

The Mediating Role of Confidence in the Relationship Between Perfectionism and Mental Well-Being in Athletes-Students

Sporcu-Öğrencilerde Mükemmeliyetçilik ve Mental İyi Oluş Arasındaki İlişkide Güvenin Aracı Rolü

Volkan ÖZCAN¹ 

Gönderim: 10/03/2023

Düzeltilme: 25/05/2023

Kabul: 28/05/2023

ABSTRACT

This cross-sectional study aims to examine the relationship between perfectionism and mental well-being and the mediating role of self-confidence. A total of 277 athlete-students, 166 males and 111 females, aged between 18 and 30, who were studying at different educational levels in the 2022-2023 academic year, participated in the study. Participants completed the perfectionism, confidence, which is a sub-dimension of the mental resilience scale, and mental well-being scales through an online questionnaire. Data were analyzed using descriptive statistics, Pearson correlations and mediation analysis. The results showed that there was a negative relationship between perfectionism and mental well-being. Likewise, a positive relationship was found between self-confidence and mental well-being. The findings also revealed a negative relationship between perfectionism and self-confidence. Mediation analysis showed that self-confidence played a partial mediating role in the relationship between perfectionism and mental well-being. This study has important implications for interventions aimed at improving mental well-being in student athletes. Focusing on improving self-confidence and providing support to individuals with perfectionistic tendencies has the potential to increase mental well-being. Furthermore, programs that aim to increase athletes' self-confidence, interpersonal relationships, self-awareness, and skill development may also support mental well-being. In conclusion, this study shows that self-confidence mediates the relationship between perfectionism, self-confidence and mental well-being. Understanding and addressing these relationships provides important information for developing interventions and programs that promote mental well-being in university students.

Keywords: Perfectionism, mental well-being, confidence, athletes-students.

ÖZET

Bu kesitsel çalışma, mükemmeliyetçilik ve mental iyi oluş arasındaki ilişkiyi ve özgüvenin aracılık rolünü incelemeyi amaçlamaktadır. Araştırmaya 2022-2023 Eğitim-öğretim yılında farklı eğitim kademelerinde öğrenim gören yaşları 18 ile 30 arasında değişen düzenli olarak spor yapan 166'sı erkek ve 111'i kadın olmak üzere toplam 277 sporcu-öğrenci katılmıştır. Katılımcılar çevrimiçi bir anket aracılığıyla mükemmeliyetçilik, mental dayanıklılık ölçeğinin alt boyutu olan güven ve mental iyi oluş ölçeklerini tamamlamıştır. Veriler tanımlayıcı istatistikler, Pearson korelasyonları ve aracılık analizi kullanılarak analiz edilmiştir. Sonuçlar, mükemmeliyetçilik ile mental iyi oluş arasında negatif bir ilişki olduğunu göstermiştir. Aynı şekilde, özgüven ile mental iyi oluş arasında pozitif bir ilişki bulunmuştur. Bulgular ayrıca, mükemmeliyetçilik ile özgüven arasında negatif bir ilişki olduğunu ortaya koymuştur. Aracılık analizi, özgüvenin mükemmeliyetçilik ile mental iyi oluş arasındaki ilişkide kısmi bir aracılık rolü oynadığını göstermiştir. Bu çalışmanın sporcu öğrencilerinde mental iyi oluşu geliştirmeyi amaçlayan müdahalelere yönelik önemli uygulamaları bulunmaktadır. Özgüvenin geliştirilmesine odaklanmak ve mükemmeliyetçilik eğilimlerine sahip bireylere destek sağlamak, mental iyi oluşu artırma potansiyeline sahiptir. Ayrıca, sporcuların özgüvenlerini, kişilerarası ilişkilerini, öz-farkındalıklarını ve beceri gelişimlerini artırmayı hedefleyen programlar da mental iyi oluşu destekleyebilir. Sonuç olarak, bu çalışma mükemmeliyetçilik, özgüven ve mental iyi oluş arasındaki ilişkide özgüvenin aracılık rolü olduğunu göstermektedir. Bu ilişkilerin anlaşılması ve ele alınması, üniversite öğrencilerinde mental iyi oluşu teşvik eden müdahaleler ve programlar geliştirmek için önemli bir bilgi sağlamaktadır.

Anahtar Kelimeler: Mükemmeliyetçilik, mental iyi oluş, güven, sporcu öğrenciler.

Önerilen atf: Özcan, V. (2023). The mediating role of confidence in the relationship between perfectionism and mental well-being in athletes-students. *Uluslararası Psiko-Sosyal Eğitim Araştırmaları Dergisi*, 3(4), 139-151.

¹ Doktor Öğretim Üyesi, Artvin Çoruh Üniversitesi, vozcan@artvin.edu.tr

INTRODUCTION

Psychology proposes a holistic concept of well-being that combines two notions of well-being: the "hedonic" approach, rooted in the balance of positive and negative emotions and the individual's happiness, and the "eudaimonic" approach, based on an individual's understanding of how to be well. (Keyes, 2002). The hedonic approach, also referred to as subjective well-being, defines well-being as experiencing frequent positive emotions, less frequent negative emotions, and deriving satisfaction from life. In other words, it primarily focuses on "happiness," often described as the presence of positive emotions and the absence of negative emotions (Huta & Ryan, 2010; Bal & Gülcan, 2014). On the other hand, the eudaimonic approach is based on the idea that an individual's well-being is rooted in self-acceptance, effective interpersonal relationships, autonomy, finding meaning and purpose in life, and personal growth through utilizing environmental opportunities. In short, it centers on "living a fully and deeply satisfying life" (Rahmani et al., 2018; Diener, 1984; Ryan & Deci, 2001). The state of well-being is explained as individuals experiencing more positive emotions and fewer negative emotions in their lives (Myers & Diener, 1995). Therefore, both concepts of well-being complement each other in different ways, ultimately contributing to the emergence of the concept of mental well-being.

Mental (psychological) well-being encompasses an individual's awareness of their life goals, their recognition of their potential, and the quality of their relationships with others (Ryff & Keyes, 1995). The World Health Organization (2022a) defines mental well-being as a state of well-being in which an individual is aware of their abilities, can cope with stressful situations in their life, and can contribute to their life by achieving productivity and effectiveness. Another definition reflects an individual's positive self-perception, even when aware of their limitations, their ability to develop secure and warm relationships with others, their capacity to shape their environment to meet individual needs and desires, their ability to act autonomously and independently, their sense of purpose and meaning in life, their awareness of their capacity, and their efforts to enhance this capacity (Keyes et al., 2002). Individuals with high levels of mental well-being tend to be curious about themselves and their surroundings, continuously inclined towards learning. They express themselves creatively and derive happiness (well-being) when their needs are met (Ryff & Keyes, 1995). People feeling mentally well are often more capable of coping with the problems they encounter. Research studies suggest that individuals with high levels of mental well-being tend to have very good physical and psychological health (Keyes, 2002; Keyes et al., 2010a). When examining research on this topic, it is evident that athletes with positive psychological states and high levels of mental well-being tend to be in better physical health. Indeed, numerous studies in the literature have yielded positive results regarding the relationship between sports and mental well-being (Keyes, 2005; Keyes et al., 2010a; Keyes et al., 2010b; Yarayan et al., 2018).

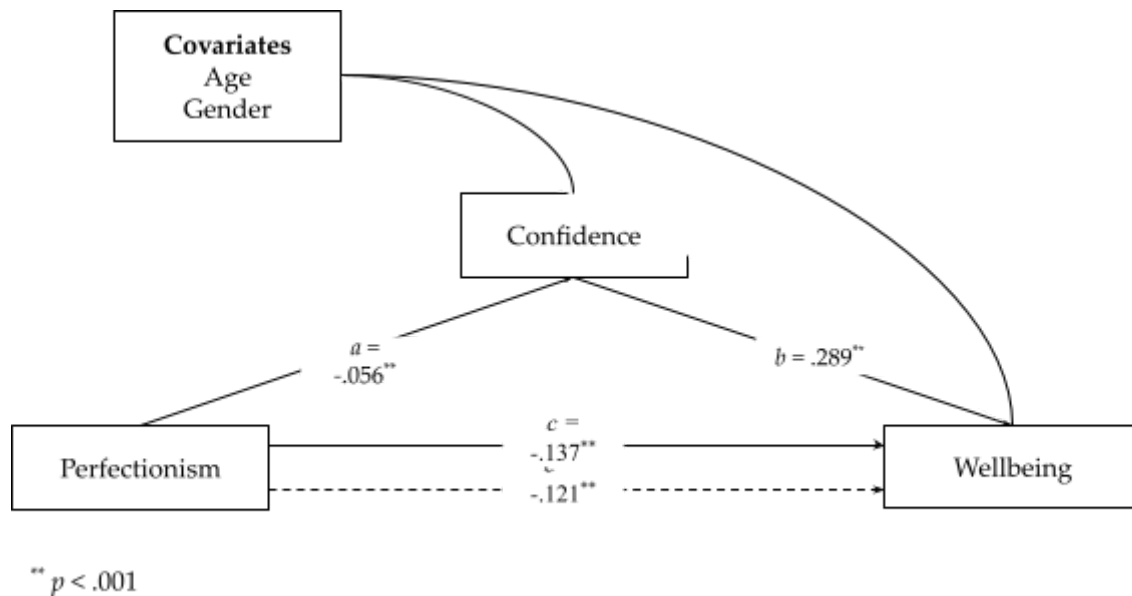
Although perfectionism has been defined by numerous researchers to date, there is no universally accepted single definition for perfectionism (Hewitt & Flett, 2002). In initial definitions, perfectionism was portrayed as a unidimensional negative concept, focusing

solely on its pathological aspects (Stoeber & Joormann, 2001). However, subsequent studies began to emphasize that perfectionism encompasses both positive and negative dimensions (Frost et al., 1990; Rice et al., 1998; Schuler, 2002). An increase in perfectionism is particularly concerning because excessive perfectionism is associated with a range of mental health issues. According to a meta-analysis of 284 studies, high levels of perfectionism have been linked to depression, anxiety, eating disorders, deliberate self-harm, and obsessive-compulsive behaviors. Striving for perfection often leads individuals to experience problems such as fatigue, stress, headaches, and insomnia (Limburg et al., 2017). On the other hand, perfectionism's desire to achieve the best possible results can have positive contributions in settings such as school, sports, and the workplace by enhancing performance. These findings can be seen as evidence that individuals displaying perfectionism set high goals, work diligently, and demonstrate dedication to their objectives (Limburg et al., 2017; Verner-Filion & Gaudreau, 2010; Stoeber & Kersting, 2007). Therefore, it can be said that perfectionism has both enhancing and diminishing qualities concerning individuals' mental well-being, in other words, their states of well-being.

Another characteristic that influences mental well-being is confidence. Confidence is defined as the belief in the successful execution of a desired behavior and plays a profound role in one's belief about whether they can complete a specific task (Weinberg & Gould, 2019). According to Bandura (1997), individuals with high self-efficacy, those who have confidence in their coping abilities, appear to cope more effectively with stress (Bandura, 1997). In the context of sports, it is noted that confidence is the most consistent factor in distinguishing successful athletes from less successful ones (Gould et al., 1999; Bačanac et al., 2014; Sar & Isilkar, 2012). Therefore, it can be stated that a high sense of confidence has a positive impact on both athletic success and mental well-being. Moreover, facing challenges and finding meaning in sports, where athletes discover themselves in terms of the significance of sports in their lives, providing opportunities for personal development, and determining what athletes can achieve can be a way to gain self-confidence (Tamminen et al., 2013).

Taking into consideration all the mentioned information, it can be stated that positive perfectionism may enhance confidence, and confidence, in turn, could increase the level of mental well-being. Considering the existing research data on the relationship between perfectionism, confidence, and mental well-being, it suggests that confidence may play a mediating role in the relationship between perfectionism and mental well-being. Therefore, in the current study, the mediating role of confidence in the relationship between athletes' perfectionism tendencies and their mental well-being has been assessed. In other words, it was hypothesized that perfectionism tendencies may increase confidence, and this increase in confidence could positively influence athletes' mental well-being. The structural model used in the research is presented in Figure 1.

Figure 1. Indirect association between perfectionism and wellbeing via confidence



METHOD

Participants and procedure

The current cross-sectional study was conducted with a convenience sample of athletes-students. The final sample consisted of 277 participants, ranging in age from 18 to 30 years ($M = 21.75$ years, $SD = 2.02$). Among the participants, there were 111 females (40.1%) and 166 males (59.9%). In terms of academic year, 53 participants (19.1%) were freshmen, 60 (21.7%) were sophomores, 90 (32.5%) were junior students, and 74 (26.7%) were senior students. Regarding the distribution of majors, 22 participants (79%) were in the field of coaching, 133 (48%) were in teaching, 61 (22%) were in recreation, and 60 (21.7%) were in management. Furthermore, 222 participants (80.1%) engaged in team sports, while 55 participants (19.9%) participated in individual sports.

The data for the study were collected online. The online survey link was distributed to participants through both social media channels and university lecturers. The data collection process ensured anonymity, and participants were informed about the purpose of the study and asked to provide informed consent. Emphasis was placed on voluntary participation, and participants were informed that they could withdraw from the study at any time. The surveys were designed to be completed within a short time frame of approximately 6-8 minutes.

Measures

Multi-Dimensional Perfectionism Scale. The adaptation of the scale developed by Hewitt and Flett (1991) into Turkish was carried out by Oral (1999). The scale consists of 45 items and uses a 7-point Likert-type scale. The scale has three subscales, which are self-oriented perfectionism, other-oriented perfectionism, and socially prescribed perfectionism. The total variance explained by these three factors is 31%. When examining reliability calculations, Cronbach's Alpha coefficients were found to be .91 for the self-oriented perfectionism subscale, .73 for the other-oriented perfectionism subscale, and .80 for the socially prescribed perfectionism subscale (Oral, 1999). Additionally, Tuncer and Voltan-Acar (2006) examined Cronbach's Alpha coefficients in the context of the reliability of the Multidimensional Perfectionism Scale and found them to be .86 for total perfectionism, .86 for self-oriented perfectionism subscale, .65 for other-oriented perfectionism subscale, and .78 for socially prescribed perfectionism subscale.

Warwick-Edinburgh Mental Well-being Scale (WEMWBS). WEMWBS (2007) by Tennant et al. was developed to measure the level of mental well-being of individuals residing in the United Kingdom. WEMWBS consists of 14 items and aims to address individuals' positive mental health by encompassing both psychological well-being and subjective well-being. The scale is a 5-point Likert scale, and scores on the scale range from a minimum of 14 to a maximum of 70 points. The scoring of the scale is as follows: 1 (strongly disagree), 2 (disagree), 3 (somewhat agree), 4 (agree), and 5 (strongly agree). All items on the scale are positively worded. Reliability studies of the scale were conducted with individuals aged 16 and above. The internal consistency reliability of the scale was calculated using data obtained from 348 individuals, and the Cronbach's Alpha coefficient for the scale was found to be .89. Test-retest reliability of the scale was conducted with 124 individuals over a one-week interval. The correlation coefficient obtained from these tests was .83.

Sports Mental Toughness Questionnaire(SMTQ). Developed by Sheard et al. (2009), this scale was created by drawing upon previous research and raw data related to mental toughness. The scale consists of three sub-factors: Confidence, Constancy, and Control. The initial version of the scale comprised 14 items, which were scored on a 4-point Likert scale. However, during the validity-reliability study, confirmatory factor analysis was conducted, and the first item was removed, resulting in the Turkish version of the scale consisting of 13 items. The items of the scale are scored on a 4-point Likert scale as follows: 1 (definitely true), 2 (usually true), 3 (rarely true), and 4 (not true at all). According to the results of the confirmatory factor analysis (CFA), all fit indices indicated "good fit," and the t-values were significant at the 0.01 level. These findings demonstrate that the scale exhibited a good fit. The calculated Cronbach Alpha values for the sub-dimensions of the scale were as follows: .81 for the Confidence sub-dimension, .80 for the Constancy sub-dimension, and .83 for the Control sub-dimension. The overall Cronbach Alpha value for the entire scale was found to be 0.72.

Statistical Assessment

In the statistical assessment, preliminary analyses such as Pearson correlations, means, and standard deviations were conducted for all study variables. To test whether the sense of

trust mediates the relationship between perfectionism and mental well-being, Model 4 of the PROCESS macro developed by Hayes (2018) was used. This macro is based on regression-based bootstrapping analysis and involved 5,000 resampling iterations to generate coefficients and confidence intervals. If the confidence intervals generated do not include zero (0), it indicates that the coefficient is statistically significant (Hayes, 2018).

Ethical Statements

Prior to the start of the study, permission to conduct research was obtained from Artvin Coruh University Scientific Research and Publication Ethics Committee (Date: 03.10.2022, number: E-18457941-050.99-64634).

RESULTS

Descriptive Statistics

Bivariate Pearson correlations were examined to investigate the relationships among the study variables, as shown in Table 1. Consistent with expectations, there was a significant negative relationship between mental well-being and perfectionism ($r = -.379$, $p < .01$). Additionally, a significant positive relationship was found between confidence and mental well-being ($r = .262$, $p < .01$). On the other hand, a significant negative relationship was observed between perfectionism and confidence ($r = -.273$, $p < .01$).

Table 1. Descriptive and correlations

Variable	Mental wellbeing	Perfectionism	Confidence
Mental well-being	–		
Perfectionism	-.379**	–	
Confidence	.262**	-.273**	–
Mean	55.84	157.88	27.74
SD	9.13	24.87	5.18
Skewness	-.682	.245	.315
Kurtosis	.122	.316	.298

Evaluation of Statistical Assumptions

Before proceeding to the mediation analysis, the assumptions were evaluated. Skewness and kurtosis values ($> \pm 2$; George & Mallery, 2010) were checked for normality, and the assumption was made. Multicollinearity was checked with variance inflated factor (VIF), tolerance, and Durbin-Watson (DW) value. The VIF was found to be 1.08, and the tolerance was .926, indicating no issues with multicollinearity according to Field's (2013) recommendation. Additionally, the DW value was determined as 1.78, suggesting no significant correlations between the residuals. These findings indicate that the assumptions of

normality and absence of multicollinearity were met, allowing for the appropriate application of the mediation analysis.

Mediation Analyses

Using the PROCESS model 4, the analysis examined the mediating role of confidence in the relationship between perfectionism and mental well-being, as depicted in Table 2 and Figure 1. In Table 2, the coefficients and significance levels are provided for the direct effect of perfectionism on mental well-being, the direct effect of confidence on mental well-being, the indirect effect of perfectionism on mental well-being through confidence (mediation effect), and the total effect of perfectionism on mental well-being (including both direct and indirect effects). Figure 1 visually represents the mediation model, illustrating the paths between perfectionism, confidence, and mental well-being. The results indicated a significant total direct effect (*path c*) of perfectionism on mental well-being ($B = -.137$, 95% CI = $-.178, -.0974$), significant direct effect (*path c'*) ($B = -.121$, 95% CI = $-.162, -.080$), and a significant indirect effect via confidence ($B = -.044$, 95% CI = $-.085, -.010$). The results also showed that perfectionism was associated with lower confidence scores (*path a*; $B = -.056$, $p = 0.001$). Ek olarak confidence de mental well-being ile pozitif yordamaktadır (*path b*; $B = .289$, $p = .001$).

DISCUSSION

The findings of the study demonstrate that confidence partially mediates the relationship between perfectionism and mental well-being. In this framework, individuals with positive perfectionism tendencies tend to have higher levels of confidence, which in turn leads to increased levels of mental well-being. In other words, perfectionism enhances mental well-being through the mediating role of confidence.

Although research examining the relationship between perfectionism, confidence, and mental well-being within a single model is scarce, previous studies have separately investigated the relationships among these variables. Existing research indicates that perfectionism is associated with confidence (Koivula et al., 2002; Gotwals et al., 2003) and mental well-being (Stoeber & Becker, 2008; Sagar & Stoeber, 2009), with these variables predicting each other. Notably, the relationship between perfectionism and mental well-being in this pathway is found to be negatively oriented (Limburg et al., 2017). However, upon examining the findings of the current study, it is evident that perfectionism is negatively related to both confidence and mental well-being, while confidence is positively related to mental well-being. Therefore, the findings of the present study align with previous research investigating the relationships between mental well-being, confidence, and perfectionism. Additionally, this study contributes to the literature by highlighting that perfectionism enhances mental well-being indirectly through the mediating role of confidence, providing insights into the nature of these relationships when examined together.

When examining the characteristics of individuals with high levels of mental well-being, they are typically individuals who are aware of their abilities, make efforts to develop their skills, have positive self-perceptions, possess self-confidence, maintain healthy

interpersonal relationships, adapt easily to their environment, and are productive and beneficial to society (Keldal, 2015; World Health Organisation, 2022b). Furthermore, a series of studies have demonstrated a consistent relationship between an athlete's self-confidence and athletic performance (Beattie et al., 2004; Craft et al., 2003; Marsh & Perry, 2005; Sheldon & Eccles, 2005; Woodman & Hardy, 2003). Therefore, it can be suggested that another way to enhance athletes' mental well-being and athletic performance within the context of these positive qualities is to provide them with professional support to develop their confidence and perfectionism tendencies. In this regard, offering programs designed by sport psychologists and experts that facilitate the enhancement of athletes' confidence, effective interpersonal relationships, adaptation to new social environments, self-awareness, and skill development could be an effective approach to improving athletes' levels of mental well-being.

Overall, the findings of this study contribute to the understanding of the relationships among mental well-being, confidence, and perfectionism, and highlight the potential role of interventions aimed at enhancing athletes' mental well-being through the development of their confidence and perfectionism tendencies.

Conclusions

Emotions and rationality constantly influence each other, and this applies not only to athletes but to all individuals. However, emotions and rationality have particular significance for athletes due to the expectation of "performance." In order to achieve the desired high performance in sports and maintain an optimal level of performance, it is necessary to develop mental and psychological skills. Confident athletes believe in themselves and, more importantly, believe that they have the necessary potential to succeed by unleashing their physical and mental abilities. This confidence helps high-confidence athletes remain calm and composed even under stress, enabling them to focus on more positive thoughts (Yıldırım, 2013). Indeed, in a study, it was found that an increase in the sense of confidence leads to a decrease in negativity arising from perfectionism, thus promoting mental well-being. In this regard, the development of a sense of confidence is considered important in overcoming the negative effects of perfectionism, coping with stress, and enhancing and preserving mental well-being. As a result, it can be argued that the development of a sense of confidence in athletes can have positive effects on their mental health. Athletes with high confidence experience constructive emotions like happiness and joy, while low confidence can lead to negative and anxious thoughts that negatively affect performance. Low confidence reduces the likelihood of success by reducing effort and perseverance (Shaw et al., 2005).

A decrease in the belief in perfectionism can lead to anxiety and a decrease in confidence in sports (Koivula et al., 2002). In the development of a sense of confidence in athletes, not only their abilities but also positive responses from their environment are important. Supporting and rewarding athletes, as well as directing them to sports they can be successful in, increasing their motivation for success, contribute to the development of self-confidence and positively impact well-being. Additionally, regarding perfectionism, factors such as fear of making mistakes, organization, high personal standards, parental

expectations, parental criticism, and suspicion of actions are associated with negative factors that affect well-being, such as depression and stress, but high personal standards are positively associated (Frost et al., 1990). Particularly, sensitive and insecure individuals can be vulnerable in the face of perfectionism (Hollender, 1965). This situation can often arise in sports environments. Therefore, raising awareness among athletes' social environment, especially their families and coaches, is important in order to develop their sense of confidence and to avoid the negative effects associated with perfectionism.

In conclusion, sports clubs and institutions associated with sports, including government organizations, can help raise awareness among athletes, coaches, and families regarding the levels of perfectionism, confidence, and mental well-being. By identifying the areas in which athletes need to develop their mental well-being and providing various educational programs to help them improve and enhance their performance, their mental well-being can be improved.

Limitations and Suggestions

This study has some limitations. Firstly, the research was conducted with university athletes-students only, which limits the generalizability of the findings to university students. Therefore, further research with participants from different developmental periods is needed. Additionally, the data in this study were collected using self-report measurement tools, which rely on participants' self-perception. To enhance the scientific knowledge on the topic, future research can employ various methods such as interviews, peer evaluations, and so on. Finally, conducting new research with different participant groups and utilizing different research methods can contribute significantly to the literature on perfectionism, confidence, and mental well-being.

REFERENCES

- Awad, E., Hallit, S. & Obeid, S. Does self-esteem mediate the association between perfectionism and mindfulness among Lebanese university students? *BMC Psychol* 10, 256 (2022). <https://doi.org/10.1186/s40359-022-00964-9>
- Baćanac, L., Milićević-Marinković, B., Kasum, G., & Marinković, M. (2014). Competitive Anxiety, Self-Confidence and Psychological Skills in Top Athletes With And Without Disabilities: Pilot Study. *Facta Universitatis. Series physical education and sport*, 12, 59-70.
- Bandura, A. (1997). *Self-Efficacy: The Exercise of Control*. WH Freeman/Times Books/Henry Holt & Co., New York.
- Beattie, S., Hardy, L., & Woodman, T. (2004). Precompetition self-confidence: The role of the self. *Journal of Sport & Exercise Psychology*, 26(3), 427–441.
- Craft, L. L., Magyar, T. M., Becker, B. J., & Feltz, D. L. (2003). The relationship between the Competitive State Anxiety Inventory-2 and sport performance: A meta-analysis. *Journal of Sport & Exercise Psychology*, 25(1), 44–65.
- Diener, E. (1984). Subjective well-being, *Psychological Bulletin*, 95, 542-575.
- Field, A. (2013) *Discovering Statistics Using IBM SPSS Statistics: And Sex and Drugs and Rock “N” Roll*, 4th Edition, Sage, Los Angeles, London, New Delhi.
- Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive therapy and research*, 14(5), 449-468. <https://doi.org/10.1007/BF01172967>
- George, D., & Mallery, P. (2010). *SPSS For Windows Step by Step: A Simple Guide and Reference 17.0 Update (10th Edition)*. Pearson, Boston.
- Gotwals, J. K., Dunn, J. G. H., & Wayment, H. A. (2003). An examination of perfectionism and self-esteem in intercollegiate athletes. *Journal of Sport Behavior*, 26(1), 17–38.
- Gould, D., Greenleaf, C., Lauer, L., & Chung, Y. (1999). Lessons from Nagano. *Olympic Coach*, 9 (3), 2-5.
- Gürkan, U. & Top, A. (2019). Genç ve yetişkinlerde duygusal zekâ ve mutluluk düzeyinin bazı değişkenlere göre incelenmesi. *Avrasya Sosyal ve Ekonomi Araştırmaları Dergisi*, 6 (7), 113-132. <https://dergipark.org.tr/pub/asead/issue/47889/605264>
- Hayes, A. F. (2018). *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach (Methodology in the Social Sciences) (2nd ed.)*. New York, NY: The Guilford Press.
- Hewitt, P. L., & Flett, G. L. (1991). Perfectionism in the self and social contexts: Conceptualization, assessment, and association with psychopathology. *Journal of Personality and Social Psychology*, 60(3), 456–470. <https://doi.org/10.1037/0022-3514.60.3.456>
- Hewitt, P. L., & Flett, G. L. (2002). Perfectionism and Stress Processes in Psychopathology. In G. L. Flett, & P. L. Hewitt (Eds.), *Perfectionism: Theory, Research, and Treatment* (pp. 255-284). Washington DC: American Psychological Association. <https://doi.org/10.1037/10458-011>
- Hollender, M. H. (1965). Perfectionism. *Comprehensive Psychiatry*, 6, 94-103.
- Huta, V., & Ryan, R. M. (2010). Pursuing pleasure or virtue: The differential and overlapping well-being benefits of hedonic and eudaimonic motives. *Journal of Happiness Studies: An*

- Interdisciplinary Forum on Subjective Well-Being*, 11(6), 735–762. <https://doi.org/10.1007/s10902-009-9171-4>
- Keldal, G. (2015). Warwick-Edinburgh Mental İyi Oluş Ölçeği'nin Türkçe Formu: Geçerlik ve güvenilirlik çalışması. *J Happiness Well-Being*, 3, 103-115.
- Keyes, C. L. (2002). The mental health continuum: From languishing to flourishing in life. *Journal of Health and Social Behavior*, 43(2), 207-222.
- Keyes, C. L. M., Dhingra, S. S., & Simoes, E. J. (2010a). Change in Level of Positive Mental Health as a Predictor of Future Risk of Mental Illness. *American Journal of Public Health*, 100, 2366-2371. <https://doi.org/10.2105/AJPH.2010.192245>
- Keyes, C. L. M., Shmotkin, D., & Ryff, C. D. (2002). Optimizing well-being: The empirical encounter of two traditions. *Journal of Personality and Social Psychology*, 82(6), 1007–1022. <https://doi.org/10.1037/0022-3514.82.6.1007>
- Keyes, C. L., Myers, J. M., & Kendler, K. S. (2010b). The structure of the genetic and environmental influences on mental well-being. *American Journal of Public Health*, 100(12), 2379-2384. <https://doi.org/10.2105/AJPH.2010.193615>
- Koivula, N., Hassmén, P., & Fallby, J. (2002). Self-esteem and perfectionism in elite athletes: Effects on competitive anxiety and self-confidence. *Personality and individual differences*, 32(5), 865-875. [https://doi.org/10.1016/S0191-8869\(01\)00092-7](https://doi.org/10.1016/S0191-8869(01)00092-7)
- Limburg, K., Watson, H. J., Hagger, M. S., & Egan, S. J. (2017). The relationship between perfectionism and psychopathology: A meta-analysis. *Journal of Clinical Psychology*, 73(10), 1301–1326. <https://doi.org/10.1002/jclp.22435>
- Marsh, H. W., & Perry, C. (2005). Does a positive self-concept contribute to winning gold medals in elite swimming? The causal ordering of elite athlete self-concept and championship performances. *Journal of Sport and Exercise Psychology*, 27, 71-91.
- Myers, D. G., & Diener, E. (1995). Who is happy? *Psychological Science*, 6(1), 10–19. <https://doi.org/10.1111/j.1467-9280.1995.tb00298.x>
- Oral, M. (1999). The relationship between dimensions of perfectionism, stressful life events and depressive symptoms in university students 'a test of diathesis-stress model of depression' [M.S. - Master of Science]. Middle East Technical University.
- Rahmani, K., Gnoth, J., & Mather, D. (2018). Hedonic and eudaimonic well-being: A psycholinguistic view, *Tourism Management*, 69, 155-166.
- Rice, K. G., Ashby, J. S., & Slaney, R. B. (1998). Self-esteem as a mediator between perfectionism and depression: A structural equations analysis. *Journal of Counseling Psychology*, 45(3), 304–314. <https://doi.org/10.1037/0022-0167.45.3.304>
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52, 141–166. <https://doi.org/10.1146/annurev.psych.52.1.141>
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69(4), 719–727. <https://doi.org/10.1037/0022-3514.69.4.719>

- Sagar, S. S., & Stoeber, J. (2009). Perfectionism, fear of failure, and affective responses to success and failure: the central role of fear of experiencing shame and embarrassment. *Journal of sport & exercise psychology*, 31(5), 602–627. <https://doi.org/10.1123/jsep.31.5.602>
- Schuler, P. (2002). Perfectionism in gifted children and adolescents. In M. Neihart, S. M. Reis, N. M. Robinson, & S. M. Moon (Eds.), *The social and emotional development of gifted children: What do we know?* (pp. 71–79). Prufrock Press Inc..
- Shaw, D., Gorely, & T., Corban, R. (2005): Sport and exercise psychology. Oxon, UK: BIOS Scientific Publishers.
- Sheard, M., Golby, J., & Van Wersch, A. (2009). Progress towards construct validation of the Sports Mental Toughness Questionnaire (SMTQ). *European Journal of Psychological Assessment*, 25, 186-193. <https://doi.org/10.1027/1015-5759.25.3.186>
- Sheldon, J. P., & Eccles, J. S. (2005). Physical and psychological predictors of perceived ability in adult male and female tennis players. *Journal of Applied Sport Psychology*, 17(1), 48-63. <https://doi.org/10.1080/10413200590907568>
- Stoeber, J., & Becker, C. (2008). Perfectionism, achievement motives, and attribution of success and failure in female soccer players. *International Journal of Psychology*, 43, 980-987. <https://doi.org/10.1080/00207590701403850>
- Stoeber, J., & Joormann, J. (2001). Worry, procrastination, and perfectionism: Differentiating amount of worry, pathological worry, anxiety, and depression. *Cognitive Therapy and Research*, 25(1), 49-60. <https://doi.org/10.1023/A:1026474715384>
- Stoeber, J., & Kersting, M. (2007). Perfectionism and aptitude test performance: Testees who strive for perfection achieve better test results. *Personality and Individual Differences*, 42(6), 1093–1103. <https://doi.org/10.1016/j.paid.2006.09.012>
- Şar, A. H., & Işıklar, A. (2012). Examination of locus of control, subjective well-being and optimism as the predictors of sport confidence. *Nigde University Journal of Physical Education And Sport Sciences*, 6(1), 76-84.
- Tamminen, K. A., Holt, N. L., & Neely, K. C. (2013). Exploring adversity and the potential for growth among elite female athletes. *Psychology of Sport and Exercise*, 14(1), 28–36. <https://doi.org/10.1016/j.psychsport.2012.07.002>
- Tennant, R., Hiller, L., Fishwick, R., Platt, S., Joseph, S., Weich, S., Parkinson, J., Secker, J., & Stewart-Brown, S. (2007). The Warwick-Edinburgh Mental Well-Being Scale (WEMWBS): Development and UK validation. *Health and Quality of Life Outcomes*, 5(1), 50-63. <https://doi.org/10.1186/1477-7525-5-63>
- Tuncer, B., & Voltan-acar, N. (2006). Kaygı Düzeyleri Farklı Üniversite Hazırlık Sınıfı Öğrencilerinin Mükemmeliyetçilik Özelliklerinin incelenmesi. *Kriz Dergisi*, 14 (2), 1-15. https://doi.org/10.1501/Kriz_0000000247
- Verner-Filion, J., & Gaudreau, P. (2010). From perfectionism to academic adjustment: The mediating role of achievement goals. *Personality and Individual Differences*, 49(3), 181–186. <https://doi.org/10.1016/j.paid.2010.03.029>
- Weinberg, R., & Gould, D. (2019). Foundations of sport and exercise psychology. Champaign, IL: Human Kinetics.

- Woodman, T., & Hardy, L. (2003). The relative impact of cognitive anxiety and self-confidence upon sport performance: A meta-analysis. *Journal of Sport Sciences*, 21, 443-457. <https://doi.org/10.1080/0264041031000101809>
- World Health Organization. (2022a). Mental health: strengthening our response. <https://www.who.int/news-room/factsheets/detail/mental-health-strengthening-our-response> adresinden 18 Ocak 2023 tarihinde alınmıştır.
- World Health Organization. (2022b). World mental health report: transforming mental health for all. World Health Organization. <https://apps.who.int/iris/handle/10665/356119>.
- Yarayan, Y. E., Yıldız, A. B., & Gülşen, D. B. A. (2018). Elit düzeyde bireysel ve takım sporu yapan sporcuların zihinsel dayanıklılık düzeylerinin çeşitli değişkenlere göre incelenmesi. *Uluslararası Sosyal Araştırmalar Dergisi*, 11(57), 992-999. <http://dx.doi.org/10.17719/jisr.2018.2509>
- Yıldırım, F. (2013). Sportif sürekli kendine güven alt ölçeğinin uyarlanması ve ortaöğretim kurumlarındaki öğrencilerde sportif sürekli kendine güvenin çeşitli değişkenler açısından incelenmesi. Yüksek Lisans Tezi. Mersin: Mersin Üniversitesi Eğitim Bilimleri Enstitüsü.