

The Impact of Perfectionism on Individual vs. Group-Based Academic Success

Mükemmeliyetçiliğin Bireysel ve Grup Tabanlı Akademik Başarı Üzerindeki Etkisi

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Abstract

Existent literature on the relationship between academic success and perfectionism mainly focuses on individual academic performance measured by grade point average (GPA), and the impact of perfectionism on individual vs. group-based academic performance is still not known. In this study, we aimed to test the effect of perfectionism on both individual and group-based real life academic assessments. Participants were 167 students (54% female) aged between 18-38 ($M = 21.4$, $SD = 2.73$) registered for a psychology course in Spring 2021. At the beginning of the semester, they completed a demographic form and perfectionism scale. We used their final, midterm, and group presentation scores to assess their academic performance via correlational (i.e., individual-based assessments) and experimental designs (i.e., group-based assessment). The joint effect of perfectionistic tendencies revealed a significant difference between perfectionists and non-perfectionists on high-value individual assessments (i.e., the final exam). Furthermore, even after controlling for perfectionistic strivings, perfectionistic concerns showed a positive association with performance in group presentations. In conclusion, not only the assessment type but also the value of the assessment predicts the relationship between perfectionism and academic performance.

Keywords: Perfectionism, Academic Achievement, Learning Processes, Exam Scores, Group-Based Performance

Özet

Akademik başarı ile mükemmeliyetçilik arasındaki ilişkiye dair mevcut literatür, büyük oranda genel not ortalaması (GNO) ile ölçülen bireysel performansa odaklanmakla birlikte, mükemmeliyetçiliğin bireyselle kıyasla grup tabanlı akademik performans üzerindeki etkisi hala bilinmemektedir. Bu çalışmada amacımız mükemmeliyetçiliğin her iki tabandaki akademik performans üzerindeki etkisini test etmektir. 2020-2021 akademik yılı Bahar döneminde bir psikoloji dersine kayıtlı 18-38 yaşları arasındaki (Ort. = 21,4, SS = 2,73) 167 öğrenciden (%54 kadın) dönem başında demografik form ve mükemmeliyetçilik ölçeğini tamamlamaları istenmiş; akademik performanslarını değerlendirmek için final, ara sınav ve grup sunum puanları kullanılmıştır. Öğrencilerin bireysel tabanlı gerçek performansları korelasyonel yöntemle, grup tabanlı gerçek performansları deneysel yöntemle değerlendirilmiştir. Bulgularda mükemmeliyetçi eğilimlerin ortak etkisi, mükemmeliyetçi kişiler ve olmayanlar arasında yüksek değerli bireysel değerlendirmelerde (final sınavı) önemli bir fark olduğunu ortaya koymuştur. Dahası, mükemmeliyetçi çabalar kontrol edildikten sonra bile, mükemmeliyetçi kaygılar grup sunumlarındaki performansla pozitif bir ilişki göstermiştir. Sonuç olarak, sadece değerlendirme türü değil, aynı zamanda değerlendirmenin değeri de mükemmeliyetçilik ve akademik performans arasındaki ilişkiyi öngörmektedir.

Anahtar Kelimeler: Mükemmeliyetçilik, Akademik Başarı, Öğrenme Süreçleri, Sınav Puanları, Grup Tabanlı Performans

Learner-centered education (LCE) integrates an understanding of learners' characteristics (e.g., skills, prior experiences, and goals) with a focus on the learning process, encompassing teaching practices and the school environment (Henson, 2003; Ecker, 2023). This approach requires mutual commitment and genuine collaboration among various educational components to maximize learner motivation and achievement (Aslan &

Reigeluth, 2015). According to Alexander and Murphy (1998), these components can be grouped into five principles: *the knowledge base, strategic processing or executive control, motivation and affect, situation or context, development and individual differences*. The last category emphasizes that each individual is unique in terms of abilities, capacity, and background; therefore, both teaching and assessment processes should consider these differences. Instructors

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Yükseköğretim Dergisi / TÜBA Higher Education Research/Review (TÜBA-HER), 15(3), 667-675. © 2025 TÜBA
Geliş tarihi / Received: Ekim / October 29, 2024; Kabul tarihi / Accepted: Nisan / April 22, 2025

Bu makalenin atıf künyesi / How to cite this article: Eğer Aydoğmus, M. (2025). The impact of perfectionism on individual- vs group-based academic success. *Yükseköğretim Dergisi*, 15(3), 667-675. <https://doi.org/10.53478/yuksekogretim.1575459>

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should set appropriately high and challenging standards while taking into account learners' characteristics. When students perceive that their unique abilities, backgrounds, cultures, and experiences are acknowledged, respected, and integrated into learning activities, their intrinsic motivation, academic engagement, and performance improve, along with the quality of classroom relationships (e.g. Debiec, 2017; Meece, 2003). This study aims to explore how the characteristics of learners may influence success rates in diverse academic assessments. Our specific goal is to evaluate the effectiveness and suitability of various assessment methods concerning learners' personalities, thereby prompting a critical examination to advance a more effective LCE system.

Personality and Academic Performance

Personality refers to individual differences shaped by biological, social, and cultural factors (John & Srivastava, 1999; McAdams, 1995). Since the 1990s, extensive research has underscored the critical role of primary personality traits (i.e., Big Five) in academic success and job performance (e.g., Paunonen & Ashton, 2001; Soric et al., 2017). However, Hough and Oswald (2008) argued that human behavior and performance are too complex to be predicted by solely these traits. This challenge is further compounded by the inherent challenges in defining and measuring psychological constructs, which are often abstract and context-dependent (De Boeck et al., 2023). Thus, this study aims to examine the effects of other personality characteristics on academic success to determine whether previous findings with Big Five traits generalize to other personality traits.

While the Big Five traits have been widely studied, other personality characteristics may also significantly influence academic achievement. One such trait is perfectionism, which has drawn growing interest in educational psychology for its profound effects on students' motivation, learning strategies, and overall well-being (Bong et al., 2014; Kurtovic et al., 2019; Wan et al., 2023). Perfectionism is characterized by the setting of exceptionally high standards and a tendency to be overly critical in response to subpar performance (Frost et al., 1990; Hewitt & Flett, 1991; Stoeber & Childs, 2011). Various researchers have proposed different domains within perfectionism and, as a result, have developed various perfectionism measurement tools (Frost et al., 1990; Hewitt et al., 1991). Further categorization by Frost et al. (1993) divided these domains into two overarching categories: positive achievement strivings, defined primarily by high standards, and maladaptive evaluation concerns, marked by an intense fear of making mistakes. Stoeber and Otto (2006) argued that these factors distinguish between three types of perfectionists: nonperfectionists, adaptive perfectionists, and maladaptive perfectionists. Both adaptive and maladaptive perfectionists share high levels of perfectionistic strivings. However, whereas maladaptive perfectionists experience significant distress due to evaluation concerns; adaptive perfectionists view their goals as motivators, and challenges as

opportunities for growth rather than stressors. Consequently, maladaptive perfectionism is closely linked to psychological problems (Limburg et al., 2017; Stan et al., 2024) and low productivity including procrastination and imposter syndrome (Holden et al., 2021). On the other hand, adaptive perfectionism is associated with positive psychological and performance-related outcomes (Wigert et al., 2012).

Perfectionism and Individual-Based Academic Assessments

Previous findings show that adaptive perfectionism is positively correlated with academic performance, whereas maladaptive perfectionism is negatively correlated (e.g., Loscalzo et al., 2019; Shin et al., 2023; Stoeber & Rambow, 2007). In 2019, Madigan completed a meta-analysis of 37 studies published between 1999 and 2017. Results revealed that perfectionistic strivings show a small to moderate positive relationship with academic performance when controlling for perfectionistic concerns, whereas perfectionistic concerns show a small negative relationship when controlling for perfectionistic strivings. Neither academic level nor gender moderates the relationship between the two domains of perfectionism and academic performance. Most of this literature is based on grade point average (GPA) therefore, conducting additional studies using various academic assessments, including both structured and time-constrained ones (e.g., final and midterm exams) as well as open-ended assessments emphasizing critical thinking (e.g., oral presentations and group research projects) will enhance the external validity of research in this field.

Perfectionism and Group-Based Academic Assessments

Research on the relationship between perfectionism and group performance has shown varying outcomes, depending on the type of perfectionism and the context. While perfectionism has been extensively studied in the context of group performance in sports, research on its relationship with academic group performance remains limited. Studies in sports have generally indicated that adaptive perfectionists tend to enhance group performance, whereas maladaptive perfectionists often hinder it (Cacho, 2017; Grugan, 2018; Hill et al., 2014; Nascimento Junior et al., 2020; Stoeber, 2011). In terms of academic group performance, DaRos-Voseles, Onwuegbuzie, and Collins (2003) suggested that higher group homogeneity based on adaptive perfectionism is associated with improved group performance, whereas the opposite is true for maladaptive perfectionism. Furthermore, the level of students' procrastination, which is strongly correlated with maladaptive perfectionism, was found to be a predictor of lower group performance in a graduate-level course, according to Jiao et al. (2011).

This research aims to provide new insights into the impact of perfectionism on academic performance by investigating its influence on both individual and group-based academic achievements. Unlike much of the existing literature, which



predominantly focuses on GPA (e.g., Endleman et al., 2022; Nounopoulos et al., 2006), this study will emphasize course-specific evaluations aligning with the limited research that examines exam performance (e.g., Bong et al., 2014; Fong & Yuen, 2009). Building on the literature that emphasizes the positive effects of adaptive perfectionism and the negative effects of maladaptive perfectionism, as summarized above, we aim to test the following hypotheses on the relationship between perfectionism and academic performance in individual-based academic settings:

H1: Perfectionistic strivings, when controlling for perfectionistic concerns, will predict higher academic performance levels.

H2: Perfectionistic concerns, when controlling for perfectionistic strivings, will predict lower academic performance levels.

H3: In terms of the joint effect of perfectionistic strivings or concerns, individuals with adaptive perfectionism will outperform those with maladaptive perfectionism.

Literature on the relationship between perfectionism and group academic performance is scarce. Therefore, we conducted exploratory analyses to test this relationship, as we did not have specific hypotheses regarding these comparisons.

Notably, this study plays a pioneering role by employing a more diverse set of objectives, various course-specific assessments, which marks a departure from previous research. These unique features of the study will enable us to uncover assessment-specific outcomes related to perfectionism in an academic context. In conclusion, this study not only contributes to testing the external validity of previous findings but also addresses research questions that have not been explored before.

Research Method

A collaboration with an instructor teaching an elective psychology course to a large class and incorporating multiple assessment techniques as part of the course led us to employ both convenience and purposive sampling methods. We used a correlational design for individual-based assessments, as we directly analyzed students' midterm and final exam scores. In contrast, because students' group assignments and presentation topics were randomly assigned, we employed an experimental design for the group-based assessments.

The research assistants attended to the class at the beginning of the semester and introduced the study as a survey study on the relationship between personality and wellbeing. Data collection was completed in two parts. For the first, students were expected to complete an online survey including questions on demographics and perfectionism within the first two weeks of the semester. The second part was composed of academic assessments along the semester. We used both individual- (i.e., midterm and final scores) and group-based measures (i.e., observer ratings of group

presentations). One midterm exam which took place in the middle of the semester constituted 30% and the non-cumulative final exam represented 50% of the final grade. Both exams were multiple choice. Group presentations took place in between midterm and final exams, and they constituted 20% of the final grade. All assessments were scored on a 100-point scale.

At the beginning of the semester, the instructor randomly assigned students to groups of four. Each group was tasked with collecting examples of a social psychology topic (e.g., attitudes, aggression) from the media and explaining them based on theories covered in class through a 10-minute PowerPoint presentation. Three research assistants, senior students majoring in psychology, who were blind to the study's objectives, observed the group presentations. They independently rated the presentations using the scoring rubric. Inter-rater reliability was acceptable with an average intra-class correlation coefficient of .83: 95% CI [.75, .90]. Before rating the presentations, the observers attended a training session where the instructor shared her lecture notes and addressed any questions they had.

Participants were notified that their group performances would be assessed as part of the study, but this information was withheld until after the study was concluded. This precaution was taken to ensure that participants did not alter their behavior due to the knowledge of being evaluated. In other words, while participants were aware that their presentations were being evaluated by the instructor for course grades, they were unaware that researchers were also assessing their performance for the study. At the end of the semester, during the debriefing session, participants were informed about the study's objectives and procedures. It is worth noting that all participants willingly provided their information during the debriefing.

Participants

A total of 210 students from a large public university, which has a student body of over 53,000 across 16 faculties, participated voluntarily in this study. These faculties offer a diverse range of rigorous academic programs in fields such as medicine, engineering, social sciences, and the arts. The participants were all enrolled in an elective social psychology course, accessible exclusively to second-year social sciences students. However, 43 students were excluded from the analysis due to incomplete responses on either the online survey or the group presentation, resulting in a final sample of 167 students (54% females), with an average age of 21.4 years ($SD = 2.73$). Although participants were from various fields of social sciences outside of psychology, all participants had previously taken at least one other psychology course. The demographic characteristics of the sample are shown in ■ Table 1. The university's academic ethics board approved this research.

Table 1
Demographic Characteristics of the Sample.

Demographics	Subcategories	n (%)
Gender	Female	90 (54)
	Male	77 (46)
Age (year)	18-20	67 (40)
	21-30	98 (59)
	31-38	2 (1)
Major	Economics	74 (44)
	Sociology	51 (31)
	Philosophy	42 (25)

Measures

The online survey included questions on demographics and perfectionism. For demographics, participants were asked to report their gender, age, and major.

To identify the participant's perfectionistic tendencies, we used the revised version of *The Almost Perfect Scale (APS-R)* developed by Slaney et al. (2001). This 23-item scale is composed of three domains: high standards (7 items), order (4 items), and discrepancy (12 items), with items rated on a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). As an example of each domain, the item "I have high expectations for myself" represents the *high standards* domain, "I am an orderly person" represents the *order* domain, and "My performance rarely measures up to my standards" represents the *discrepancy* domain. Sapmaz (2006) adapted the scale into Turkish and reported that each domain has good psychometric features. Cronbach's alpha is .92.

The scoring rubric for group presentations was developed based on the study by Liang and Kelsen (2018). The rubric allocated 80% of the total score to the content of the presentation, focusing on elements such as organization, illustration/visualization, and the explanation of the topic and related theories, with the explanation received the highest weight in scoring. The remaining 20% of the score was reserved for evaluating the delivery of the message, which encompassed aspects like time management, clarity, and enthusiasm. During the evaluation process, observers did not share their scores with the instructor to ensure impartiality in the grading process. Instead, the instructor employed her own rubric to assess the presentations. Only the observers' scores were used in this study.

Data Analysis

As preliminary analyses, the frequency and correlation analyses were completed to assess general characteristics of the sample and broad statistical relationships between variables. Subsequently, Partial Correlation analyses

were performed to test H1 and H2, and to explore the relationship between perfectionism and group-based academic performance. Specifically, unique correlations between each aspect of perfectionism and the scores on three assessments were examined. The "high standards" domain of the scale represented perfectionistic strivings, while the "discrepancy" domain represented perfectionistic concerns (Slaney et al., 2001).

Later, we examined differences in individual-based academic performance among three groups: adaptive perfectionists, maladaptive perfectionists, and nonperfectionists to test H3. Participants were assigned to each group based on the criteria established by Ashby et al. (1999). Initially, the sample was divided into two groups based on their scores on APS-R high standards. Those who scored above the 50th percentile were identified as perfectionists, while the rest were labeled as nonperfectionists. Subsequently, we used a similar procedure to distinguish adaptive perfectionists from maladaptive ones within the perfectionist group. Those at the top of the perfectionist group in terms of discrepancy were identified as maladaptive, and the rest were classified as adaptive. Following this classification, we conducted Welch's Analysis of Variance (ANOVA) to test the validity of group assignment and a Multivariate Analysis of Variance (MANOVA) to compare the performance of these groups on the midterm and final exams.

Results

Preliminary Analyses

The findings from the descriptive and correlation analyses are presented in Table 2. The mean scores for group presentations were higher than those for the final exam and midterm. Additionally, Pearson correlation analysis revealed a significant correlation between individual-based assessments (i.e., final exams and midterms) ($r = .65, p < .00$) however group performance was not related to these two scores. In addition, *high standards* were positively correlated with *discrepancy* domain of perfectionism.

Main Analyses

As shown in Table 2, no significant correlation was found between *high standards* and scores on three assessments. However, *discrepancy* was positively correlated with group performance. These correlations remained consistent after controlling for the other domain of perfectionism in Partial Correlation analyses, as demonstrated in Table 3. However, this adjustment led to a general reduction in correlation coefficients, indicating the covariance between the domains and their joint effect on academic performance. In summary, our findings do not support H1 and H2, suggesting a nonsignificant effect of perfectionism on course-specific, individual-based assessments. However, we did find that students with high levels of perfectionistic concerns scored better than their counterparts on group-based assessments.

**Table 2**

Bivariate Correlation Between Perfectionism Domains and Academic Performance, N = 167

	Min-Max	M (SD)	1	2	3	4
1.Final	0-100	61.75 (14.84)				
2.MT	0-100	65.39 (15.56)	.65**			
3.Group	0-100	76.53 (11.34)	.05	.09		
4. Discrep	7-49	45.53 (15.18)	.05	.07	.19*	
5. Stand	12-84	34.86(8.81)	.11	.04	.11	.44**

Note: * $p < .05$, ** $p < .01$; **Min:** possible minimum score, **Max:** Possible maximum score. **MT:** Midterm; **Group:** Group presentation; **Discrep:** Discrepancy; **Stand:** Standards.

Before conducting MANOVA analysis to compare three groups of perfectionism on individual-based assessments, we compared their mean scores on standards and discrepancy to ensure the validity of group assignment. Due to unequal sample sizes and significant Levene's test of homogeneity results ($p \leq .001$) for both domains of perfectionism, we utilized Welch's ANOVA analysis. Results indicated significant differences in mean scores across the three groups for both domains: $F(2, 164) = 33.42$, $p < .001$ for discrepancy, $F(2, 164) = 23.06$, $p < .001$ for high standards. ■ Table 4 displays the analysis results and detailed information for each group regarding the two domains of perfectionism.

We confirmed that the assumptions required for MANOVA analysis were met (Field, 2024). There was a moderate correlation between the dependent variables as seen in ■ Table 2. Additionally, Levene's test for equality of variances confirmed homogeneity of variances for the midterm (p

$= .27$) and final exam scores ($p = .47$) across three groups. The MANOVA analysis revealed a significant main effect for the perfectionism category, $F(4, 326) = 2.50$, $p = .04$; Wilk's $\lambda = .94$, partial $\eta^2 = .03$. As shown in ■ Table 5, both adaptive and maladaptive perfectionists outperformed nonperfectionists on two measures, with a significant difference observed only in their final scores. LSD post-hoc analysis indicated that nonperfectionists scored significantly lower than both maladaptive and adaptive perfectionists on the final exam, with p-values of .01 and .03, respectively. In conclusion, H3 was partially supported. As predicted, adaptive perfectionists performed better than maladaptive perfectionists, but this was only observed in midterm scores and the difference was not statistically significant. Nonetheless, students identified as perfectionists, whether maladaptive or adaptive, significantly outperformed their non-perfectionist counterparts in the final exam.

Table 3

Correlations (and Partial Correlations) Between the Domains of Perfectionism and Scores at Three Assessments, N = 167

Measures	Final	MT	Group
Discrepancy	.05	.07	.19*
Discrepancy, Controlling for Standards	.05	.00	.16*
Standards	.11	.04	.11
Standards, Controlling for Discrepancy	.01	.10	.03

Note: * $p < .05$; **MT:** Midterm; **Group:** Group presentation.

Table 5

Results of MANOVA Analysis Testing the Effect of Perfectionism on Individual-Based Academic Assessments, N = 167

Measures	F	Categories of Perfectionism M (SD)		
		Nonperfectionists n=77	Adaptive perfectionists n=36	Maladaptive perfectionists n=54
Final	4.35**	58.16 _a (14.66)	64.75 _b (13.32)	64.87 _b (15.15)
Midterm	1.25	63.57 _c (14.54)	68.42 _c (15.78)	65.96 _c (16.72)

Note: ** $p = .01$; the values with different superscript letters in a row are significantly different ($p < .05$).

Table 4

Welch ANOVA results comparing three groups on two domains of perfectionism, N = 167

Measures	Welch's F	Categories of Perfectionism M (SD)		
		Nonperfectionists n=77	Adaptive perfectionists n=36	Maladaptive perfectionists n=54
Discrepancy	33.42***	40.51 _a (13.24)	34.69 _a (7.07)	59.92 _b (10.50)
High Standards	23.06***	27.47 _c (7.20)	40.42 _d (3.11)	41.71 _d (3.81)

Note: *** $p < .001$; the values with different superscript letters in a row are significantly different based on Games-Howell Post Hoc analyses ($p < .001$).

Discussion

The aim of this study was to examine the impact of perfectionism on real-life, course-specific academic performance among college students. We analyzed the final exams, midterm exams, and group presentation scores of students enrolled in an elective psychology course. The results indicated that neither perfectionistic strivings nor perfectionistic concerns significantly correlated with success in individual-based assessments even after controlling for the unique effects of each domain. On the other hand, perfectionistic concerns were significantly correlated with better performance in group-based assessments when we controlled for perfectionistic strivings. Furthermore, when both domains were considered together, their joint effect was significant in high-value individual assessments. Specifically, group comparisons based on categories of perfectionism revealed that both adaptive and maladaptive perfectionists outperformed non-perfectionists in the final exam.

Descriptive and correlation analyses showed that group presentation scores were higher than exam scores and these two categories of assessment were not related to each other. Exam type, assessment requirements, and teamwork dynamics might be related to these results. Final and midterm exams were multiple-choice tests in this study. In terms of content and requirements, exams were based on several course topics while group presentations were on specific psychology topics. Lastly, previous findings emphasize the advantages of group work in terms of performance and learning (Gaudet et al., 2010; Vrioni, 2011).

The findings revealed that perfectionistic strivings and perfectionistic concerns did not significantly correlate with success in individual-based assessments, even after controlling for the overlap between the two dimensions of perfectionism. However, when controlling for perfectionistic strivings, perfectionistic concerns were significantly associated with improved performance in group-based assessments. Previous research has shown that test anxiety is related to perfectionistic concerns (Buras & Cretu, 2021; Eum & Rice, 2011), and avoidant coping mediates this relationship (Weiner & Carton, 2012). This suggests that students with a high fear of success cannot procrastinate as much during group-based assessments as they do during individual-based assessments. Alternatively, the group atmosphere might help students cope better with their perfectionistic concerns because, in the case of anxiety, students tend to rely more on others (Aldridge-Gibbons, 2022), or their insufficient contribution to the group work can be compensated for by the efforts of others, paralleling the findings of Lavy in 2017, where participants with anxious attachment scored high on group tasks. This similarity between anxious attachment and perfectionistic concerns may result from their shared correlation with a high fear of negative evaluation, a strong need for external

validation, and an over-focus on mistakes and others' opinions (Başkurt & Zeren, 2024; Pishva & Besharat, 2011). Therefore, group tasks may help vulnerable students enhance their academic performance through support mechanisms embedded in collective work.

It is not the unique effects of each domain but rather their combined impact that is crucial for understanding the relationship between perfectionism and academic success. Therefore, we further assessed the joint effect of two domains of perfectionism on academic success. Analyses revealed that even though both adaptive and maladaptive perfectionists scored higher than nonperfectionists on individual-based academic assessments, this difference was significant only for the *final exam*. In other words, both high standards and concerns over mistakes increased academic performance, however, the impact of perfectionism was the highest for individual assessments that influenced the final grade the most, at 50%. Perfectionist people might spend less time and energy on the midterm exam and the group presentation that constituted 30% and 20% of the final grade, respectively. However, both groups showed a better performance than nonperfectionists and their scores were very close to each other. From the perspective of motivation, Stoeber and his colleagues (2017) proposed that both adaptive and maladaptive perfectionism are characterized by performance-approach goals (e.g., striving to do better than others), but not performance-avoidance goals (e.g., striving to avoid doing worse than others). Perfectionistic people in this study might benefit from this similarity in motivation at academic tasks independent of their category of perfectionism, however, we need more research to test this suggestion.

This research was conducted with students enrolled in an elective psychology course within a specific educational system and culture. Ertugruloęlu and her colleagues (2024) illustrate the reciprocal relationship between culture and education, highlighting how historical changes in the Turkish education system have paralleled political and cultural developments. Further research involving diverse populations across various educational fields, and employing real-life, course-specific, and objective academic assessments, is needed to validate and generalize our findings.

Conclusion and Implications

Our findings indicate that the combined effect of two dimensions of perfectionism becomes especially significant in individual-based assessments at higher levels. Additionally, perfectionistic concerns are associated with enhanced group performance in academic settings. In conclusion, not only the assessment type but also the value of the assessment predicts the relationship between perfectionism and academic performance.



These findings underscore that healthy perfectionism should not be regarded as an oxymoron, contrary to earlier arguments (Greenspon, 2000). Accordingly, we recommend that educators and counselors avoid pathologizing perfectionism entirely. Instead, they can identify adaptive elements within traits typically viewed as maladaptive and help students learn to manage, rather than suppress, them. This perspective aligns with the principles of LCE, which emphasize treating students as whole, complex individuals. Recognizing the nuanced ways in which personality traits influence learning and performance allows instructors to provide more tailored and effective support. For instance, the positive correlation between perfectionistic concerns and group success suggests that motivation in such settings may arise not only from intrinsic interest but also from stress and pressure. Therefore, group activities can be designed to harness these motivation patterns productively, while also providing emotional support to reduce anxiety and prevent burnout.

In conclusion, each student brings a unique combination of abilities, motivations, and psychological tendencies to the classroom. Teaching and assessment strategies should reflect these differences. Our findings suggest employing various course-specific assessment methods that use diverse formats and assign different weightings toward the final grade.

This study is pioneering in its use of diverse objectives and course-specific assessments, marking a shift from previous research. These features allowed us to examine assessment-specific outcomes of perfectionism in academic settings, while also testing the external validity of past findings and addressing previously unexplored questions.

References

- Aldridge-Gibbons, A. (2022). *Managing anxiety in the classroom: how small group work helps students manage the effects of their anxiety* [Doctoral dissertation, University of Oxford].
- Alexander, P. A., & Murphy, P. K. (1998). The research base for APA's learner-centered psychological principles. In N. M. Lambert & B. L. McCombs (Eds.), *How students learn: Reforming schools through learner-centered education* (pp. 25–60). American Psychological Association.
- Asby, J. S., Kottman, T., & DeGraaf, D. (1999). Leisure satisfaction and attitudes of perfectionists: Implications for therapeutic recreation professionals. *Therapeutic Recreation Journal*, 33, 142–151.
- Aslan, S., & Reigeluth, C. M. (2015). Examining the challenges of learner-centered education. *Phi Delta Kappan*, 97(4), 63–68. <https://doi.org/10.1177/003172171561992>
- Başkurt, B., & Zeren, Ş. (2024). Fear of Negative Evaluation and Feelings of Inferiority in Predicting Perfectionism. *Hacettepe Eğitim Dergisi*, 39(1). <https://doi.org/10.16986/huje.2024.515>
- Bong, M., Hwang, A., Noh, A., & Kim, S. I. (2014). Perfectionism and motivation of adolescents in academic contexts. *Journal of educational psychology*, 106(3), 711. <https://doi.org/10.1037/a0035836>
- Burcaş, S., & Cretu, R. Z. (2021). Multidimensional perfectionism and test anxiety: A meta-analytic review of two decades of research. *Educational Psychology Review*, 33, 249–273. <https://doi.org/10.1007/s10648-020-09531-3>
- Cacho, F. (2017). *Collegiate Dancers' Perceptions of the Coach-Created Motivational Climate, Perfectionism, and Team Cohesion*. California State University, Fullerton.
- De Boeck, P., Pek, J., Walton, K., Wegener, D. T., Turner, B. M., Andersen, B. L., ... & Petty, R. E. (2023). Questioning psychological constructs: Current issues and proposed changes. *Psychological Inquiry*, 34(4), 239–257. <https://doi.org/10.1080/1047840X.2023.2274429>
- Debiec, P. (2017). Effective learner-centered approach for teaching an introductory digital systems course. *IEEE Transactions on Education*, 61(1), 38–45. <https://doi.org/10.1109/TE.2017.2729498>
- DaRos-Voseles, D. A., Onwuegbuzie, A. J., & Collins, K. M. (2003). Graduate cooperative groups: Role of perfectionism. *Academic Exchange Quarterly*, 7(3), 307–312.
- Ecker, J. (2023). Universal Design for Learning as a framework for designing and implementing learner-centered education. *AI, Computer Science and Robotics Technology*, (13).
- Endleman, S., Brittain, H., & Vaillancourt, T. (2022). The longitudinal associations between perfectionism and academic achievement across adolescence. *International Journal of Behavioral Development*, 46(2), 91–100. <https://doi.org/10.1177/01650254211037400>
- Ertugruloglu, O., Gülcan, N. Y., & Abidoğlu, Ü. P. (2024). The Impact of Culture on the Education System. *International e-Journal of Educational Studies*, 8(16), 131–141. <https://doi.org/10.31458/iejes.1436091>
- Eum, K., & Rice, K. G. (2011). Test anxiety, perfectionism, goal orientation, and academic performance. *Anxiety, Stress, & Coping*, 24(2), 167–178. <https://doi.org/10.1080/10615806.2010.488723>
- Field, A. (2024). *Discovering statistics using IBM SPSS statistics*. Sage publications limited.
- Fong, R. W., & Yuen, M. (2009). Associations among measures of perfectionism, self-concept and academic achievement identified in primary school students in Hong Kong. *Gifted and Talented International*, 24(1), 147–154. <https://doi.org/10.1080/15332276.2009.11674869>
- 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>
- Frost, R. O., Heimberg, R. G., Holt, C. S., Mattia, J. I., & Neubauer, A. L. (1993). A comparison of two measures of perfectionism. *Personality and Individual Differences*, 14(1), 119–126. [https://doi.org/10.1016/0191-8869\(93\)90181-2](https://doi.org/10.1016/0191-8869(93)90181-2)
- Gaudet, A. D., Ramer, L. M., Nakonechny, J., Cragg, J. J., & Ramer, M. S. (2010). Small-group learning in an upper-level university biology class enhances academic performance and student attitudes toward group work. *PloS One*, 5(12), e15821. <https://doi.org/10.1371/journal.pone.0015821>
- Greenspon, T. S. (2000). “Healthy perfectionism” is an oxymoron!: Reflections on the psychology of perfectionism and the sociology of science. *Journal of Secondary Gifted Education*, 11(4), 197–208. <https://doi.org/10.4219/jsge-2000-631>
- Grugan, M. C. (2018). *Multidimensional perfectionism and antisocial behaviour in team sport: The mediating role of angry reactions to poor performance* [Doctoral dissertation, York St. John University].
- Henson, K. T. (2003). Foundations for learner-centered education: A knowledge base. *Education*, 124(1), 5–16.
- Hewitt, P. L., & Flett, G. L. (1991). Dimensions of perfectionism in unipolar depression. *Journal of Abnormal Psychology*, 100(1), 98–101. <https://doi.org/10.1037/0021-843X.100.1.98>
- Hewitt, P. L., Flett, G. L., Turnbull-Donovan, W., & Mikail, S. F. (1991). The Multidimensional Perfectionism Scale: Reliability, validity, and psychometric properties in psychiatric samples. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, 3(3), 464–468. <https://doi.org/10.1037/1040-3590.3.3.464>
- Hill, A. P., Stoeber, J., Brown, A., & Appleton, P. R. (2014). Team perfectionism and team performance: A prospective study. *Journal of Sport and Exercise Psychology*, 36(3), 303–315. <https://doi.org/10.1123/jsep.2013-0206>
- Holden, C. L., Wright, L. E., Herring, A. M., & Sims, P. L. (2021). Imposter syndrome among first-and continuing-generation college students: The roles of perfectionism and stress. *Journal of College Student Retention: Research, Theory & Practice*, <https://doi.org/10.1177/152102512110193>
- Hough, L. M., & Oswald, F. L. (2008). Personality testing and industrial-organizational psychology: Reflections, progress, and prospects. *Industrial and Organizational Psychology*, 1(3), 272–290. <https://doi.org/10.1111/j.1754-9434.2008.00048.x>
- Jiao, Q. G., DaRos-Voseles, D. A., Collins, K., & Onwuegbuzie, A. J. (2011). Academic procrastination on the performance of graduate-level cooperative groups in research methods courses. *Journal of the Scholarship of Teaching and Learning*, 119–138.
- John, O. P., & Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. In Pervin, L. A. & John, O. P. (Eds.). *Handbook of personality: Theory and Research*, 2(1999), 102–138.



- Kurtovic, A., Vrdoljak, G., & Idzanovic, A. (2019). Predicting procrastination: The role of academic achievement, self-efficacy and perfectionism. *International Journal of Educational Psychology: Ijep*, 8(1), 1-26. <http://doi.org/10.17583/ijep.2019.2993>
- Lavy, S. (2017). Who benefits from group work in higher education? An attachment theory perspective. *Higher Education*, 73, 175-187. <https://doi.org/10.1007/s10734-016-0006-z>
- Liang, H. Y., & Kelsen, B. (2018). Influence of personality and motivation on oral presentation performance. *Journal of Psycholinguistic Research*, 47(4), 755-776. <https://doi.org/10.1007/s10936-017-9551-6>
- 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>
- Loscalzo, Y., Rice, S. P., Giannini, M., & Rice, K. G. (2019). Perfectionism and academic performance in Italian college students. *Journal of Psychoeducational Assessment*, 37(7), 911-919. <https://doi.org/10.1177/0734282918800748>
- Madigan, D. J. (2019). A meta-analysis of perfectionism and academic achievement. *Educational Psychology Review*, 31, 967-989. <https://doi.org/10.1007/s10648-019-09484-2>
- McAdams, D. P. (1995). What do we know when we know a person? *Journal of Personality*, 63(3), 365-396. <https://doi.org/10.1111/j.1467-6494.1995.tb00500.x>
- Meece, J. L. (2003). Applying learner-centered principles to middle school education. *Theory into practice*, 42(2), 109-116.
- Nascimento Junior, J. R. A. D., Batista, R. P., Silva, A. A. D., Granja, C. T. L., Fiorese, L., & Fortes, L. D. S. (2020). Is an athlete's perfectionism associated with the performance of indoor football teams? *Psicologia: Teoria e Prática*, 22(2), 317-337. <http://doi.org/10.5935/1980-6906/psicologia.v22n2p317-337>
- Nounopoulos, A., Ashby, J. S., & Gilman, R. (2006). Coping resources, perfectionism, and academic performance among adolescents. *Psychology in the Schools*, 43(5), 613-622. <https://doi.org/10.1002/pits.20167>
- Paunonen, S. V., & Ashton, M. C. (2001). Big Five predictors of academic achievement. *Journal of Research in Personality*, 35(1), 78-90. <https://doi.org/10.1006/jrpe.2000.2309>
- Pishva, N., & Besharat, M. A. (2011). Relationship attachment styles with positive and negative perfectionism. *Procedia-Social and Behavioral Sciences*, 30, 402-406. <https://doi.org/10.1016/j.sbspro.2011.10.079>
- Sapmaz, F. (2006). *Üniversite öğrencilerinin uyumlu ve uyumsuz mükemmeliyetçilik özelliklerinin psikolojik belirti düzeyleri açısından incelenmesi* [Master's thesis, Sakarya Üniversitesi].
- Shin, J., Lee, H. J., Park, H., Hong, Y., Song, Y. K., Yoon, D. U., & Oh, S. (2023). Perfectionism, test anxiety, and neuroticism determines high academic performance: a cross-sectional study. *BMC psychology*, 11(1), 410. <https://doi.org/10.1186/s40359-023-01369-y>
- Slaney, R. B., Rice, K. G., Mobley, M., Trippi, J., & Ashby, J. S. (2001). The revised almost perfect scale. *Measurement and Evaluation in Counseling and Development*, 34(3), 130-145. <https://doi.org/10.1080/07481756.2002.12069030>
- Soric, I., Penezic, Z., & Buric, I. (2017). The Big Five personality traits, goal orientations, and academic achievement. *Learning and Individual Differences*, 54, 126-134. <https://doi.org/10.1016/j.lindif.2017.01.024>
- Stan, A., & Ionescu, M. C. (2024). Perfectionism, Psychological Well-Being and Academic Performance in University Students. *Current Trends in Natural Sciences*, 13(26), 64-71. <https://doi.org/10.47068/ctns.2024.v13i26.007>
- Stoeber, J. (2011). The dual nature of perfectionism in sports: Relationships with emotion, motivation, and performance. *International Review of Sport and Exercise Psychology*, 4(2), 128-145. <https://doi.org/10.1080/1750984X.2011.604789>
- Stoeber, J., & Childs, J. H. (2011). *Perfectionism*. *Encyclopedia of Adolescence*. Springer, 2053-2059. https://doi.org/10.1007/978-1-4419-1695-2_279
- Stoeber, J., Damian, L. E., & Madigan, D. J. (2017). Perfectionism: A Motivational Perspective. In F. B. Burns & C. R. Stoeber (Eds.), *The Psychology of Perfectionism*, 20-44, Routledge.
- Stoeber, J., & Otto, K. (2006). Positive conceptions of perfectionism: Approaches, evidence, challenges. *Personality and Social Psychology Review*, 10(4), 295-319. https://doi.org/10.1207/s15327957pspr1004_2
- Stoeber, J., & Rambow, A. (2007). Perfectionism in adolescent school students: Relations with motivation, achievement, and well-being. *Personality and Individual Differences*, 42(7), 1379-1389. <https://doi.org/10.1016/j.paid.2006.10.015>
- Vrioni, R. (2011). Effects of group learning on the academic performance of university students. *Problems of Education in the 21st Century*, 33, 111-117.
- Wan, X., Huang, H., Peng, Q., Zhang, Y., Liang, Y., Ding, Y., & Chen, C. (2023). The role of self-efficacy and psychological resilience on the relationship between perfectionism and learning motivation among undergraduate nursing students: A cross-sectional descriptive study. *Journal of Professional Nursing*, 47, 64-72. <https://doi.org/10.1016/j.profnurs.2023.04.004>
- Weiner, B. A., & Carton, J. S. (2012). Avoidant coping: A mediator of maladaptive perfectionism and test anxiety. *Personality and Individual Differences*, 52(5), 632-636. <https://doi.org/10.1016/j.paid.2011.12.009>
- Wigert, B., Reiter-Palmon, R., Kaufman, J. C., & Silvia, P. J. (2012). Perfectionism: The good, the bad, and the creative. *Journal of Research in Personality*, 46(6), 775-779. <https://doi.org/10.1016/j.jrp.2012.08.007>

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