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# The effect of mindful attention awareness on ruminative thought styles: Physical education and sports teacher candidates

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## Abstract

The present study aimed to examine the effect of mindful attention awareness on ruminative thought styles levels of physical education and sports teacher candidates. 183 students studying in the Department of Physical Education and Sports Teaching at Bingol University voluntarily participated in the study. Mindful attention awareness and ruminative thought style scale were used as data collection. The scales were applied to students by face-to-face survey method. SPSS package program was used to analyze of the data. Pearson Correlation and Linear Regression analyses were applied for the statistical analyses. As a result, it was found that there was a positive and low-level relationship between mindful attention awareness and ruminative thought styles while mindful attention awareness slightly affected ruminative thought styles. In this context, it can be said that the students do not lose command over past or future events in their lives and act by experiencing the present moment.

Keywords: Sports; teacher candidates; mindfulness; ruminative thought

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## 1. Introduction

Today, certain new variables such as ego, identity, general self-efficacy, and self-regulation, which have recently begun to be studied and regarded as important, have come into prominence. One of these variables is mindful attention awareness. Mindful attention awareness when an individual adopts a receptive attitude and chooses to think openly about the negative feelings they experience without running away from them or trying to destroy, suppress, and judge them (Germer, 2004). Mindful awareness is the state of living and accepting the experiences in the present moment without being influenced by the past or the future (Bishop et al., 2004). Siegel, Germer, and Olendzki (2009) define mindful attention awareness as a simple path in terms of taking a positive step towards personal development and affiliating oneself with all experiences aimed at reducing pain. According to Germer, Siegel, and Fulton (2005), mindful attention awareness is an opportunity to be fully alive and alert in life. Mindful attention awareness is a skill that allows us to be less passive in the face of ongoing events and it is associated with reducing all levels of suffering and increasing our well-being through our positive, negative, and neutral experiences.

The concept of mindful attention awareness was put forward by Langer and Ngnoumen (2018) and it generally represents the individual demonstrating a high level of focus, calmness and stability and channeling their focus on "what is happening at the moment" in an accepting manner without judgment. Mindful attention awareness enables the individual to self-regulate by taking notice of their behavior and emotions. Individuals who become aware of their feelings can utilize their emotions easier and regulate according to their behavior (Deniz, Erus & Buyukcebeci, 2017). Individuals with low levels of mindful attention awareness will also have low levels of self-perception and awareness of what is going on in their inner world and surroundings (Brown & Ryan, 2003).

It is estimated that most people evoke the positive and negative situations in their past, present or future intentionally or unintentionally. While evoking these thoughts partly helps individuals to regulate themselves, it can sometimes be a wearing process as well. Continuously evoking goals towards the future in particular can provide a progress (Martin & Tesser, 1996). However, it is thought that focusing on negative events in the past, present or future may impact daily life and, consequently, the emotional well-being of the individual negatively. The concept of rumination is defined as individuals being passive in the face of their existing problems, remaining stuck in the past, and evoking repetitive thoughts regarding the potential causes and outcomes of the emotions they experience (Nolen-Hoeksema, 1987). Trapnell and Campbell (1999) divided rumination into two categories as pondering and brooding. The individual focuses on questions such as "why" and "what if", and struggles to overcome their negative emotions (Watkins, 2008). It includes questions of negative self-criticism such as "why do I feel this way?" and "why am i unable to overcome problems?". This situation leads to detachment from the present experience and repetitive thinking of eventuated reality (Ogel, 2012). Individuals who ruminate have more negative thoughts regarding the past, present, and future. These individuals spontaneously and repetitively think about their negative memories, recall negative events, and relive them repeatedly. This is a common situation experienced by individuals, they get stuck with negative thoughts instead of focusing on the positive (Lyubomirsky, Caldwell & Nolen-Hoeksema, 1998; McFarland & Buehler, 1998).

There are many studies in the literature on mindful attention awareness (Celik, & Cetin, 2014; Cengiz, Serdar & Donuk, 2016; Gulum, 2017; Saricali & Satici, 2017; Kara & Ceyhan, 2017; Deniz, Erus & Buyukcebeci, 2017; Meiklejonh et al., 2012; Schonert-Reichl & Lawlor, 2010; Sample, 2010) and ruminative thought styles (Graham et al., 2018; Gustavson et al., 2018; Robinson & Alloy, 2003; Topcu, 2014; Cilali, 2015; Onayli, 2019; Aksoz-Efe, 2018). When the information above is evaluated as a whole, it is observed that the concepts of mindful attention awareness and ruminative thought can

be effective in different areas of life to various extents. However, no studies were found examining both the mindful attention awareness levels and ruminative ruminative thought styles of physical education and sports teacher candidates. Therefore, it is thought that the present study will provide a different perspective and contribute to the field of Physical Education and Sports. In this context, the present study aims to examine the effect of mindful attention awareness on ruminative thought styles levels of physical education and sports teacher candidates.

## 2. Method

## 2.1. Research model

In the present study, the descriptive survey, which aims to reveal the present situation, and correlational survey methods were used. A descriptive survey model is a study approach that aims to describe a past or present situation as it is. It is aimed to describe the events, individuals or objects included in the study as they are and in their own conditions. These elements are not changed or affected in any way. Correlational survey models are study models that aim to determine the presence and/or degree of covariance between two or more variables (Karasar, 2004).

# 2.2. Participants

183 students selected among 190 students studying in the Department of Physical Education and Sports Teaching at Bingöl University School of Physical Education and Sports using the simple complete census method voluntarily participated in the study. Data was collected from students by face-to-face survey method.

# 2.3. Data collection

The socio-demographic information form, the mindful attention awareness scale, and the ruminative thought style questionnaire were used as data collection tools.

# 2.3.1. Demographic information form

Information regarding the gender, age, grade point average (GPA), grade level, and perceived income status presented below (Table 1).

Table 1. Descriptive statistics of the participants

Variables	Categories	N	%
Gender	Male	134	73.2
	Female	49	26.8
	18-21	99	54.1
Age	22-25	81	44.3
	26 and older	3	1.6
GPA	1.25-1.99	10	5.5
	2.00-2.99	129	70.5
	3.00-4.00	44	24.0
Grade Level	1 <sup>st</sup> year	50	27.3
	2 <sup>nd</sup> year	66	36.1
	3 <sup>rd</sup> year	67	36.6

Table 1 shows that 73.2% of the participants are male while 26.8% are female, 54.1% are aged 18-21 while 44.3% are aged 22-25 and 1.6% are 26 and older. 5.5% of the participants have a GPA of 1.25-1.99 while this ratio is 70.5% for the 2.00-2.99 range and 24.0% for the 3.00-4.00 range. 27.3% of the participants are 1st-year students while 36.1% are 2nd-year students and 36.6% are 3rd-year students. In terms of the perceived income statuses, it is observed that 23.0% have low income, 68.3% have medium income and 8.7% have a high income.

## 2.3.2. Mindful attention awareness scale

This scale was developed by Brown and Ryan (2003) and adapted to Turkish by Ozyesil et al. (2011). The scale is a 6-point scale (1=Almost Always, 6=Almost Never) and consists of 7 items and one dimension. The Cronbach alpha reliability coefficient calculated to test the reliability of the scale was found as .82. In the current study, this coefficient was found as .72.

# 2.3.3. Ruminative thought style scale

This scale was developed by Brinker and Dozois (2009) adapted to Turkish by Karetepe (2010). The scale is a 7-likert scale (1= Not Suitable, 7= Very Suitable) and consists of 20 items and one dimension. The Cronbach alpha reliability coefficient calculated to test the reliability of the scale was found as .82. In the current study, this coefficient was found as .89.

## 2.4. Data Analysis

The IBM SPSS 24 (Statistical Package for the Social Sciences) statistical package program was used in the analysis of the data. It was determined that the skewness and kurtosis values of the scales ranged between -1 and +1 (Table 2). Values in this range indicate no excessive deviations from normality (Buyukozturk, 2007). In this context, the data was considered to be normally distributed. Accordingly, Pearson Correlation and Linear Regression analyses were applied.

Table 2. The skewness and kurtosis values of the scale scores

Variables	N Skewness		Kurtosis	
Mindful Attention Awareness	183	.366	.993	
Ruminative Thought Style	183	189	364	

# 3. Results

In this section, the students' mindful attention awareness and ruminative thought style score averages, the relationship between them and the details of the results based on the impact were presented in the table 3-4-5.

Table 3. Descriptive statistics scores of the mindful attention awareness and the ruminative thought style

Variables	N	Min	Max	$\overline{\mathbf{X}}$ ±SD
Mindful Attention Awareness	183	29.00	115.00	57.83±12.88
Ruminative Thought Style	183	31.00	135.00	85.32±21.45

Table 3 shows that the participants have a score average of 57.83±12.88 from the mindful attention awareness scale and 85.32±21.45 from the ruminative thought style scale.

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Table 4. Correlation analysis between mindful attention awareness and the ruminative thought style

Variables		(1)	(2)
Mindful Attention Awareness (1)	r	1	
Minutul Attention Awareness (1)	р		
Duminative Thought Styles (2)	r	.183*	1
Ruminative Thought Styles (2)	р	.013	
N=183; *p<.05			

When the result of the pearson correlation analysis was examined, it was determined that there was a low-level relationship between mindful attention awareness and the ruminative thought style (r=-.183; p=.013).

Table 5. The effect of mindful attention awareness on ruminative thought styles

Dependent Variable: Ruminative Thought Styles					
Variables	В	Standard Error	β	t	р
(Constant)	48.471	3.860		12.557	.000
Mindful Attention Awareness	.110	.044	.183	2.501	.013
R <sup>2</sup> =.033; adj. R <sup>2</sup> =.028					
F=6.255; p=.013					

When the results of linear regression analysis was examined, it was found that the level of mindful attention awareness predicted the variable of the ruminative thought styles approximately at the rate of 3% ( $_{adj}$ .R<sup>2</sup>=.028). In other words, it was determined that mindful attention awareness affects the ruminative thought styles variable statistically significantly ( $\beta$ =.183; p=.013).

# 4. Discussion

In this study, which was conducted to determine the effect of mindful attention awareness on ruminative thought style, it was found that participating students had a score average of 57.83±12.88 from the mindful attention awareness scale and a mindful attention awareness level above average. When the literature is examined, it is observed that participants had mindful attention awareness levels above average in the studies conducted by Kilincoglu (2020) on university students, by Ozgun (2018) on high-school principals and by Akkaya (2019) on classroom teachers. These findings are in parallel with the results of the present study. Considering that the possible total score from the mindful attention awareness scale ranges between 15 and 90 (Brown & Ryan, 2003), it can be said that the participants act with awareness towards internal and external events in the face of "what is happening at the moment".

When the score average of the ruminative thought style was examined, it was calculated as 85.32±21.45 and it was determined that the participants had ruminative thought levels above average. In the literature study on the aforementioned average scores, it was found that participants had ruminative thought levels above average in the studies conducted by Lale (2019) on university students and by Cakir (2019) on individuals. These findings are in parallel with the results of the present study. It can be said that the participants tend to have ruminative thoughts, repetitively think about negative memories, recall negative events, and relive them in their minds over and over.

When the correlation and regression analysis results were examined, it was observed that mindful attention awareness predicted the ruminative thought styles variable by 3% and it was determined that there was a positive relationship between mindful attention awareness levels and ruminative thought style. Ruminative thought increases the impact of emotions on thoughts and affects the

individual's evaluation and interpretation of present situations in a depressive manner. Thus, the individual uses negative thoughts and memories more frequently. When the literature is examined, in the study conducted by Yazici (2020) on university students; a negative, moderate and significant relationship was determined between the score averages of mindful attention awareness and ruminative thought styles. According to this, it can be said that individuals with high levels of mindful attention awareness are expected to have low levels of ruminative thought and that high score averages of mindful attention awareness indicate low score averages of ruminative thought. Individuals in a state of mindful attention awareness become aware of the stimuli perceived by their sensory system without making any evaluations or judgment and, therefore, establish a real connection (Brown & Ryan, 2003). This connection allows the individual to experience the present moment (Brown, Ryan & Creswell, 2007). Individuals in a state of mindful attention awareness are peaceful, happy, and aware towards internal and external events. This type of individual knows how to define and evaluate emotions and thoughts. They are both consciousness itself and the observer of consciousness. In other words, these individuals can simultaneously focus on present events without judgment while experiencing them. The aim is not to engage in a certain thought or drive that thought away from oneself, but to be aware of it (Kabat-Zinn & Hanh, 2009).

### 5. Conclusion

It was found that there was a positive and low-level relationship between mindful attention awareness levels and ruminative thought styles while mindful attention awareness levels slightly affected ruminative thought styles. In this context, it can be said that the students do not lose command over past or future events in their lives and act by experiencing the present moment.

## 6. Recommendations

Since there is a limited number of previous studies on mindful attention awareness and ruminative thought in the literature, more studies can be conducted on the said subjects. Conducting more studies on the subject with different sample groups can fill the deficiency in this area and make a bigger contribution to the literature. It may be beneficial to conduct qualitative studies to make indepth evaluations of the mindful attention awareness levels and ruminative thought styles of university students.

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