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IS MORAL IDENTITY EFFECTIVE IN THE RELATIONSHIP BETWEEN SELF-EFFICACY AND PSYCHOLOGICAL PROBLEMS?

Abstract: The primary purpose of this study is to design a model that examines the mediating role of moral identity in the effect of self-efficacy on stress, depression, and anxiety. For this purpose, the researcher applied three scales to 366 students enrolled in state universities on the Anatolian side of Istanbul. The data analysis used parametric tests, correlation tests, structural equation models, and Bayesian reliability analyses. Based on the results from the structural equation modeling analysis, the variable of moral identity was found to have a significant effect on the positive impact to self-efficacy on psychological problems. Therefore moral identity has been concluded to be able to help reduce the effects of stress, depression, and anxiety.

Keywords: self-efficacy, depression, stress, anxiety, moral identity.

Introduction

As a reflection of the new world order, the main aim of Turkish students is to enroll in university and take up a career in their profession after completing this training. Students beginning their university studies, though, move into a new dynamic scenario different from previous times. New requirements emerge for students, and particular challenges arise because of the unique circumstances in that period (Durak-Batigun & Atay-Kayis, 2014). These difficulties may trigger feelings of insecurity and inadequacy in students. At the same time, researchers believe stressful and even anxiety-inducing circumstances may exist that inhibit university students' motivation and learning outcomes (Bailey & Phillips, 2016; Bucker, Nuraydin, Simonsmeier, Schneider, & Luhmann 2018; Wei, Russell, & Zakalik, 2005). In a study examining the factors that cause stress in university students' lives, Bojuwoye (2002) determined stress to have economic, social, and school enrollment outcomes. Hong and Wengboey (2002) conducted a similar study and concluded that academic stress and poor living conditions are the key factors that cause stress effects. Andrews and Wilding (2004) noted that economic problems played a significant role in increasing anxiety and depression in university students. A decline in their performance and academic self-efficacy was observed due to this circumstance. Other researchers in Turkey have also reported students' stress levels increase after stepping into college life. According to the findings obtained from these studies, the emphasis was found to primarily be on students' academic success, with individual needs not being met (Bilgin, 2000; Erkan, Ozbay, Cankaya, & ve Terzi, 2012; Koc, Avsaroglu, & ve Sezer, 2004).

Researchers have been interested in why some students start university with high levels of stress and anxiety while others have low levels of stress and anxiety (Kuh, Kinzie, Schuh, & Whitt, 2011). Identifying the situations that can help alleviate tension and distress in people with high anxiety and stress levels is particularly important. Because reforming the present stress-generating university

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education environment is known to be difficult, thinking critically about which services can help alleviate the circumstances that create stress and anxiety is important. As Bandura (2000) has also said, individuals with high self-efficacy can easily cope with stress and anxiety and successfully resolve these types of circumstances. Several experiments can be carried out to evaluate the association between self-efficacy and stress. However, no study has been found to investigate the effect of moral identity on the relationship between university students' self-efficacy levels and their levels of stress, anxiety, and depression. This research has therefore been conducted to examine the impact self-efficacy has on reducing university students' levels of stress, depression, and anxiety and to evaluate how the variable of moral identity mediates these variables.

Self-Efficacy and Levels of Stress, Depression, and Anxiety

The concept of self-efficacy is crucial in both the social sciences and psychology. It is also considered one of the basic principles of social cognitive theory, according to which self-efficacy is expressed as the necessary power behind an individual's actions (Bandura, 1986). Pajares (1996) claimed perseverance and commitment to improve with self-efficacy, which has essential effects on performance, while the development of self-efficacy belief is intuitive. Put more plainly, a person believes they can achieve success after a successful job. Bandura et al. (2003) stated self-efficacy to be a key factor of personality and strongly influences stress as a positive source of resistance. This condition highlights one's resilience against both environmental challenges and the difficult circumstances being faced. Bandura (2006) also stated self-efficacy has a beneficial impact on the various areas dealing with difficulties. Self-efficacy abilities are necessary for healing following trauma (Benight & Bandura, 2004; Benight & Harper, 2002). Likewise, self-efficacy plays a vital role in social well-being, lack of distress, burnout syndrome, and lowering of sadness in people's lives (Bisschop, Kriegsman, Beekman, & Deeg, 2004; Brouwers & Tomic, 2000; Gallagher et al., 2011). Neil (2006) suggested that the inherent powers individuals attribute to fate and luck control their actions under certain circumstances. Individuals with high self-efficacy should also be noted as being aware of the benefits of cognitive and affective processes when making decisions. Individuals with high self-efficacy were concluded to have decreased levels of social anxiety and depression (Singh & Bussey, 2010). Higher self-efficacy levels are commonly accompanied by a lower cortisol response after experiencing stress and diminished autonomic arousal after mental challenges (Nierop, Wirtz, Bratsikas, Zimmermann, & Ehlert, 2008; Sanz & Villamarin, 2001). Meanwhile, self-efficacy is found to improve academic success and prompt a reduction in stress and anxiety levels (Hoffman, 2010; Niemiec & Lachowicz-Tabaczek, 2015). As can be seen from these studies, self-efficacy has essential effects on psychological health.

Moral Identity and Self-Efficacy: The Mediating Role of Moral Identity

In general, various studies are seen to have been conducted in the context of moral emotion, guilt, and empathy. However, moral identity for some reason has yet to be sufficiently studied (Mazzone, Camodeca, & Salmivalli, 2016; Poyhonen, Juvonen, & Salmivalli, 2010). Although some studies have used variables related to morality, they generally have not addressed how moral identity interacts with self-efficacy (Hardy 2006). When considering the theories of Gibs (2019), Kohlberg, and Piaget, people who develop high moral identity skills have been emphasized to be able to respond to social events and circumstances more sensitively. Bandura (2016) stated people with firm self-efficacy beliefs are able to convey moral virtues and identities, such as intervening in abusive situations in society. People with higher levels of moral maturity and identity have been claimed to possess higher levels of sense of self and self-efficacy. Therefore, although researchers have mainly ignored the relationship between moral identity and self-efficacy, this relationship should be investigated. Given the beneficial influence self-efficacy has on depression, stress, and anxiety, exploring self-

efficacy's impacts on moral efficacy has similar significance. Therefore, this research examines the relationship self-efficacy has with depression, stress, and anxiety as mediated by moral identity.

The Present Study

This study aims to resolve a gap in the literature by examining the mediating role the variable of moral identity has in the relationship between university students' self-efficacy and their levels of stress, depression, and anxiety. In general, numerous experiments have been considered for investigating the association self-efficacy has with stress, depression, and anxiety (Bacchini & Magliulo, 2003; Bandura, Pastorelli, Barbaranelli, & Caprara, 1999; Caprara, Gerbino, Paciello, Di Giunta, & Pastorelli, 2010; Chen, Liu, Zheng, & Chen, 2010; Klasen et al., 2015; Muris, Meesters, Pierik, & de Kock, 2016; Soysa & Wilcomb, 2015; Steca et al., 2014). However, no research is found regarding how moral identity affects this relationship. This study is the first to examine the mediating effect of moral identity on the relationship between self-efficacy and stress, depression, and anxiety. The primary purpose of this research is to examine the mediating role moral identity has over the positive effects of self-efficacy on psychological disorders. Thus, this study tests whether moral identity positively impacts stress, depression, and anxiety. The study has set two goals. The first is to test whether or not self-efficacy has a positive effect on stress, depression, and anxiety. The second is to test whether moral identity has a mediating role in self-efficacy's positive effect. These goals constitute the primary purpose of the study. At the same time, the findings section will also present parametric test results related to certain critical data obtained in the study.

Method

Research Model

This research uses a relational screening model to examine the relationships among the variables. Many methods exist for analyzing relational screening models. This research uses the structural equation model. The researcher uses three variables in the study (i.e., self-efficacy; the scores from the Depression, Anxiety, and Stress Scale (21 items, DASS-21; Lovibond & Lovibond, 1995); and moral identity). Self-efficacy is used as the study's independent variable, DASS-21 score is used as the dependent variable, and the sub-dimensions of moral identity are used as the mediator. Relational screening models are generally models that examine the degree of a relationship between two or more variables and the effects these variables have on each other (Creswell, 2017).

Participants

The data for this research have been collected from students enrolled in undergraduate programs at state universities on the Anatolian side of Istanbul during the 2019-2020 academic year. Within the scope of the research, data from 366 students were found to be good enough for inclusion in the analysis. Of these students, 274 (74.9%) are female, and 92 (25.1%) are male. Information on other demographic variables is presented in the table below.

Table 1. Demographic Information

Variables	Groups	F	%
Gender	**Female**	274	74.9
	Male	92	25.1
Faculty	**Education**	241	65.8
	Religion	97	26.5
	Technology	28	7.7

Age	Under 21	133	36.3
	21 or Older	233	63.7
Class	1st Year	85	23.2
	2nd Year	129	35.2
	3rd Year	80	21.9
	4th Year	72	19.7
Income	High	18	4.9
	Middle	316	86.4
	Low	32	8.7
Academic success	High	28	7.7
	Middle	284	77.5
	Low	54	14.8
	Total	366	100.0

Instruments

The following scales have been used to collect the data: DASS-21, Self-Efficacy Scale, Moral Identity Scale.

The DASS-21 scale was developed and first published by Lovibond and Lovibond (1995a) then adapted into Turkish by Saricam (2018). The scale has three sub-dimensions: depression, stress, and anxiety. When examining the previously reported values for DASS-21, the internal consistency for the depression subscale was found as .88, .90 for stress, and .93 for anxiety (Henry & Crawford, 2005). In the original analysis of the scale, Lovibond and Lovibond (1995) found the following fit index values for the DASS-21 model: $\chi2 = 1092.1$, $df = 180$; $RCFI = 0.93$, $SRMR = 0.03$, $RMSEA = 0.05$.

The Moral Identity Scale was developed by Aquino and Reed (2002) and adapted into Turkish by Yilmaz and Yilmaz (2015). It consists of 10 items and two sub-dimensions: symbolization (5 items) and internalization (also 5 items). As a result of the confirmatory factor analysis applied for the construct validity, the Turkish adaptation of the scale was also found to have two dimensions (i.e., symbolization and internalization) and 10 items with similar goodness-of-fit indices as in the original form of the scale ($\chi^2 = 49.59$, $df = 33$, $p = .03$, $RMSEA = .052$, $CFI =. 96$, $IFI = .96$, $GFI = .95$, $AGFI = .92$, and $SRMR = .057$).

The self-efficacy scale was developed and first published by Jerusalem (1995) and adapted into Turkish by Aypay (2010). The scale consists of two sub-dimensions: effort/resistance and ability/confidence, with respective internal consistency values of .79 and .63.

Procedures

The research followed the following procedures. First, the permissions required for the 2019-2020 fall semester were obtained from two state university boards located on the Anatolian side of Istanbul (Marmara and Medeniyet Universities). After receiving the permissions, face-to-face data were collected from the students in the classroom environment. Data were collected on an entirely voluntary basis. The voluntary consent form was obtained from each student who filled out data. Data were collected from three faculties (the faculties of Education, Theology, and Technology). The researcher was present in all classes and answered participants' questions from the participants during the data completion process, which lasted about 15 minutes.

Data Analysis

The data were then entered into an Excel file, and erroneous data were eliminated. After eliminating incomplete data, normality calculations were made, and data were checked to ensure their suitability for analysis. The package programs SPSS 25 and Amos 24 were used for analyzing the data. The research first performed parametric test analyses followed by the mediating role analysis.

Findings

Descriptive Analysis Results

Although the study's primary purpose is to examine the mediating effect of moral identity, some of the ANOVA test analyses made with the data obtained within the scope of the research have also been included in the findings. Therefore, the results that were deemed important from the ANOVA tests are briefly mentioned first, then the findings are presented regarding the mediating effect. The study compared the scores for the variables in regard to faculty. Education faculty students' DASS-21 scores (χ = 20.14, p < .01) with regard to Scheffé's post-hoc test and found to be higher than both theology faculty (χ = 16.02) and technology faculty (χ = 19.25) students'. The moral identity scores of theology faculty students (χ = 53.34; p < 05) have been found to be higher than education faculty (χ = 50.50) and technology faculty (χ = 51.96) students' scores. For self-efficacy, theology faculty students' (χ = 29.41; p < 05) and technology faculty students' (χ = 30.28; p < 05) scores have been found to be higher than education faculty students' scores (χ = 27.35).

Another key variable investigated in this study is students' grade year. When examining the ANOVA test results for this variable in terms of Scheffé's post-hoc test, freshmen's DASS-21 scores (χ = 21.56; p < 05) were observed to be higher than those for sophomores (χ = 19.54), juniors (χ = 17.81), and seniors (χ = 16.23). The moral identity scores for freshmen (χ = 48.83; p < .05) were concluded to be lower than those for sophomores (χ = 51.58), juniors (χ = 52.87), and seniors (χ = 52.27).

The Relationships Among DASS-21, Moral Identity, and Self-Efficacy

The results presented in Table 2 show the necessary prerequisites to have been satisfied for conducting the mediating role analysis. These results provide the necessary prerequisites, which is the study's primary purpose.

The literature reveals the need to meet the prerequisite for conducting mediating research. The relationship between the dependent and independent variables of the study should be significant. The mediating variable used in the study should also have a substantial relationship with both the dependent and independent variables (Shrout & Bolger, 2002; Tingley et al., 2014).

When examining the relationships among the variables used in the research, the prerequisite for the mediating variable analysis is seen to have been met. A positive correlation exists between DASS-21 and self-efficacy (r = -0.417; p < .001), between DASS-21 and moral identity (r = -0.236; p < .001), and between moral identity and self-efficacy (r = 0.277, p < .001).

Table 2. *Research Prerequisite Analysis Table*

Variables	N	X	Skewness	Kurtosis	Cronbach's Alpha	1	2	3
1. DASS-21	366	18.98	-0.210	.338	.907	1	-0.236**	-0.417**

2. Moral identity	366	51.36	0.246	.514	.890	1	0.277**
3. Self-efficacy	366	28.12	0.332	.642	.795		1

** *p* < .001

Analysis Findings Regarding the Mediator Model

The primary purpose of this research is to test whether moral identity has a mediating role in the relationship between self-efficacy and levels of depression, stress, and anxiety. Before including the mediator variable in the model, the relationship between the dependent and independent variables must be examined, then the mediating variable can be included. Figure 1 shows the first model analyzed for determining the relationships between the dependent and independent variables.
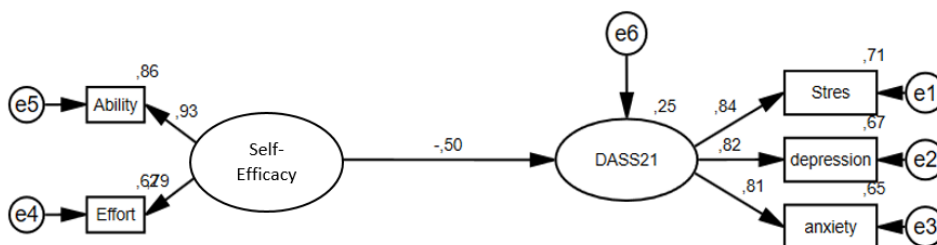

Figure 1. Structural Equation Model 1 for the dependent and independent variables.

When looking at the results in Figure 1, the variables of self-efficacy and DASS-21 score (*r* = -0.50; *p* < .000) predict each other significantly and negatively. Put more clearly, the variable of self-efficacy predicts the variable of DASS-21 score negatively by 25%. According to this result, DASS-21 scores decrease as self-efficacy increases. Following this result, the second model is tested to see what effects would be caused by adding the mediating variable of moral identity.
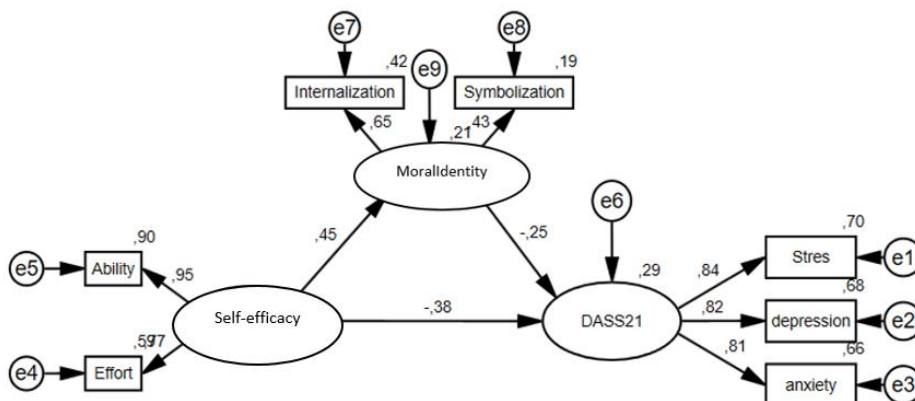

*Figure 2. The mediating effect from the variable of moral identity.*

When examining Figure 2, the mediating role of moral identity is seen in the relationship between the dependent and independent variables. Whether or not the variable of moral identity has a mediating role depends on the change in the relationship between the dependent and

independent variables. The critical point here is that a mediating variable wholly or partially helps explain the relationship between the dependent and independent variables. While the relationship between the dependent and independent variables is r_{SEM1} = -0.50 for the first model, the association reaches r_{SEM2} = -0.38 for the second model. According to this result, moral identity significantly affects the relationship between the predictive variable of self-efficacy and the predicted variable of DASS-21 score. More specifically, moral identity mediates the relationship between self-efficacy and DASS-21. The mediating role model's obtained goodness-of-fit values have been examined and presented in Table 3.

Table 3. Model 2 Fit Values

Indexes	Acceptable Fit	Model Values
χ^2 / df	$0 \leq \chi^2 / df \leq 3$	2.926
RMSEA	$0.00 \leq RMSEA \leq 0.08$	.073
GFI	$0.85 \leq GFI \leq 1.00$	.976
AGFI	$0.85 \leq AGFI \leq 1.00$	.936
CFI	$0.90 \leq CFI \leq 1.00$	.978
IFI	$0.90 \leq IFI \leq 1.00$	.978
TLI(NNFI)	$0.90 \leq TLI \leq 1.00$	.958

The literature shows the acceptable model-fit values for mediator role studies. Researchers look at these fair values in their studies and decide. When examining the values related to the mediating role research obtained as a result of these research analyses (Schermelleh-Engel et al., 2003), all values are seen to have good or excellent values. According to these results, the tested model contains the required goodness-of-fit values. Bayesian analysis has been made to test the accuracy and reliability of the analyses, and the results related to this are presented in Figure 3.
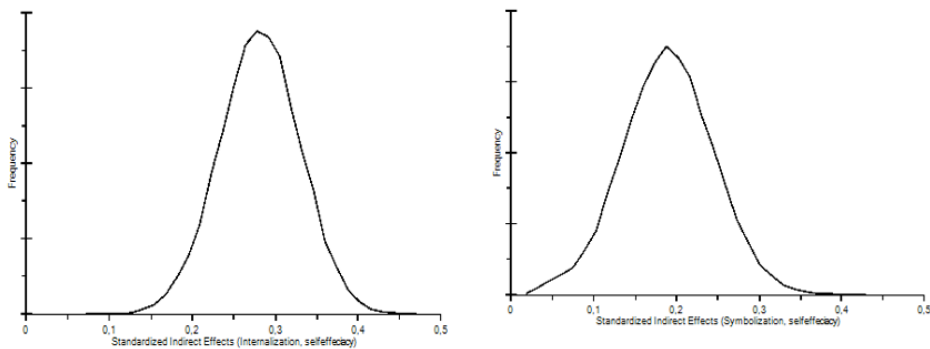
Figure 3. Bayesian results of the indirect effects from the sub-dimensions of moral identity (internalization and symbolization).

As shown in Figure 3, the sub-dimension of internalization has a significant effect as a mediator (*M* = .282; *SE* = .001; *SD* = .0048; *N* = 93,501). Similar results have been obtained for the sub-dimension of symbolization (*M* = .190; *SE* = .002; *SD* = .055; *N* = 93,501). Bayesian structural equation modeling (SEM) is used as an alternative method to traditional SEM applications and is also considered as the second generation of SEMs (Kaplan & Depaoli, 2012, p. 650). Bayesian structural equation modeling reduces errors and thus arrives at better model fit values (Arbuckle, 2012, p. 385).

Discussion

Universities and educational institutions continuously strive to find ways to mitigate the many psychological challenges university students encounter. This research has attempted to contribute to the literature for helping universities identify solutions to students' psychological difficulties. Self-efficacy is an essential element of Bandura's (1997) social cognitive theory and is considered to have positive effects on stress, depression, and anxiety. The primary purpose of this study has been aimed at examining the mediating role that moral identity and its sub-dimensions have in this positive effect of self-efficacy. However, a few inferences from this analysis need to be mentioned. First of all, previous studies have concluded self-efficacy to positively affect stress, depression, and anxiety (Benight & Bandura, 2004; Benight & Harper, 2002; Vaezi & Fallah, 2011). The present study has also obtained a similar result while also showing moral identity to have a significant effect on this outcome. These findings indicate moral identity as a predictor to have a successful impact on resolving the psychological challenges university students encounter. Of course, as this study is a mediating variable study, it has concentrated on the extent to which the variable of moral identity explains the association between self-efficacy and various psychological issues and has contributed to the literature on this point. Moral identity has been concluded to be able to help reduce the effects of stress, depression, and anxiety.

This outcome is in line to an extent with Brown's (2013) research investigating the impact of moral identity on reducing work stress. Womra's (2007) study on university students also revealed moral identity to dramatically decrease antisociality and social anxiety, where students with moral identity avoid cheating behaviors more. Students with a high moral identity are known to avoid situations such as lying, aggression, theft, infidelity, and various psychological problems (Schlenker, 2006). The findings from the present study agree with those of previous studies. Therefore, this study also confirms the significance moral identity has in the beneficial impact of self-efficacy on psychological problems, which is the main aim of the research.

A few other findings from this research are as follows: The results indicate students studying in education faculties to encounter more stress, depression, and anxiety. In addition, students studying in theology faculties are found to have greater levels of moral identity and to experience less stress, depression, and anxiety. The results obtained from the final analysis support the primary objective of the research.

Practical Implications

This research has some practical consequences for universities as well as other education and training institutions. Because of the stress and anxiety students have about their courses and concerns about the future, people attending universities in particular are seen to need help. To reduce students' levels of stress, depression, and anxiety, the relevant institutions and organizations can test the benefits of conducting various psycho-educational activities on self-efficacy and moral identity. These psycho-educations will hopefully help reduce the problems students experience. Bandura (1997) viewed self-efficacy as a significant factor in reducing psychological problems, and the way that moral identity often plays an essential role in this effect should additionally not be ignored. Therefore, enhancing moral identity is crucial in self-efficacy-based psycho-trainings. At the same time, organizing various self-efficacy- and moral identity-based activities that should help reduce students' psychological problems would be beneficial in addition to the courses equipped with just theoretical knowledge. Perhaps at some point, academicians will also be able to be ensured to support their students by raising awareness of this issue, as the academic world is frequently unaware of the harmful conditions students face. However, more practical classes are often likely to be taught by academicians who are mindful of the challenges students face and who plan relaxing experiences for them.

Conducting psycho-trainings on the relations of academicians and other staff working at the university with students would also be beneficial at this point. Students who take their education and graduate in an atmosphere where such interactions are enabled will effectually be able to represent favorable conditions to the environments they enter. In addition, this helps students feel valued, believe they are cared for, and become more psychologically sound.

Limitations and Directions for Future Research

To better understand the results of this study, some of its limitations should be mentioned. Qualitative research can be done to confirm the cause and effect of the potential relationships mentioned in this study. Another limitation of the research is that the data have been limited to students studying at the education, theology, and technology faculties at state universities in Istanbul. Thirdly, this study has examined the mediating role of moral identity in the positive effect of self-efficacy on psychological problems. However, different variables should not be forgotten as they may also have this positive effect. Therefore, studying this analysis with other variables (e.g., self-confidence) may be able to achieve futher-reaching results. Fourthly, the students enrolled in educational faculties have been concluded to encounter greater stress, depression, and anxiety compared to students in other faculties. At the same time, students studying in the faculty of theology have been concluded to have greater levels of moral identity and lower levels of stress, depression, and anxiety. Therefore, qualitative research can help determine what factors cause these problems as well as alleviate them.

Conducting qualitative research on revealing which factors cause these will lead to more effective results. Finally, moral identity has been concluded to have a substantial influence on decreasing psychological problems.

Conclusion

The most critical point of this research is its examination of whether moral identity has a role in the relationship between self-efficacy and levels of depression, stress, and anxiety as known in the literature. This brings the research to a valuable point. When examining the research results, a significant part of the effect of self-efficacy in reducing stress, depression, and anxiety are seen to be explained by moral identity. To be more explicit, moral identity has essential functions in reducing stress, anxiety, and depression. In particular, students with low moral identity were found to have higher levels of stress, depression, and anxiety. Therefore, this study highlights the importance of helping students increase their levels of moral identity in order to address their psychological problems.

References:

Andrews, B. & Willing, J.M. (2004). The relation of depression and anxiety to life-stress and achievement in students. *British Journal of Psychology*, 95, 509-521. https://doi.org/10.1348/0007126042369802

Arbuckle, J. L. (2012*). IBM SPSS Amos 21 user's guide.* Amos Development Corporation

Aypay, A. (2010). Genel Oz Yeterlik Olceginin GOYO Turkceye Uyarlama Calismasi. [Adaptation Study of General Self-Efficacy Scale into Turkish]. *Inonu Universitesi Egitim Fakultesi Dergisi*, 11(2), 113-131.

Bacchini, D., & Magliulo, F. (2003). Self-image and perceived self-efficacy during adolescence. *Journal of Youth and Adolescence*, 32 (5), 337-350. https://doi.org/10.1023/A:1024969914672

Bailey, T. H., & Phillips, L. J. (2016). The influence of motivation and adaptation on students' subjective well-being, meaning in life and academic performance. *Higher Education Research & Development*, 35(2), 201–216.
http://dx.doi.org/10.1080/07294360.2015.1087474

Bandura, A. (1986). *Social foundation of thought and action: A social cognitive theory*. Prentice Hall.

Bandura, A. (1997). *Self-efficacy: The exercise of control*. Freeman.

Bandura, A. (2000). Cultivate self-efficacy for personal and organizational effectiveness. In: E.A. Locke (Ed.), *Handbook of principles of organization behavior* (pp. 120-136). Oxford U.K. Balckwell.

Bandura, A. (2006). Guide for constructing self-efficacy scales. *Self-Efficacy Beliefs of Adolescents,* 5, 307–337.

Bandura, A. (2016). *Moral disengagement: How people do harm and live with themselves*. New York, NY: Worth.

Bandura, A., Caprara, G. V., Barbaranelli, C., Gerbino, M., & Pastorelli, C. (2003). Role of affective self-regulatory efficacy in diverse spheres of psychosocial functioning. *Child Development,* 74(3), 769–782. https://doi.org/10.1111/1467-8624.00567

Bandura, A., Pastorelli, C., Barbaranelli, C., & Caprara, G. V. (1999). Self-efficacy pathways to childhood depression. *Journal of Personality and Social Psychology,* 76, 258-269. https://doi.org/10.1037/0022-3514.76.2.258

Batigun, A, Kayis, A. (2014). Universite ogrencilerinde stres faktorleri: Kisilerarasi iliski tarzlari ve problem cozme becerileri acisindan bir degerlendirme. [Stress factors in university students: An evaluation in terms of interpersonal relationship styles and problem solving skills]. *Hacettepe Universitesi Egitim Fakultesi Dergisi*, 29 (29-2), 69-80. Retrieved from https://dergipark.org.tr/tr/pub/hunefd/issue/7788/101807

Benight, C. C., & Bandura, A. (2004). Social cognitive theory of posttraumatic recovery: The role of perceived self-efficacy. *Behaviour Research and Therapy*, 42(10), 1129-1148. https://doi.org/10.1016/j.brat.2003.08.008

Benight, C. C., & Harper, M. L. (2002). Coping self-efficacy perceptions as a mediator between acute stress response and long-term distress following natural disasters. *Journal of Traumatic Stress*, 15(3), 177–186. https://doi.org/10.1023/A:1015295025950

Bilgin, M. (2000). Universite ogrencilerinin sorunlari ile degerleri arasindaki iliskilerin incelenmesi. [Examining the relationships between university students' problems and their values]. *Cukurova Universitesi Egitim Fakultesi Dergisi*, 2, 18-25.

Bisschop, M. I., Kriegsman, D. M., Beekman, A. T., & Deeg, D. J. (2004). Chronic diseases and depression: The modifying role of psychosocial resources. *Social Science & Medicine*, 59(4), 721–733. https://doi.org/10.1016/j.socscimed.2003.11.038

Bojuwoye, O. (2002). Stressful experiences of first year students of selected universities in South Africa. *Counselling Psychology Quarterly*, 15(3), 277-290. https://doi.org/10.1080/09515070210143480

Brouwers, A., & Tomic, W. (2000). A longitudinal study of teacher burnout and perceived self-efficacy in classroom management. *Teaching and Teacher Education*, 16(2), 239–253. https://doi.org/10.1016/S0742-051X(99)00057-8

Brown, T. G. (2013). Job stress and counterproductive work behaviors: Does moral identity matter? *Dissertation Abstracts International: Section B: The Sciences and Engineering, 74*(1-B(E)).

Bucker, S., Nuraydin, S., Simonsmeier, B. A., Schneider, M., & Luhmann, M. (2018). Subjective well-being and academic achievement: A meta-analysis. *Journal of Research in Personality*, 74, 83–94. https://doi.org/10.1016/j.jrp.2018.02.007

Caprara, G. V., Gerbino, M., Paciello, M., Di Giunta, L., & Pastorelli, C. (2010). Counteracting depression and delinquency in late adolescence: The role of regulatory emotional and interpersonal self-efficacy beliefs. *European Psychologist*, 15, 34-48. https://doi.org/10.1027/1016-9040/a000004

Chen, J., Liu, T., Zheng, M., & Chen, C. (2010). Relationships between self-esteem, self-efficacy, selfconcept, and depression. *Chinese Journal of Clinical Psychology,* 18, 799-801. https://doi.org/10.4236/jss.2016.412011

Creswell, J. W. (2017). *Egitim arastirmalari nicel ve nitel arastirmanin planlanmasi, yurutulmesi ve degerlendirilmesi.* [Planning, conducting and evaluating educational quantitative and qualitative research]. (H. Eksi, Cev.). Istanbul: EDAM Yayinlari.

Erkan, S., Ozbay, Y., Cankaya, ZC. ve Terzi, S. (2012). Universite ogrencilerinin yasadiklari problemler ve psikolojik yardim arama gonullukleri. [Problems experienced by university students and their willingness to seek psychological help]. *Egitim ve Bilim*, 37(164), 94-107.

Gallagher, D., Ni Mhaolain, A., Crosby, L., Ryan, D., Lacey, L., Coen, R. F., ...Lawlor, B. A. (2011). Self-efficacy for managing dementia may protect against burden and depression in Alzheimer's caregivers. *Aging & Mental Health*, 15(6), 663–670. https://doi.org/10.1080/13607863.2011.562179

Gibbs, J. C. (2019). *Moral development and reality: Beyond the theories of Kohlberg, Hoffman, and Haidt (4th ed.).* New York, NY: Oxford University Press.

Hardy, S. A. (2006). Identity, reasoning, and emotion: An empirical comparison of three sources of moral motivation. *Motivation and Emotion*, 30(3), 205–213. https://doi.org/10.1007/s11031-006-9034-9

Henry, J. D., & Crawford, J. R. (2005). The short-form version of the Depression Anxiety Stress Scales (DASS-21): Construct validity and normative data in a large non-clinical sample. *British Journal of Clinical Psychology*, 44, 227-239. https://doi.org/10.1348/014466505X29657

Hoffman, B. (2010). "I think I can, but I'm afraid to try": The role of self-efficacy beliefs and mathematics anxiety in mathematics problem-solving efficiency. *Learning and Individual Differences*, 20(3), 276–283. https://doi.org/10.10.1016/j.lindif.2010.02.001

Hong, L. & Wengboey, K. (2002). Types and characteristics of stress on college campus. *Psychological Science (China),* 25(4) (138), 398-401.

Kaplan, D., & Depaoli, S. (2013). Bayesian statistical methods. Oxford handbook of quantitative methods, 407-437.

Klasen, F., Otto, C., Kristen, L., Patalay, P., Schlack, R., & Sieberer, U. R. (2015). Risk and protective factors for the development of depressive symptoms in children and adolescents: results of the longitudinal BELLA study. *European Child & Adolescent Psychiatry*, 24, 695-703. https://doi.org/10.1007/s00787-014-0637-5

Koc, M., Avsaroglu, S. ve Sezer, A. (2004). Universite ogrencilerinin akademik basarilari ile problem alanlari arasindaki iliski. [The relationship between the academic achievement of university students and their problem areas]. Selcuk Universitesi Sosyal Bilimler Enstitusu Dergisi, 11, 483-489

Kuh, G. D., Kinzie, J., Schuh, J. H., & Whitt, E. J. (2011). *Student success in college: Creating conditions that matter.* John Wiley & Sons.

Mazzone, A., Camodeca, M., & Salmivalli, C. (2016). Interactive effects of guilt and moral disengagement on bullying, defending and outsider behavior. *Journal of Moral Education*, 45(4), 419–432.

Muris, P., Meesters, C., Pierik, A., & de Kock, B. (2016). Good for the self: Self-compassion and other self-related constructs in relation to symptoms of anxiety and depression in non-clinical youth. *Journal of Child and Family Studies*, 25, 607-617. https://doi.org/10.1007/s10826-015-0235-2

Niemiec, T., & Lachowicz-Tabaczek, K. (2015). The moderating role of specific selfefficacy in the impact of positive mood on cognitive performance. *Motivation and Emotion,* 39(4), 498–505. https://doi.org/10.1007/s11031-014-9469-3

Nierop, A., Wirtz, P. H., Bratsikas, A., Zimmermann, R., & Ehlert, U. (2008). Stressbuffering effects of psychosocial resources on physiological and psychological stress response in

pregnant women. *Biological Psychology,* 78(3), 261–268. https://doi.org/10.1016/j.biopsycho.2008.03.012

Pajares, F. (1996). Self-Efficacy Beliefs in Academic Settings. Review of Educational Research, 66, 543. https://doi.org/10.3102/00346543066004543

Poyhonen, V., Juvonen, J., & Salmivalli, C. (2010). What does it take to stand up for the victim of bullying? *Merrill-Palmer Quarterly,* 56(2), 143–163. https://doi.org/10.1353/mpq.0.0046

Sanz, A., & Villamarin, F. (2001). The role of perceived control in physiological reactivity: Self-efficacy and incentive value as regulators of cardiovascular adjustment. *Biological Psychology,* 56(3), 219–246. https://doi.org/10.1016/s0301-0511(01)00095-3

Saricam, H. (2018). The psychometric properties of Turkish version of Depression Anxiety Stress Scale-21 (DASS-21) in community and clinical samples. *Bilissel Davranisci Psikoterapi ve Arastirmalar Dergisi, 7,* 19-30. https://doi.org/10.5455/JCBPR.274847

Schermelleh-Engel, K., Moosbrugger, H., & Muller, H. (2003). Evaluating the fit of structural equation models: Test of significance and descriptive goodness-of-fit measures [Online]. *Methods of Psychological Research-Online,* 8 (2), 23–74.

Schlenker, B. R. (2006). *Principled and expedient ideologies: The Integrity Scale as a measure of ethical orientations.* Unpublished manuscript, University of Florida, Gainesville.

Schwarzer, R. & Jerusalem, M. (1995). Generalized self-efficacy scale. In: J. Weinman, S. Wright, & M. Johnston (Eds.), *Measures in health psychology: A user's portfolio. Causal and control beliefs* (pp. 35-37). Windsor, UK: NFER-Nelson.

Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: new procedures and recommendations. *Psychological Methods, 7,* 422-445. https://doi.org/10.1037/1082-989X.7.4.422

Singh, P., & Bussey, K. (2011). Peer victimization and psychological maladjustment: The mediating role of coping self-efficacy. *Journal of Research on Adolescence,* 21(2), 420–433. https://doi.org/10.1111/j.1532-7795.2010.00680.x

Soysa, C.K., & Wilcomb, C.J. (2015). Mindfulness, self-compassion, self-efficacy, and gender as predictors of depression, anxiety, stress, and well-being. *Mindfulness,* 6, 217-226. https://doi.org/10.1007/s12671-013-0247-1.

Steca, P., Abela, J. R. Z., Monzani, D., Greco, A., Hazel, N. A., & Hankin, B. L. (2014). Cognitive vulnerability to depressive symptoms in children: The protective role of self-efficacy beliefs in a multi-wave longitudinal study. *Journal of Abnormal Child Psychology,* 42(1), 137-148. https://doi.org/10.1007/s10802-013-9765-5

Tingley D, Yamamoto T, Hirose K, Keele L, Imai K (2013). mediation: R Package for Causal Mediation Analysis. R package version 4.4.2, URL http://CRAN.R-project.org/ package=mediation.

Vaezi, S. & Fallah, N. (2013). The relationship between self-efficacy and stress among iranian efl teachers. *Journal of language teaching and research,* Vol. 2, No. 5, pp. 1168-1174. https://doi.org/10.4304/jltr.2.5.1168-1174

Wei, M., Russell, D. W., & Zakalik, R. A. (2005). Adult attachment, social self-efficacy, self-disclosure, loneliness, and subsequent depression for freshman college students: A longitudinal study. *Journal of Counseling Psychology,* 52(4), 602–614. https://doi.org/10.1037/0022-0167.52.4.602

Wowra, S., A. (2007) Moral Identities, Social Anxiety, and Academic Dishonesty Among American College Students, *Ethics & Behavior,* 17:3, 303-321, https://doi.org/10.1080/10508420701519312

Yilmaz, F. ve Yilmaz, F. (2015). Ahlaki Kimlik Olcegi Turkce formunun gecerlik ve guvenirlik calismasi. [The validity and reliability study of the Turkish form of the Moral Identity Scale]. *Celal Bayar Universitesi Sosyal Bilimler Dergisi,* 13(4),11-133. http://dx.doi.org/10.18026/cbusos.35372.

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