

# The Determinants of Occupational Therapy Students' Attitudes: Mindfulness and Well-Being

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## Abstract

There are 12.5 million people with disabilities in Turkey according to the research conducted in recent years. It is an unquestionable fact that attitudes and behaviors towards people with disabilities. Their lives and harmony with the society describe social interactions. The awareness and attitudes of health professionals towards people with disabilities may affect the quality of service for people with disabilities. The aim of this study was to investigate the effect of occupational therapy student's mindfulness and the well-being on the attitude towards people with disabilities. The study was conducted with 134 students at the Faculty of Health Sciences, Department of Occupational Therapy. The Attitudes Towards Disabled People Scale, Mindful Attention Awareness Scale, Adolescent Subjective Well Being Scale were the used scales. According to the regression analysis, the student's mindfulness and well-being affected their attitudes towards people with disabilities.

Mindfulness was related with positive emotions and life satisfaction according to sub-scale of Adolescent Subjective Well Being Scale while attitude was related with satisfaction in relationships with precious people of Adolescent Subjective Well Being Scale ( $p < 0.05$ ). As a result, it was found that the occupational therapy students at different classes have positive attitudes towards people with disabilities. Increasing consciousness mindfulness and the well-being is important for reducing negative attitudes and behaviors. Therefore, the relationship between mindful attention, well-being and attitudes towards disabilities need to be examined with details in the non-health profession's departments. Those results are compared with the health professionals' results.

**Keywords:** disability, university students, well-being, mindful attention

## 1. Introduction

The mindfulness is based on Eastern culture which is a popular and accessible practice of directing focus, attention and awareness. It is known as the augmentation of perceived experiences through emotions in clinical and nonclinical populations (Ludwig & Kabat-Zinn, 2008). Mindfulness is a method that allows people to clear and alert in life and maintains the well-being by accepting the thoughts that arise in the mind without judging thoughts and feelings. Mindfulness is focusing and accepting the individual by accepting the moment. Mindfulness enables being clear and alert in life and maintains the well-being (Ozyesil, Arslan, Kesici, & Deniz, 2011). Mindfulness concept has acquired popularity in between health professionals over the last years because of its effect on increasing quality of life and well-being (Baer, 2003; Kabat-Zinn & Hanh, 2009; Miller, Fletcher, & Kabat-Zinn, 1995; Krasner et al., 2009). The mindfulness is a strategy which facilitating the use of problem solving and coping skills, the attitude of the person is affected negatively as the state of the well-being is degraded (Shaunessy & Suldo, 2010; Stoeber & Janssen 2011).

The well-being is a process in which a person has self-consciousness that is apparent, so that the person can manage to reveal his/her potential in the social and natural environment (The National the Well-being Institute, [NWI], 2016). The well-being allows the individuals to reach their highest potential. Thus, the person maintains a balanced and meaningful behavior. The well-being can control thoughts, optimism and appearance. It is influenced positively by physical respect and perceived importance (Dogan, 2006; Kasapoglu, 2013; Myers, Sweeney, & Witmer, 2000). It has been shown that the well-being determines goals, preferences, interests and attitudes. It is also believed that the well-being enhances and strengthens optimistic and positive attitudes by increasing inner drive rather than focusing on problems and issues (Dogan, 2006; Myers et al., 2000; NWI,

2016). Unfortunately, in the last 20 years, health professional's quality of life and wellbeing decreased, combining this situation with the deterioration of work conditions had an important impact on the health professions workforce (Williams et al., 2001; Dorsey, Jarjoura, & Rutecki, 2003; Landon, Reschovsky, Pham, & Blumenthal, 2006; Reuben, 2007).

Attitude is the completion of an individual's emotions, thoughts and attitudes towards a certain thing or person (Allport, 1935). Experiences in life forms a person's regular attitudes and behaviors. According to Ryff's well-being approach (1989), people show positive attitudes towards themselves when they accept themselves as prerequisites of well-being. Swarbrick (2006) has shown that the right knowledge, attitudes and behaviors provide satisfaction in life for people and gives a chance to make the right choice (Ryff, 1989).

According to recent studies conducted in Turkey, there are 12.5 million people with disabilities (Turkish Statistics Institute, [TUIK], 2016). The attitudes of society towards people with disabilities determine their collective adaptability and social interactions. Acceptance of people with disabilities in society facilitates those people's integration and interaction with the society (Ozyurek, 2006). However, the presence of negative judgements, negative discriminatory and refusing attitudes are still present in different parts of the society. The inappropriate attitude of health professionals to people with disabilities has been shown to hinder access to health services for these individuals. Negative or positive attitudes are also important during the rehabilitation of people with disabilities. For this reason, research on the perception of health worker's negative attitudes and behaviors is a necessity for the to understand people with disabilities desire to live and maintain their lives. In addition, exhibiting these attitudes during teaching can negatively affect other students (Paris, 1993; Tervo & Palmer, 2004). The researches have also shown that the factors affecting attitudes have socio-demographic, political, economic, religious and cultural dimensions (Barnes, 1996; Au & Man, 2006; Ozyurek, 2006; Yucker, 1994).

Negative attitudes of healthcare professionals can affect awareness and quality of service for the people with disabilities (Byron & Dieppe, 2000; Kritsotakis et al., 2017). Moreover, studies have identified five major problems for health professionals: lack of specific information about specific assessments, inadequate skills to meet complex needs related to disability, annoyance when working with people with disabilities, difficulties in communication and misunderstandings (Cleary & Doody, 2017; Lam, Gunukula, McGuigan, Symons, & Akl, 2010; Ndengeyingoma & Ruel, 2016). In addition, some studies about attitudes of healthcare student's shows the importance of modern academic curricula and additional appropriate education programs (Lee & Rodda, 1994; Tervo, Azuma, Palmer, & Redinius, 2002; Sahin & Bekir 2016; Kritsotakis et al., 2017). Although there have been many studies on factors affecting attitudes towards disabilities both in our country and abroad, no study has been found about the relationship between mindfulness and the well-being in university students and their attitudes towards disabilities (Paris, 1993; Au & Man, 2006; Ozyurek, 2006; Yucker, 1994; White & Olson, 1998; Benham, 1988). While the attitudes of health professionals are so important over the healthy state of the individual, factors such as consciousness, awareness and well-being that may be effective in improving these attitudes may also be the solution to this problem (Grepmaier et al., 2007; Hassed, De Lisle, Sulvian, & Pier, 2009). The prominence of this research is; when this relationship becomes apparent, it would have been possible to recommend simple programs that could be applied even in the workplace to solve this problem. The hypothesis of this research is; "the conscious awareness and well-being of the occupational therapy students is not related to their attitudes to the disability". The aim of this study was to examine the relationship between the mindfulness and the well-being of students who study in the occupational therapy department and their attitudes towards the people with disabilities.

## **2. Methods**

### *2.1 Research Design*

In this study, one of the quantitative research methods; "experimental" research design, was chosen as the relational screening model. According to this, we examined whether there is a relationship between mindfulness and the well-being and the attitudes of students who were studying in the Occupational Therapy Department during 2015-2016 term.

### *2.2 Participants*

The research was carried out in Department of Occupational Therapy in Hacettepe University during the spring semester of 2015-2016. The study was confirmed by the Hacettepe University Senate Ethics Committee and the study was conducted in accordance with the Helsinki Declaration.

134 (108 females, 80.5%) students who attended Hacettepe University, Department of Occupational Therapy participated in and given an informed consent form and signed before the datas were collected. The age range of the students was between 18-27 years ( $20.72 \pm 1.60$  years) (Table 1).

Table 1. Demographic data

		Total	
		n	%
Gender	Male	26	19.5
	Female	108	80.5
Year of Education	1	41	30.5
	2	35	26.1
	3	28	20.8
	4	30	22.3
Total		134	100

Note. n= number of participants.

Inclusion criteria were as follows; 1) to study in Hacettepe University, Faculty of Health Sciences, Department of Occupational Therapy, 2015-2016 academic year fall and spring semester, 2) to sign the consent form and 3) to be able to read and understand in Turkish language.

### 2.3 Measures

In this study we used an information form (age, gender, year of university) and Mindful Attention Awareness Scale (MAAS), the Adolescent Subjective Well-Being Scale (ASWS) and the Attitude Toward Disabled Persons Scale (ATDP).

#### 2.3.1 Mindful Attention Awareness Scale (MAAS)

Brown & Ryan (2003) developed, Ozyesil, Arslan, Kesici, & Deniz (2011) adapted this scale and Turkish version of the scale has 15-item, 6-point Likert type and it is a one-factor scale that measures the awareness and attentiveness of the instant experiences of a person. Higher scores indicate greater mindfulness. The internal consistency coefficient (ICC) of the original test is 0.82, the test retest coefficient is 0.81 whereas the ICC of the Turkish version is 0.80 and the item-total correlation is between 0.43 and 0.68 (Ozyesil et al., 2011; Brown & Ryan, 2003; Baer, Smith, & Allen, 2004).

#### 2.3.2 The Adolescent Subjective Well-Being Scale (ASWS)

The well-being status in the study was obtained using ASWS (Eryilmaz, 2009). The scale consists of 15 items and obtains of 4-point Likert scale, which includes satisfaction levels and positive effects on life's different areas. ASWS has four sub-scale which are satisfaction in family relations, satisfaction in life, positive affection and satisfaction in the relationships with important people. Those four dimensions have a reported variance of 61.64. Scale has a Cronbach alpha reliability value of 0.87 and Spearman-Brown value is 0.83. After the analysis Adolescent Subjective Well-being Scale had a correlation with Life Satisfaction Scale at a level of 0.63.

Our participants were a group of young people. However, we chose this scale designed for the adult age group. The most important reason for this choice was that there was a questionnaire that included questions about satisfaction with family relations among the well-being scales of Turkish validity and reliability. We also chose this scale because there is a Turkish version for it which lets us determine our attitudes and experiences and because we made our first experiences in family and learned human relationships in the family. We got approval from the developing author about this issue. Nevertheless, the use of a different type of well-being scale, which is still in the correct age group, may be a limitation of this research.

#### 2.3.3 The Attitude Toward Disabled Persons Scale (ATDP)

It was developed by Yuker & Block (1986) and adapted to Turkish by Ozyurek. The scale has 20 items and 6-point Likert types. Some questions of the scale are inverted and then added to the total score. High scores

indicate positive attitude. The Cronbach alpha range of the ATDP has been reported from 0.83 to 0.87, demonstrating a extremely reliable instrument (Yuker & Block, 1986; Ozyurek, 2006).

#### 2.4 Statistical Analysis

The IBM SPSS 21.00 was used for statistical analysis. The Kolmogorov-Smirnov test was used to test the normality of the variables. The relationship between the scales in the study is explained by the correlation coefficient and regression analysis. Pearson's correlation coefficient was used to understand the relationship between variables. Variables were entered into the multivariate linear regression analysis with scores on the attitude scale as dependent variables. The level of significance was accepted as 0.05.

### 3. Results

Descriptive statistics of scales are given in Table 2. According to correlation coefficient, there was positive direction, significant relationship between MAAS and ASWS total score ( $r=0.454$ ,  $p=0.021$ ), satisfaction in family relations ( $r = 0.325$ ,  $p =0.032$ ), satisfaction in life ( $r=0.353$ ,  $p=0.028$ ), positive affection ( $r=0.347$ ,  $p=0.042$ ), satisfaction in relationships with important people ( $r=0.352$ ,  $p=0.031$ ). In addition, there was a negative direction, significant relationship between the ASWS total score and ATDP score ( $r=-0.436$ ,  $p=0.018$ ). Moreover, there was a negative direction, also a significant relationship between the MAAS and ATDP score ( $r=-0.451$ ,  $p=0.042$ ) (Table 3). In other words, when the mindful attention and well-being both increased, the attitudes towards people with disabilities improved as well.

Table 2. Descriptive statistics

	Total X±SD (n=134)	Min	Max
The Mindful Attention Awareness Scale	58±12	22	83
The Adolescent Subjective Well Being Scale	47±13	12	79
The Attitude Toward Disabled Persons Scale	48±6	25	60

Note. n= number of participants. X±SD= mean and standard deviation.

Table 3. Correlation coefficient of variables

	MAAS total	Satisfaction in family relations	Satisfaction in life	Positive affection	Satisfaction in the relationships with important people	ASWQ total
Satisfaction in family relations	r 0.325*					
	p 0.032					
Satisfaction in life	r 0.353*	0.360**				
	p 0.028	0.000				
Positive affection	r 0.347*	0.269*	0.544*			
	p 0.042	0.002	0.000			
Satisfaction in the relationships with important people	r 0.352*	0.337**	0.540**	0.524**		
	p 0.031	0.000	0.000	0.000		
ASWQ_TOTAL	r 0.454*	0.625**	0.803**	0.780**	0.814**	
	p 0.021	0.000	0.000	0.000	0.000	
ATDP	r -0.451*	-0.087	-0.140	-0.162	-0.218*	-0.436*
	p 0.042	0.318	0.108	0.062	0.011	0.018

Note. \* $p<0.05$ ; \*\* $p<0.001$ .

According to the results of regression analysis, student's attitudes are affected by mindfulness and the well-being. The affecting factor accounts for about 24% of the ATDP score ( $[R^2=0.329]$   $[F [8, 134] = 9.910]$ ). On the other hand, gender, university year and mindfulness do not contribute to the attitude score (Table 4).

Table 4. Coefficients of ATDP score according to regression analysis

	Unstandardized coefficients		Standardized coefficients		
	B	Std. Err	Beta	t	Sig.
[Constant]	105.631	35.945		2.670	0.007
Gender	1.405	3.042	0.041	0.462	0.052
Year in the University	1.049	1.133	0.090	0.926	0.356
MAAS	0.580	0.197	-0.508	-2.942	0.007*
ASWS	-0.374	0.189	-0.177	-1.975	0.049*

Note. \*  $p < 0.05$  Independent variable: Attitude Towards Disabled People Scale (ATDP). Model 8 Adjusted  $R^2 = 0.329$ . Std.= standard; sig.= significant level. MAAS= Mindful Attention Awareness Scale. ASWS= the Adolescent Subjective Well Being Scale.

#### 4. Discussion

In this study, the effects of mindfulness and well-being over the attitudes towards the people with disabilities were investigated in between the students of the occupational therapy department. The result of this study shows that; increased mindful attention and wellness affect the attitudes towards the people with disabilities in a positive way.

Mindfulness is a strategy that is thought to reduce emotional difficulties and distresses by allowing them to emerge without judging emotions and thoughts and allowing them to escape or accompany these thoughts (Ozyesil et al., 2011). The literature presents that the correct use of these strategies are related to mental status (Aydin, 2010; Demir, 2015; Fidan, Ceyhan, & Kirpinar, 2009; Frydenberg, Care, Freeman, & Chan, 2009; Öngen, 2006; Shaunessy & Suldo, 2010). A study by Eskin, Ertekin, Harlak, & Dereboy, (2008) pointed out that inadequate problem-solving skills predicted depression. People who can produce constructive solutions to the problems they face in the social environment can be expected to have less difficulty in establishing and maintaining friendships. According to the another research; as the mindfulness including problem solving and coping skills decreases, the attitude of the person is affected negatively as the state of the well-being is degraded. In the literature, it has been pointed out that people with poor ability to focus on problem solving and to produce alternative solutions are often found in situations of losing anger control, sudden decision making, and uneasiness (Shaunessy & Suldo, 2010; Stoeber & Janssen 2011). The results of another research reveal that when emotional problems increase, attitudes are negatively affected as self-reliance decreases over problem solving (Hamarta, 2009). In this study, it is concluded that as the mindfulness of the person increases, the well-being state develops (Eskin et al., 2008). In other words, as the mindfulness of the student increase, it seems that the relationship of the individual with the family and the people around is in direct proportion and is more likely to establish positive relationships. As a consistency with the literature, this study has also shown that the mindfulness and the well-being can lead to positive developments in attitudes towards disabilities. According to the researches (Krasner et al., 2009; Christopher et al., 2011) on the participants of the mindfulness class the mindfulness practice leads to positive influence in physical, emotional, cognitive and attitudes of the participants. A useful model offered by Shapiro, Carlson, Astin, & Freedman (2006), based on three “axioms” of mindfulness: intention, attention, and attitude (Shapiro, Carlson, Astin, & Freedman, 2006). The authors claim that a foster better health is possible with these basic components of mindfulness which lead to a shift in perspective, enabling other essential mechanisms Furthermore, and the literature contains studies that are showing the relationship between good state and attitudes. The common feature of these surveys is the awareness and the good state of mind of the health professionals are related to the caregiver and the quality of care given. They even suggest resources that will improve health professionals to goodness (Novack, Epstein, & Paulsen, 1999). There are studies in the literature that show the mother’s/peers attitudes towards child with disability effects the well-being of the child with disabilities (Duvdevany & Abboud, 2003; Magaña & Smith, 2006; Rillotta & Nettelbeck, 2007).

Both the results of our research and the information we gained from the literature indicate that well-being is one of the most important factors affecting attitudes. In the light of these information people with disabilities generally have confronted with negative attitudes from individuals without disabilities (Au & Man, 2006). Researches have shown that people who have an important role on our health, help people with disabilities and negative attitudes may lead to negative rehabilitation outcomes. So it is very critical to build the structure of their

professional education and life (Kritsotakis et al., 2017). The provision of information about mindfulness and well-being strategies to a person may result with a modification of the attitude formation.

According to research findings we also concluded that gender and the year of university education did not predict attitudes against people with disabilities. Every year, the knowledge of the occupational therapy students and their contacts with the patient progress more and more. However, no attitudinal difference was found between the classes in this study. A study in the literature has that refer a curriculum which was comparing occupational therapy and medical students studying in the same semester found that the occupational therapy students have more positive attitudes (Estes, Deyer, Hansen, & Russel, 1991). However; there is no study evaluating the grade and progress of university education Moreover, gender did not influence the attitudes towards people with disabilities. This finding was similar with literature (Tait & Purdie, 2000; Au, & Man, 2006).

There were some limitations of this study. The number of male participants can be low and, furthermore, participants only consist of university students. There was not a conducted control group. In addition, the scale which assess well-being was used for adolescent but our participants were young.

## 5. Conclusion

The study has shown that the influence of mindfulness and well-being on occupational therapy student's attitudes towards people with disabilities. During the university years, people are in a period where their individual needs are beginning to be solved, while their mindfulness and the well-beings develop (Myers et al., 2000; Ozyesil et al., 2011). In the meantime, they can also develop positive attitudes (Allport, 1935; Myers et al., 2000; Ozyesil et al., 2011). In this study the results were similar for participants studying in different terms. In this case, the relationship between the well-being and attitudes towards disabilities need to be examined with details in a non-health-related department and compared with students in a health-related department. For the future, it is important to plan the interventions aiming to improve student's or professional's mindfulness as well as well-being may have a part in solving the problems.

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## References

- Allport, G. W. (1935). Attitudes. In C. Murchison (Ed.), *Handbook of Social Psychology* (pp. 798-844). Worcester, MA: Clark Univ. Press.
- Au, K. W., & Man, D. W. (2006). Attitudes toward people with disabilities: A comparison between health care professionals and students. *International Journal of Rehabilitation Research*, 29(2), 155-160. <https://doi.org/10.1097/01.mrr.0000210048.09668.ab>
- Aydin, K. B. (2010). Strategies for coping with stress as predictors of mental health. *International Journal of Human Science*, 7(1), 534-548. Retrieved from <https://j-humansciences.com/ojs/index.php/IJHS/article/view/1037/496>
- Baer, R. A. (2003). Mindfulness training as a clinical intervention: A conceptual and empirical review. *Clinical Psychology: Science and Practice*, 10(2), 125-143. <https://doi.org/10.1093/clipsy.bpg015>
- Baer, R. A., Smith, G. T., & Allen, K. B. (2004). Assessment of mindfulness by self-report: The Kentucky Inventory of Mindfulness Skills. *Assessment*, 11(3), 191-206. <https://doi.org/10.1177/1073191104268029>
- Barnes, C. (1996). Theories of disability and the origins of the oppression of disabled people in western society. In L. Barton (Ed.), *Disability and society: Emerging issues and insights* (pp. 43-60). London: Longman.
- Benham, P. K. (1988). Attitudes of occupational therapy personnel toward persons with disabilities. *American Journal of Occupational Therapy*, 42(5), 305-311. <https://doi.org/10.5014/ajot.42.5.305>
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84(4), 822. <http://dx.doi.org/10.1037/0022-3514.84.4.822>.
- Byron, M., & Dieppe, P. (2000). Educating health professionals about disability: attitudes, attitudes, attitudes. *Journal of the Royal Society of Medicine*, 93(8), 397-398. <https://doi.org/10.1177/014107680009300801>
- Cleary, J., & Doody, O. (2017). Nurses' experience of caring for people with intellectual disability and dementia. *Journal of Clinical Nursing*, 26(5-6), 620-631. <https://doi.org/10.1111/jocn.13431>

- Christopher, J. C., Chrisman, J. A., Trotter-Mathison, M. J., Schure, M. B., Dahlen, P., & Christopher, S. B. (2011). Perceptions of the long-term influence of mindfulness training on counselors and psychotherapists: A qualitative inquiry. *Journal of Humanistic Psychology, 51*(3), 318-349. <https://doi.org/10.1177/0022167810381471>
- Demir, V. (2015). Bilinçli farkındalık temelli kognitif terapi programının bireylerin depresif belirti düzeyleri üzerine etkisi. *Psikoloji Çalışmaları Dergisi, 35*(1), 15-26. Retrieved from <http://www.journals.istanbul.edu.tr/iupcd/article/view/5000130178>
- Dogan, T. (2006). Üniversite öğrencilerinin iyilik halinin incelenmesi. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, 30*(30), 120-129. Retrieved from <http://dergipark.ulakbim.gov.tr/hunefd/article/view/5000048592>
- Dorsey, E. R., Jarjoura, D., & Rutecki, G. W. (2003). Influence of controllable lifestyle on recent trends in specialty choice by US medical students. *Jama, 290*(9), 1173-1178. <https://doi.org/10.1001/jama.290.9.1173>
- Duvdevany, I., & Abboud, S. (2003). Stress, social support and well-being of Arab mothers of children with intellectual disability who are served by welfare services in northern Israel. *Journal of Intellectual Disability Research, 47*(4-5), 264-272. <https://doi.org/10.1046/j.1365-2788.2003.00488.x>
- Eryılmaz, A. (2009). Ergen öznel iyi oluş ölçeğinin geliştirilmesi. *Journal of Turkish Educational Sciences, 7*(4), 975-989. Retrieved from <http://dergipark.gov.tr/tebd/issue/26109/275088>
- Eskin, M., Ertekin, K., Harlak, H., & Dereboy, Ç. (2008). Lise öğrencisi ergenlerde depresyonun yaygınlığı ve ilişkili olduğu etmenler. *Türk Psikiyatri Dergisi, 19*(4), 382-389. Retrieved from <http://turkpsikiyatri.com/C19S4/382-389.pdf>
- Estes, J. P., Deyer, C. A., Hansen, R. A., & Russell, J. C. (1991). Influence of occupational therapy curricula on students' attitudes toward persons with disabilities. *American Journal of Occupational Therapy, 45*(2), 156-159. <https://doi.org/10.5014/ajot.45.2.156>
- Fidan, T., Ceyhun, H. E., & Kırpınar, İ. (2009). Gençlerin kullandığı başa çıkma tutumlarının intihar girişimi ile ilişkisi. *Klinik Psikofarmakoloji Bülteni, 19*(1), 214-216.
- Frydenberg, E., Care, E., Chan, E., & Freeman, E. (2009). Interrelationships between coping, school connectedness and wellbeing Erica Frydenberg. *Australian Journal of Education, 53*(3), 261-276. <https://doi.org/10.1177/000494410905300305>
- Grepmaier, L., Mitterlehner, F., Loew, T., Bachler, E., Rother, W., & Nickel, M. (2007). Promoting mindfulness in psychotherapists in training influences the treatment results of their patients: A randomized, double-blind, controlled study. *Psychotherapy and Psychosomatics, 76*(6), 332-338. <https://doi.org/10.1159/000107560>
- Hamarta, E. (2009). Ergenlerin sosyal kaygılarının kişilerarası problem çözme ve mükemmeliyetçilik açısından incelenmesi. *İlköğretim Online, 8*(3), 729-740. Retrieved from <http://ilkogretim-online.org.tr/vol8say3/v8s3m9.pdf>
- Hassed, C., De Lisle, S., Sullivan, G., & Pier, C. (2009). Enhancing the health of medical students: outcomes of an integrated mindfulness and lifestyle program. *Advances in Health Sciences Education, 14*(3), 387-398. <https://doi.org/10.1007/s10459-008-9125-3>
- Kabat-Zinn, J., & Hanh, T. N. (2009). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness*. Delta.
- Kasapoglu, F. (2013). *Üniversite öğrencilerinde iyilik hali ile özgeciler arasındaki ilişkinin incelenmesi* (Master's thesis, İnönü Üniversitesi). İnönü Üniversitesi, Malatya, Turkey. <http://hdl.handle.net/11616/1206>
- Krasner, M. S., Epstein, R. M., Beckman, H., Suchman, A. L., Chapman, B., Mooney, C. J., & Quill, T. E. (2009). Association of an educational program in mindful communication with burnout, empathy, and attitudes among primary care physicians. *Jama, 302*(12), 1284-1293. <https://doi.org/10.1001/jama.2009.1384>
- Kritsotakis, G., Galanis, P., Papastefanakis, E., Meidani, F., Philalithis, A. E., Kalokairinou, A., & Sourtzi, P. (2017). Attitudes towards people with physical or intellectual disabilities among nursing, social work and medical students. *Journal of Clinical Nursing, 26*, 4951-4963. <http://doi.org/10.1111/jocn.13988>
- Lam, W. Y., Gunukula, S. K., McGuigan, D., Symons, A. B., & Akl, E. A. (2010). Validated instruments used to measure attitudes of healthcare students and professionals towards patients with physical disability: a

- systematic review. *Journal of Neuroengineering and Rehabilitation*, 7(1), 55. <https://doi.org/10.1186/1743-0003-7-55>
- Landon, B. E., Reschovsky, J. D., Pham, H. H., & Blumenthal, D. (2006). Leaving medicine: the consequences of physician dissatisfaction. *Medical Care*, 44(3), 234-242. <https://doi.org/10.1097/01.mlr.0000199848.17133.9b>
- Lee, T., & Rodda, M. (1994). Modification of attitudes toward people with disabilities. *Canadian Journal of Rehabilitation*, 7(4), 229-238. Retrieved from <http://psycnet.apa.org/psycinfo/1995-13508-001>
- Ludwig, D. S., & Kabat-Zinn, J. (2008). Mindfulness in medicine. *Jama*, 300(11), 1350-1352. <https://doi.org/10.1001/jama.300.11.1350>
- Magaña, S., & Smith, M. J. (2006). Psychological distress and well-being of Latina and non-Latina white mothers of youth and adults with an autism spectrum disorder: Cultural attitudes towards coresidence status. *American Journal of Orthopsychiatry*, 76(3), 346-357. <http://dx.doi.org/10.1037/0002-9432.76.3.346>
- Miller, J. J., Fletcher, K., & Kabat-Zinn, J. (1995). Three-year follow-up and clinical implications of a mindfulness meditation-based stress reduction intervention in the treatment of anxiety disorders. *General Hospital Psychiatry*, 17(3), 192-200. [https://doi.org/10.1016/0163-8343\(95\)00025-M](https://doi.org/10.1016/0163-8343(95)00025-M)
- Myers, J. E., Sweeney, T. J., & Witmer, J. M. (2000). The wheel of wellness counseling for wellness: A holistic model for treatment planning. *Journal of Counseling & Development*, 78(3), 251-266. <https://doi.org/10.1002/j.1556-6676.2000.tb01906.x>
- Ndengeyingoma, A., & Ruel, J. (2016). Nurses' representations of caring for intellectually disabled patients and perceived needs to ensure quality care. *Journal of Clinical Nursing*, 25(21-22), 3199-3208. <https://doi.org/10.1111/jocn.13338>
- Novack, D. H., Epstein, R. M., & Paulsen, R. H. (1999). Toward creating physician-healers: fostering medical students' self-awareness, personal growth, and well-being. *ACADEMIC MEDICINE-PHILADELPHIA*, 74, 516-520. <https://doi.org/10.1097/00001888-199905000-00017>
- Öngen, D. (2006). The relationships between coping strategies and depression among Turkish adolescents. *Social Behavior and Personality: An International Journal*, 34(2), 181-196. <https://doi.org/10.2224/sbp.2006.34.2.181>
- Ozyesil, Z., Arslan, C., Kesici, Ş., & Deniz, M. E. (2011). Bilinçli farkındalık ölçeği'ni Türkçeye uyarlama çalışması. *Eğitim ve Bilim*, 36(160). Retrieved from <http://eb.ted.org.tr/index.php/EB/article/view/697/271>
- Ozyurek, M. (2006). *Engellilere yönelik tutumların değiştirilmesi*. Ankara: Kök Yayıncılık.
- Paris, M. J. (1993). Attitudes of medical students and health-care professionals toward people with disabilities. *Archives of Physical Medicine and Rehabilitation*, 74(8), 818-825. [https://doi.org/10.1016/0003-9993\(93\)90007-W](https://doi.org/10.1016/0003-9993(93)90007-W)
- Rillotta, F., & Nettelbeck, T. (2007). Effects of an awareness program on attitudes of students without an intellectual disability towards persons with an intellectual disability. *Journal of Intellectual and Developmental Disability*, 32(1), 19-27. <https://doi.org/10.1080/13668250701194042>
- Ryff, C. D. (1989). Beyond Ponce de Leon and life satisfaction: New directions in quest of successful ageing. *International Journal of Behavioral Development*, 12(1), 35-55. <https://doi.org/10.1177/016502548901200102>
- Reuben, D. B. (2007). Saving primary care. *The American Journal of Medicine*, 120(1), 99-102. <https://doi.org/10.1016/j.amjmed.2006.10.019>
- Shaunessy, E., & Suldo, S. M. (2010). Strategies used by intellectually gifted students to cope with stress during their participation in a high school International Baccalaureate program. *Gifted Child Quarterly*, 54(2), 127-137. <https://doi.org/10.1177/0016986209355977>
- Shapiro, S. L., Carlson, L. E., Astin, J. A., & Freedman, B. (2006). Mechanisms of mindfulness. *Journal of Clinical Psychology*, 62(3), 373-386. <https://doi.org/10.1002/jclp.20237>
- Stoeber, J., & Janssen, D. P. (2011). Perfectionism and coping with daily failures: Positive reframing helps achieve satisfaction at the end of the day. *Anxiety, Stress & Coping*, 24(5), 477-497. <http://doi.org/10.1080/10615806.2011.562977>



- Swarbrick, M. (2006). A wellness approach. *Psychiatric Rehabilitation Journal*, 29(4), 311. <http://dx.doi.org/10.2975/29.2006.311.314>
- Sahin, H., & Bekir, H. (2016). Üniversite öğrencilerinin engellilere yönelik tutumlarının belirlenmesi. *Türkiye Sosyal Araştırmalar Dergisi*, (3), 767-779. Retrieved from <http://dergipark.gov.tr/download/article-file/355942>
- Tait, K., & Purdie, N. (2000). Attitudes toward disability: Teacher education for inclusive environments in an Australian university. *International Journal of Disability, Development and Education*, 47(1), 25-38. <https://doi.org/10.1080/103491200116110>
- The National Wellness Institutes. (2016). Definition of Wellness. Retrieved from [http://www.nationalwellness.org/?page=Six\\_Dimensions](http://www.nationalwellness.org/?page=Six_Dimensions)
- Tervo, R. C., Azuma, S., Palmer, G., & Redinius, P. (2002). Medical students' attitudes toward persons with disability: a comparative study. *Archives of Physical Medicine and Rehabilitation*, 83(11), 1537-1542. <https://doi.org/10.1053/apmr.2002.34620>
- Tervo, R. C., & Palmer, G. (2004). Health professional student attitudes towards people with disability. *Clinical Rehabilitation*, 18(8), 908-915. <https://doi.org/10.1191/0269215504cr820oa>
- Turkish Statistics Institute. (2016). Türkiye Özürlü İstatistik Sonuçları. Retrieved from [http://www.tuik.gov.tr/PreTablo.do?alt\\_id=1017](http://www.tuik.gov.tr/PreTablo.do?alt_id=1017)
- White, M. J., & Olson, R. S. (1998). Attitudes toward people with disabilities: a comparison of rehabilitation nurses, occupational therapists, and physical therapists. *Rehabilitation Nursing*, 23(3), 126-131. <https://doi.org/10.1002/j.2048-7940.1998.tb01764.x>
- Williams, E. S., Konrad, T. R., Scheckler, W. E., Pathman, D. E., Linzer, M., McMurray, J. E., ... & Schwartz, M. (2001). Understanding physicians: Intentions to withdraw from practice: The role of job satisfaction, job stress, mental and physical health. *Advances in Health Care Management* (pp. 243-262). Emerald Group Publishing Limited. [https://doi.org/10.1016/S1474-8231\(01\)02029-8](https://doi.org/10.1016/S1474-8231(01)02029-8)
- Yuker, H. E. (1994). Variables that influence attitudes toward persons with disabilities: Conclusions from the data. *Journal of Social Behavior and Personality*, 9(5), 3.
- Yuker, H. E., & Block, J. R. (1986). Research with the Attitude Toward Disabled Persons scales (ATDP) 1960-1985.

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