate or buffer the impact of existential-cognitive needs on mental health. The questions of the study can be listed as follows;

- Is there a mediating role of metacognition in the relationship between university students' need for absolute truth and psychopathology?

Proposed model of the study variables is shown in Figure 1. The questions of the study can be listed as follows;

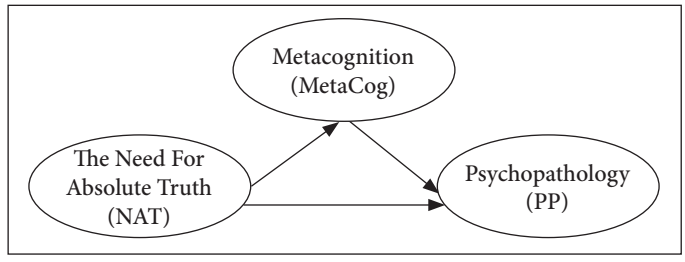


Figure 1. Proposed model of the study variables.

METHODS

This study utilized a correlational research design and employed structural equation modeling to examine the mediating role of metacognition in the relationship between university students' need for absolute truth and their psychopathological symptoms.

Participants

Of the 390 students who accessed the link, 375 provided complete data (93% response rate), and the remaining 15 incomplete responses were excluded. The final sample consisted of 214 female and 161 male students (mean age = 20 years). Ethical approval was obtained from the School of Graduate Studies of Arel University (date: 22.03.2024, number: 2024/07).

Procedure

The online survey link was distributed via university-related social media groups, student club pages, and class-based WhatsApp groups in which the researcher had access. Participation was open to all undergraduate students who voluntarily chose to respond. A non-probability convenience sampling method was used, as participants were recruited through easily accessible online platforms and volunteered to participate without any random selection procedure (Creswell, 2014). The purpose of the study, the limits of confidentiality, and ethical considerations regarding the use of data were clearly explained before participation. No personally identifying information was collected. Participants were informed that they could leave any

item blank or discontinue at any time. To encourage participation, they were also offered the option to receive their individual results via email upon completion of the data analysis.

Measurements

Need for Absolute Truth Scale

The Need for Absolute Truth Scale was developed by Şimşek (2013) to assess the extent to which individuals seek absolute and unchangeable self-knowledge. The scale consists of 5 items rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), with higher scores indicating a stronger need for absolute truth.

Exploratory and confirmatory factor analyses conducted during the scale development revealed a two-dimensional structure comprising the following subscales: Searching for the True Self, Searching for the Reasons Behind Behaviors. These two factors were supported in the Turkish validation study as well. The scale has also demonstrated construct validity, showing significant correlations with related psychological variables such as depression, anxiety, and self-concept clarity. In the original study, Cronbach's alpha coefficient was reported as .72. In the current study, the internal consistency was found to be .70, indicating acceptable reliability. McDonald's Omega coefficient was also computed and found to be ω = .74, supporting the internal consistency of the scale.

Metacognition Scale

The Metacognitions Questionnaire-30, a short form of the original 61-item scale developed by Cartwright-Hatton and Wells (1997), was adapted to Turkish culture by Tosun and Irak (2008). The MCQ-30 consists of five subscales: (1) positive beliefs about worry, (2) negative beliefs about uncontrollability and danger, (3) cognitive confidence, (4) need to control thoughts, and (5) cognitive self-consciousness. The total score ranges from 30 to 120, with higher scores indicating greater dysfunction in metacognitive processes.

The Turkish adaptation study reported good internal consistency, with a Cronbach's alpha coefficient of .86 (Tosun & Irak, 2008). In the present study, the Cronbach's alpha was calculated as .81. Additionally, McDonald's Omega coefficient was computed as ω = .83, indicating strong reliability. Regarding validity, the Turkish version of the The Metacognitions Questionnaire-30 has demonstrated adequate construct validity, with confirmatory factor analysis supporting the five-factor structure. The revised CFA model reported the following goodness-of-fit indices: χ^2 (465, N = 850) = 1282.91, p<.001, RMSEA = .051, CFI = .90, GFI = .90, RMR = .50, IFI = .90, and TLI = .89 (Tosun & Irak, 2008). Additionally, significant correlations with related constructs such as anxiety and obsessive-compulsive symptoms further support the scale's convergent validity (Tosun & Irak, 2008).

Brief Symptom Inventory (BSI): Depression and Anxiety

The Brief Symptom Inventory (BSI), developed by Derogatis (1992), is a widely used instrument for assessing psychological distress and includes nine subscales. In this study, only the Depression and Anxiety subscales were used. Depression is measured by 12 items (e.g., 9, 14, 16…), and Anxiety by 13 items (e.g., 12, 13, 28…). The BSI was adapted to Turkish by Şahin and Durak (1994), who reported high internal consistency with Cronbach's alpha coefficients of .96 and .95 for the total scale in three independent studies. The alpha coefficients for the subscales ranged between .55 and .86. Confirmatory factor analysis (CFA) and significant correlations with related constructs supported the construct validity of the Turkish version. In the present study, the internal consistency coefficient (Cronbach's alpha) was .89 for the total score of the combined Depression and Anxiety subscales. McDonald's Omega coefficient was also computed for the combined subscales and found to be ω = .90, confirming excellent reliability. Although CFA was not conducted on the current sample due to scope limitations, the scale was selected based on its well-established psychometric properties in Turkish populations.

Analysis of Data

In this study, the Maximum Likehood (ML) method was used with the LISREL 8.71 program (Jöreskog & Sörbom, 2003) in accordance with the principles of structural equation modeling to reveal whether the level of metacognition mediates between Need for Absolute Truth (NAT) and Psychopathology (PP). Before testing the measurement and structural models, key assumptions of structural equation modeling (SEM) were assessed. These include (a) multivariate normality, (b) linearity, (c) absence of multicollinearity, and (d) adequate sample size. Multivariate normality was evaluated using Mardia's coefficient and skewness–kurtosis values, which indicated acceptable levels for using the Maximum Likelihood Estimation (MLE) method. Specifically, Mardia's coefficient was 12.35 (p = .08), suggesting that the assumption of multivariate normality was met. Variance Inflation Factor (VIF) values were below 2, indicating no multicollinearity issues. The sample size (N = 375) exceeds the recommended thresholds for SEM (e.g., minimum 200 cases), ensuring the robustness of the parameter estimates. The Maximum Likelihood method was preferred because it provides consistent and efficient estimates under multivariate normality assumptions and is the most commonly used estimation technique in SEM (Byrne, 2010; Kline, 2015). According to Anderson and Gerbing (1998), before testing the model proposed between the variables, confirmatory factor analysis should be examined to reveal whether the model has a fit value within acceptable limits. If the model has a goodness of fit value within acceptable limits after confirmatory factor analysis, the structural model is tested. In other words, in structural equation model analyses, it is necessary to examine whether the confirmatory factor analysis produces acceptable goodness of fit values before testing the structural model. If the measurement model produces acceptable goodness-of-fit values, it is considered appropriate to test the proposed structural model.

For this purpose, the parceling method was used to determine the observed variables from the scores obtained from the single-factor Metacognition Scale used in the study. The parceling method involves grouping each item by considering

the item-total correlations and defining the scores obtained from these groups as observed variables. In this context, four observed variables were defined for the Metacognition Scale. Parceling is conducted for specific purposes in a structural equation modeling (SEM) study and it refers to the practice of aggregating individual items into composite scores, or 'parcels', which are then used as indicators for latent constructs. This approach is commonly employed to achieve several methodological advantages, such as improving the psychometric properties of indicators (e.g., internal consistency), simplifying complex models by reducing the number of parameters to be estimated, and enhancing model fit indices. As the number of items increases, the number of parcels typically increases as well to ensure that each parcel contains a manageable and relatively equal number of items, which helps maintain model parsimony and reliable parameter estimation (Matsunaga, 2008). Since the NAT Scale used in the study was a 5-item scale, each item of the NAT Scale was defined as a latent variable. Depression and anxiety sub-dimensions of the Psychopathology Scale, the third measurement tool used in the study, were identified as the two observed variables for the latent variable of PP. As a result of this process, a total of 11 observed variables were defined in the proposed model: five observed variables for NAT (NAT1, NAT2, NAT3, NAT4, NAT5), four observed variables for metacognition (MetaCog1, MetaCog2, MetaCog3, MetaCog4) and two observed variables for PP (Depression, Anxiety).

RESULTS

Descriptive Statistics and Correlations

Before testing the measurement model, the means, standard deviations and correlation analysis results of the observed variables are shown in Table 1.

Test of the Measurement Model

In addition to the parameter estimates for the observed variables, the relationship between the latent constructs included in the measurement model was examined. As shown in Figure 2, the latent variable Need for Absolute Truth (NAT) demonstrated a significant positive relationship with the latent variable Psychopathology (PP) ($\beta = .33$, $p < .01$). This result indicates that higher levels of NAT are associated with higher levels of psychopathological symptoms within the measurement model (Figure 2).

In order to validate the structural model created in the study, firstly, whether the measurement model and then the structural model have an acceptable goodness of fit is evaluated with goodness of fit statistics. Goodness-of-fit statistics allow to decide whether the proposed models are supported by the data as a whole at an acceptable level (Hu & Bentler, 1999).

The fit indices obtained from the measurement model analysis were as follows: $\chi^2/df = 3.81$, GFI = .93, CFI = .92, AGFI = .89, SRMR = .06, and RMSEA = .08. These values indicate that the model demonstrates an acceptable fit to the data. While the

Table 1. Means, Standard Deviations, and Intercorrelations of Observed Variables

Variable	X	SD	1	2	3	4	5	6	7	8	9	10	11
1.Nat1	3.27	1.29	-										
2.Nat2	2.62	1.36	.22	-									
3.Nat3	2.68	1.33	.35	.54	-								
4.Nat4	2.81	1.38	.40	.44	.58	-							
5.Nat5	3.01	1.35	.36	.31	.48	.58	-						
6.Dep	32.78	9.80	.03	.31	.16	.18	.12	-					
7.Anx	25.64	8.27	.06	.33	.17	.20	.16	.72	-				
8.MetaCog1	12.34	4.01	.02	.25	.20	.21	.21	.18	.24	-			
9.MetaCog2	14.27	4.90	.02	.25	.20	.21	.21	.19	.17	.46	-		
10.MetaCog3	13.77	4.03	.16	.23	.20	.28	.21	.35	.38	.28	.64	-	
11.MetaCog4	15.51	3.70	.21	.23	.29	.37	.35	.27	.32	.27	.32	.27	-

Note: NAT1–NAT5: Need for Absolute Truth Scale item indicators; **Dep:** Depression; **Anx:** Anxiety; **MetaCog1–MetaCog4:** Metacognitions (MCQ-30 subscale indicators)

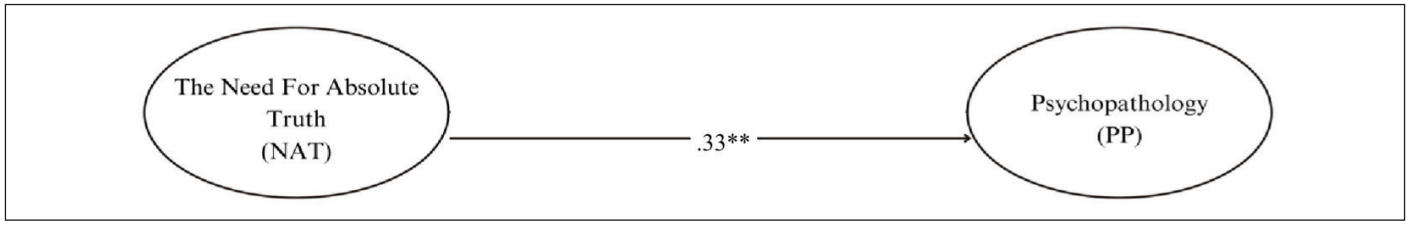


Figure 2. Relationship between NAT and psychopathology in the measurement model.

AGFI value is slightly below the .90 threshold and RMSEA and SRMR are at the upper limit of acceptability, the overall pattern of results—especially the CFI and GFI values above .90—supports the adequacy of the measurement model for further structural analysis. Goodness of fit values and acceptable and good fit values for this model are given in Table 2.

The goodness of fit values obtained as a result of the measurement model analyses were found to be at an acceptable level. The model fit indices were $\chi2(41, N = 375) = 156.58$, $p<.001$; CFI = .92, RMSEA = .08, SRMR = .06, GFI = .93 and AGFI = .89. When the standardized and unstandardized factor loadings, standard error and t-score values of the observed variables in the measurement model are examined, it is understood that the observed variables are reliable indicators of the latent variables. Related values are given in Table 3.

Test of the Structural Model

After the measurement model was found to be at an acceptable level, the structural model proposed in the study was tested using the Maximum Likelihood Estimation (MLE) method through the Lisrel 8.51 program (Jöreskog & Sörbom, 2003). The results of the analysis of the structural model revealed that the proposed structural model also produced acceptable goodness-of-fit values. The fit indices of the model were $\chi2(41, N = 375) = 156.58$, $p<.001$; CFI = .92, RMSEA = .08, SRMR =.06, GFI =.93 and AGFI =.89.

When the results of the analysis were analyzed, it was seen that the direct relationship between NAT and PP was not significant. The paths defined from NAT to metacognition ($\beta = .43$, $t = 4.98$, $p<.001$) and from metacognition to PP ($\beta = .67$, $t = 5.65$, $p<.001$) were significant. Therefore, NAT predicts PP when metacognition is considered as a mediating variable (Figure 3). In addition, while the path defined from NAT to PP was significant when metacognition variable was controlled ($\beta=.33$, $t=5.02$, $p<.001$), the path defined from NAT to PP was not significant when metacognition mediator variable was included in the model and analyzed ($\beta=-.01$, $t=-.17$, $p<.001$). According to these results, it is seen that the metacognition variable has a full mediating role between NAT and PP.

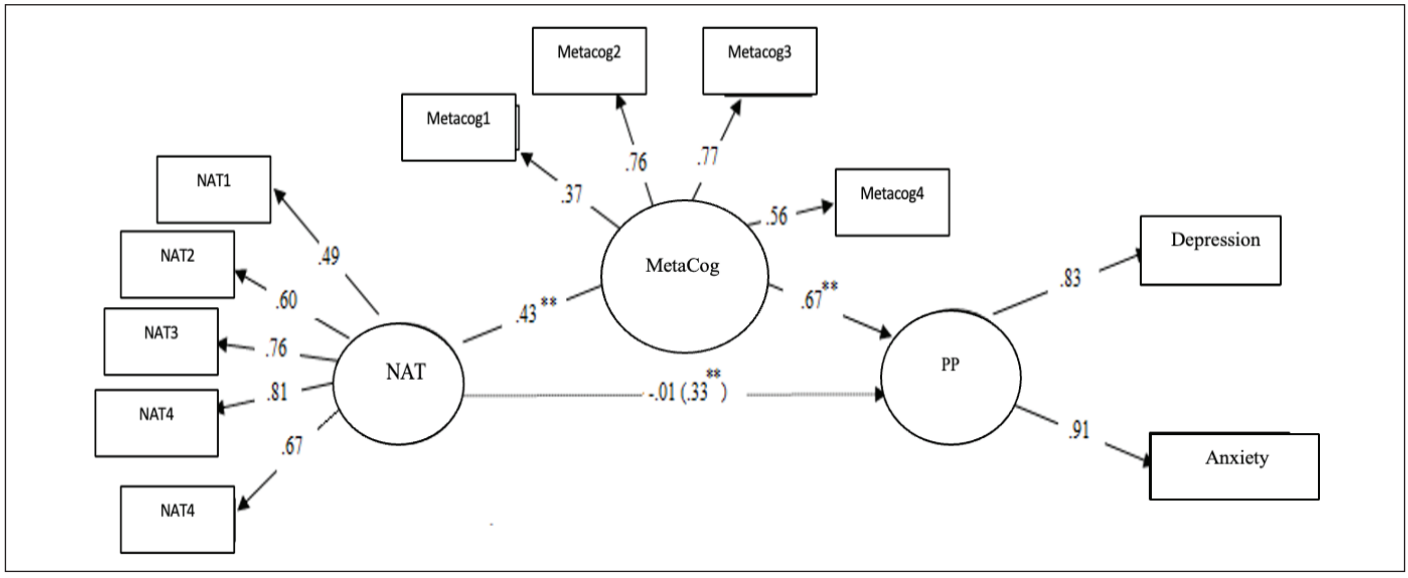
Table 2. Fit Indexes for the Measurement Model

Fit Index	Acceptable Fit	Good Fit	Goodnes of Fit Values Obtained
X^2/SD	$2<X^2/SD\leq5$	$0<X^2/SD\leq2$	3.81
GFI	0.90≤GFI<0.95	0.95≤GFI<1.00	0.93
CFI	0.90≤CFI<0.95	0.95≤CFI<1.00	0.92
AGFI	0.90≤AGFI<0.95	0.95≤AGFI<1.00	0.89
SRMR	0.05<SRMR≤0.06	0<SRMR≤0.05	0.06
RMSEA	0.05<RMSEA≤0.08	0<RMSEA≤0.05	0.08

Table 3. Factor Loading of Measurement Model

Observed Variables	Unstandardized Factor Loadings	Standart Error	t	Standardized Factor Loadings	R^2
MetaCognition					
MetaCog1	1.49	1.06		.37	0.14
MetaCog2	3.72	1.13	6.43	.76***	0.58
MetaCog3	3.11	.76	6.45	.77***	0.60
MetaCog4	2.06	.78	5.89	.56***	0.31
Psychopathology					
Depression	8.15	4.45		.83	0.69
Anxiety	7.56	3.45	14.26	.91***	0.84
The need for absolute truth					
NAT1	0.64	.09	9.33	.49***	0.24
NAT2	0.81	.09	11.67	.60***	0.36
NAT3	1.01	.07	15.80	.76***	0.57
NAT4	1.13	.07	17.35	.81***	0.66
NAT5	0.91	.08	13.54	.67***	0.45

Note: MetaCog1–MetaCog4: Metacognitions (MCQ-30 subscale indicators); **NAT1–NAT5:** Need for Absolute Truth Scale item indicators. (N = 375, ***p < .001.)



Figures 3. Final model and the standardized parameters estimation of the proposed mediational model.

DISCUSSION

This study aimed to examine the mediating role of metacognitions in the relationship between university students' need for absolute truth and psychopathology indicators. The results showed that metacognitions had a full mediating role in the relationship between the need for absolute truth and psychopathology. When the related literature was analysed, it was seen that a very limited number of studies were conducted on the need for absolute truth. Some studies examining the relationship between the need for absolute truth and various psychological relationships were found (Akcan & Uğraş, 2023; Akcan & Öztürk, 2018). Akcan and Öztürk (2018) concluded that there was a significant relationship between the need for absolute truth and problem solving and stress symptoms in a study conducted on 200 male individuals aged 20-50. Similarly, in another study conducted on individuals aged 16-55, it was concluded that the need for absolute truth negatively affects the mental health of the individual. The most striking result of this study is that increasing the individual's conscious awareness affects the decrease in anxiety and depression levels (Tacı, 2017). In this study, the fact that metacognitions play a full mediating role in the relationship between the need for absolute truth and depression and anxiety supports the conclusion that the level of consciousness, perception and awareness of university students affect mental health.

Şimşek et al. (2013) suggest that the need for absolute truth is important in understanding the effects of self-awareness on mental health. In addition, Şimşek's (2013) study shows that self-concept clarity and self-awareness mediate the relationship between personal language perceptions and depression and the need for absolute truth as a control variable. Focusing on the negative aspects of one›s own self against challenging situations leads to negative emotions, depression and anxiety (Akcan & Uğraş, 2023). As a result, when the related literature is taken into consideration, it is concluded that individuals with high absolute truth need are more prone to psychopathology and metacognitions have an effect on many psychopathological conditions such as anxiety, depression, obsession, and psychosis.

In a study conducted on 149 Japanese university students, Mori and Tanno (2015) found that individuals who focused on deep thoughts about themselves showed more depressive symptoms. Although excessive self-focus is important for the individual to understand his/her self-awareness, it also causes him/her to face the negative aspects of his/her own self repeatedly (Moberly & Watkins, 2010). Cognitive distortions such as selective attention to negative information and negative interpretation of uncertainty are more common in anxious and depressed individuals. It is stated that being in constant search for information can cause anxiety by causing confusion and at the same time, seeing the negative and negative aspects of oneself can lead to depression by creating a feeling of inadequacy (Şimşek, 2013). The individual who focuses excessively on negative thoughts on his/her own self suggests that they tend to produce less effective solutions in challenging events of life and to produce more negative prejudiced interpretations of these situations, which consequently reduces the motivation to solve problems and reduces the individual's confidence in his/her own abilities due to increased feelings of hopelessness (Lyubomirsky et al., 1999). Mori et al. (2015) conducted a study on 39 Japanese university and graduate students and concluded that excessive self-focus increases depressive mood and this negatively affects the individual's problem-solving skills. While the content or form of self-focus and the need for absolute truth is a concept that is difficult to understand concretely, the mechanism of its effect on psychological health is still not fully understood. For this reason, it is seen that there is a need for more study on the need for absolute truth.

Metacognition is a meta-system in which the individual is aware of the thoughts in his/her own mind and directs his/

her mind processes and functions purposefully (Crick, 2000). When negative feelings and thoughts appear in an individual's mind, the individual knows that this situation is temporary in the normal process and tries alternative ways to get rid of these negative feelings and thoughts. However, in some cases, metacognitive processes may prevent individuals from getting out of this situation by creating inflexible responses and this situation may cause the individual to experience psychological problems (Wells, 2008). While focusing on oneself and dwelling on one's own thoughts is not a pathological process; when it becomes rigid and intense, it can become a process that disrupts the individual's self-regulation (Moberly & Watkins, 2010). Overthinking can negatively affect the coping strategies of the individual and lead to the emergence of many negative situations such as worry, sadness, and avoidance. For this reason, it can be said that the emotions accompanying the person's self-focus are shaped according to the content of the thought and belief system that appears at that moment (Wells & Sembi, 2004). In this study, it was concluded that the coping style, thought and belief system, in short, the cognitive process occurring in the metacognitions of university students; metacognitions directly mediate the relationship between absolute truth need and psychopathology. As a result, the results of this study, which support the related literature, show that university students with high absolute truth need are more prone to psychopathology and metacognitions have an effect on psychopathological conditions.

As a result, the findings of the study revealed that psychopathological symptoms (depression and anxiety) of university students may increase significantly if their absolute truth needs are not met. However, metacognitions were found to play a full mediating role in this relationship. Skills such as metacognitive awareness and thought management increase the capacity of individuals to make sense of and manage the contradictions they experience with the need for absolute truth, which supports psychological resilience. As a result of the study, it was concluded that metacognition-focused approaches can be effective in both individual counselling processes and group-based psychological support programmes to support the psychological health of university students. These findings reveal the necessity of designing new programmes to develop awareness of the absolute truth need of university students and to teach cognitive strategies that support this need. The results obtained can be used to support not only individual psychological health, but also academic performance and general well-being in the social context.

The findings suggest that metacognition-focused intervention approaches can be effective in supporting university students' mental health. These approaches have the potential not only to reduce psychopathological symptoms but also to support academic achievement and general well-being. The study emphasizes that addressing the interaction of existential needs and cognitive processes is important in developing personal psychological support programs. Future study suggests testing similar models in different cultural contexts and age groups and examining the effectiveness of intervention programs to improve metacognitive skills.

This study has some limitations. The study was conducted only on university students. Additionally, the study employed a cross-sectional and correlational design, which limits the ability to infer causal relationships among the variables. Therefore, the observed associations should be interpreted as correlational rather than causal. It is thought that study conducted with individuals with different demographic characteristics will contribute to study on the individual's need for self-awareness. In order to obtain more concrete data, multicenter studies including individuals with different cultural characteristics are needed. Many factors affecting absolute reality are involved, such as biological, sociological, psychological aspects, temperament, education, environment, culture, and socioeconomic level (Mori et al., 2015). Considering all this, it will not be possible to explain the absolute truth with a single factor. It seems important to include these factors in future study when investigating the absolute real need and effects.

CONCLUSION

The results of this study showed the importance of university students' metacognition in the relationship between absolute truth need and mental health. Cognitive distortions such as selective attention to negative information and negative interpretation of uncertainty are frequently seen in anxious and depressed individuals (Solak & Anlı, 2023). It is stated that constantly searching for information can cause anxiety by causing confusion, and at the same time, seeing the negative and negative aspects of oneself can cause a feeling of inadequacy in the person and lead to depression (Şimşek, 2013). It is important for future study and mental health professionals that the psychological problems experienced by university students due to the need for self-awareness are important as the individual's awareness levels, coping styles, belief and value system should be focused on and studied. For this reason, especially mental health professionals; Psychological problems experienced by university students while focusing excessively on themselves; It is recommended that they try to raise awareness about their metacognition and to regulate their metacognition.

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REFERENCES

Akcan, G., & Öztürk, E. (2018). Erkeklerde benlik kavramının netliğinin mutlak gerçek ihtiyacı ile problem çözme ve stres belirtileri değişkenleri arasındaki ilişkideki aracılık rolünün incelenmesi. *Mediterranean Journal of Humanities, 8*, 1-21. doi: 10.13114/MJH.2018.379

Akcan, G., & Uğraş, S. (2023). The mediating role of the need for absolute truth in the relationship between intolerance of uncertainty, depression, and anxiety. *Global Journal of Psychology Study: New Trends and Issues, 13,* 104–116. https://doi.org/10.18844/gjpr.v13i1.8492

Anderson, J. C., & Gerbing, D. W. (1998). Structural equation modeling inpractice: are view and recommended two-stepapproach. *Psychological Bulletin, 103*, 411-423. Retrieved from https://www3.nd.edu/~kyuan/courses/sem/readpapers/ANDERSON.pdf

Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist, 55*(5), 469–480.

Bacon, E., Danion, J. M., Kauffmann-Muller, F., & Bruant, A. (2001). Consciousness in schizophrenia: a metacognitive approach to semantic memory. *Conscious Cogn, 10*, 473–484. doi: 10.1006/ccog.2001.0519

Baymur, F. (1994). *Genel Psikoloji [General psychology].* İstanbul: İnkılap Kitabevi.

Boğar, Y. (2018). Literature review on metacognition and metacognitive awareness. *Anatolian Journal of Teacher, 2,* 136-168. Retrieved from https://dergipark.org.tr/en/pub/aod/issue/41228/490919

Brito, A. D., & Soares, A. B. (2023). Well-being, character strengths, and depression in emerging adults. *Frontiers in Psychology, 14,* 1238105. doi: 10.3389/fpsyg.2023.1238105

Butzer, B., & Kuiper, N. A. (2006). Relationships between the frequency of social comparisons and self-concept clarity, intolerance of uncertainty, anxiety, and depression. *Personality and Individual Differences, 41*, 167–176. doi: 10.1016/j.paid.2005.12.017

Byrne, B. M. (2010). *Structural Equation Modeling with Amos: Basic Concepts, Applications, and Programming* (2nd ed.). New York: Taylor and Francis Group.

Campbell, J. D., Trapnell, P. D., Heine, S. J., Katz, I. M., Lavallee, L. F., & Lehman, D. R. (1996). Self-concept clarity: measurement, personality correlates, and cultural boundaries. *Journal of Personality and Social Psychology, 70,* 141–156. doi: 10.1037//0022-3514.70.1.141

Cartwright-Hatton, S., & Wells, A. (1997). Beliefs about worry and intrusions: the meta-cognitions questionnaire and its correlates. *J Anxiety Disord, 11*, 279–296. doi: 10.1016/s0887-6185(97)00011-x

Creswell, J. W. (2014). *Research design: Qualitative, quantitative and mixed methods approaches* (4th ed.). Thousand Oaks, CA: Sage.

Crick, F. (2000). *Şaşırtan varsayım* [The astonishing hypothesis] (Say S. Say Trans.). Ankara: TÜBİTAK Yayınları. (Original work was published in 1994.)

Derogatis, L. R. (1992). *The brief symptom inventory-BSI administration, scoring and procedures manual-II.* USA: Clinical Pscyhometric Study Inc.

Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive–developmental inquiry. *American Psychologist, 34*(10), 906–911.

Frankl, V. E. (1985). *Man's Search for Meaning.* Beacon Press.

Gupta, A., & Kumarı, S. (2023). Depresif bozukluklarda bilişsel davranışcı terapinin bilişüstü inançlar üzerindeki etkisi. *Türk Psikiyatri Dergisi, 34,* 80-88. https://doi.org/10.5080/u26398

Harvey, A., Watkins, E., Mansell, W., & Shafran, R. (2004). *Cognitive behavioral processes across psychological disorders: A transdiagnostic approach to study and treatment.* New York: Oxford University Press Inc.

Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal, 6,* 1-55. http://dx.doi.org/10.1080/10705519909540118

Hunt, J., & Eisenberg, D. (2010). Mental health problems and help-seeking behavior among college students. *Journal of Adolescent Health, 46*(1), 3–10.

Jöreskog, K. G., & Sörbom, D. (2003). *LISREL 8.54.* Lincolnwood, IL: Scientific Software Int.

Kline, R. B. (2015). *Principles and Practice of Structural Equation Modeling* (4th ed.). New York: Guilford Press.

Laing, R. D. (1960). *The Divided Self: An Existential Study in Sanity and Madness*. Penguin Books.

Lyubomirsky, S., Tucker, K. L., Caldwell, N. D., & Berg, K. (1999). Why ruminators are poor problem solvers: Clues from the phenomenology of dysphoric rumination. *Journal of Personality and Social Psychology, 77,* 1041–1060. doi:10.1037/0022-3514.77.5.1041.

Matsunaga, M. (2008). Item Parceling in Structural Equation Modeling: A Primer. *Communication Methods and Measures, 2*(4), 260–293. doi: 10.1080/19312450802458935

Moberly, N. J., & Watkins, E. R. (2010). Negative affect and ruminative self-focus during everyday goal pursuit. *Cognition and Emotion, 24,* 729–739. doi:10.1080/02699930802696849.

Mori, M., & Tanno, Y. (2015). Mediating role of decentering in the associations between self-reflection, self-rumination, and depressive symptoms. *Psychology, 6,* 613-621. doi:10.4236/PSYCH.2015.65059

Mori, M., Takano, K., & Tanno, Y. (2015). Role of self-focus in the relationship between depressed mood and problem solving. *Motivation and Emotion, 39,* 827–838. doi: 10.1007/s11031-015-9486-x

Solak, M. Y. F., & Anlı, G. (2023). İyimserlik, stres içeren durumlar ve başa çıkma: bir derleme çalışması. *Nevşehir Hacı Bektaş Veli Üniversitesi SBE Dergisi, 13,* 2077-2089. https://doi.org/10.30783/nevsosbilen.1282133

Şahin, H. N., & Durak, A. (1994). Kısa semptom envanteri (Bries symptom ınventory-BSI): Türk gençleri için uyarlanması. *Türk Psikoloji Dergisi, 9,* 44-56.

Şimşek, Ö. F. (2013). The relationship between language use and depression: illuminating the ımportance of self-reflection, self-rumination, and the need for absolute truth. *The Journal of General Psychology, 140,* 29-44. http://dx.doi.org/10.1080/00221309.2012.713407

Şimşek, Ö. F., Ceylandağ, A. E., & Akcan, G. (2013). The need for absolute truth and self-rumination as basic suppressors in the relationship between private self-consciousness and mental health. *The Journal of General Psychology, 140,* 294–310. doi: 10.1080/00221309.2013.831804.

Tacı, M. C. (2017). *The mïndfulness's medïational role in between the need for absolute truth and mental health.* (Unpublished master's thesis). Istanbul Arel University, Istanbul.

Tosun, A., & Irak M. (2008). Üstbiliş Ölçeği-30'un Türkçe uyarlaması, geçerliği, güvenirliği, kaygı ve obsesif-kompülsif belirtilerle ilişkisi. *Türk Psikiyatri Dergisi, 19*, 67-80.

Wells, A. (2008). Metacognitive therapy: cognition applied to regulating cognition. *Behavioural and Cognitive Psychotherapy, 36,* 651–658. doi: 10.1017/S1352465808004803

Wells, A. (2009). *Metacognitive therapy for anxiety and depression*. New York: Guilford.

Wells, A., & Matthews, G. (1994). Attention and emotion: A clinical perspective. *Psychological Medicine, 24*(3), 613–619.

Wells, A., & Papageorgiou, C. (1998). Relationships between worry, obsessive–compulsive symptoms and meta-cognitive beliefs. *Behav Res Ther, 36,* 899–913. doi: 10.1016/s0005-7967(98)00070-9

Wells, A., Sembi, S. (2004). Metacognitive therapy for PTSD: a preliminary investigation of a new brief treatment. *Journal Behav Ther Exp Psychiatry, 35,* 307-18. doi: 10.1016/j.jbtep.2004.07.001