Perfectionism, Academic Procrastination, and Psychological Well-Being among University Students

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Abstract

Procrastination is a prevalent issue that almost all students face at one point in their lives, which has strong repercussions on their well-being. The aim of this research was to improve understanding in this area by investigating the correlation between perfectionism, academic procrastination, and psychological well-being among university students. Cross-sectional survey research, using a convenient sampling technique, was conducted for data collection from a sample of 300 students from different universities situated in the twin cities of Pakistan (i.e., Rawalpindi and Islamabad). The Frost Multidimensional Perfectionism Scale, the Academic Procrastination Questionnaire, and the Warwick-Edinburgh Mental Well-being Scale were used for data collection. Findings suggest a significant relationship between perfectionism and academic procrastination and that academic procrastination affects the psychological well-being of students. Male students were found to be higher in academic procrastination than female students. Postgraduate students scored higher on perfectionism, while undergraduates scored higher on psychological well-being.

Key Words: Academic Performance, Academic Procrastination, Perfectionism, Psychological Well-being, University Students

Introduction

Perfectionism once thought to be a one-dimensional construct (Hewitt et al., 1989) has long been associated with psychological maladjustment and is a substantial predictor of psychopathology (Hewitt et al., 1989) It has since been discovered that perfectionism is a multifaceted personality trait (Curran & Hill, 2019) that can contribute to both favorable and negative effects(Harari et al., 2018). Most people are perfectionists in at least one area of their lives (Stoeber & Stoeber, 2009), but perfectionism as personality trait leads individual to irrationality for achievement of tasks (Limburg et al., 2017), as a result individual compulsively strive for compulsive striving for faultlessness (Hewitt et al., 2017). Most recent studies identify perfectionism as a trans-diagnostic component in common clinical disorders, such as mood, eating, and anxiety disorders (Drieberg et al., 2019; Holden et al., 2021) and associate perfectionism with a wide range of mental illnesses (Curşeu et al., 2019; Hill & Curran, 2016; Schmidt et al., 2018).

The two-factor theory classifies perfectionism as Perfectionistic Strivings (PS) and Perfectionistic Concerns (PC). Although it is widely agreed that PS is less linked to bad consequences than PC. It has been linked to psychopathology by several researchers, i.e., eating disorders (Drieberg et al., 2019), performance failure, and aggression (Ruiz-Esteban et al., 2021). PC, on the other hand, contains self-critical features of perfectionism that are linked to lowered performance and mental health issues (Garinger et al., 2018; Lizmore et al., 2019; Smith et al., 2020). Perfectionists perceive their environment to be overly demanding and critical. The school environment promotes perfectionistic tendencies because of high academic stress (Wuthrich et al., 2020). While perfectionism is useful in some contexts, it can often have negative consequences as it is a predictor of procrastination, indecisiveness, chronic sense of failure, and burnout among students (Garinger et al., 2018; Smith et al., 2020).

Academic procrastination refers to the willful, unjustified inclination to postpone a planned study-related action despite the inevitability of unfavorable and undesirable consequences (Steel & Klingsieck, 2016; Zacks & Hen, 2018). We plan and wish to do certain tasks, but when the time comes, we choose instant gratification instead (Nordby et al., 2019). For university students, procrastination

on academic work is the most often reported personal concern. Gallagher, and Kelleher (1992) discovered that 52 percent of students surveyed needed aid with procrastination. Over 70% of college students engage in this type of procrastination on a regular basis (Schraw et al., 2007), which is linked to lowered academic performance (Goroshit, 2018; Qian & Fuqiang, 2018). Evidence on the adaptive and maladaptive aspects of procrastination is still contradictory (Habelrih & Hicks, 2015) however Procrastination has a variety of mental, behavioral and physical repercussions (Constantin et al., 2018; Khalid et al., 2019; Shokeen, 2018). Putting things off can have a negative impact on psychological well-being as students rush to meet deadlines and finish assignments, it can negatively impact not only self image but also generate negative social impressions due to professional inconsistencies (Dautov, 2020; Fadhli, n.d.). Relationships get strained when people fail to meet deadlines and obligations (Kim, 2018; Krause & Freund, 2014).

Psychological well-being is a mix of positive affective experiences and good cognitive and social functioning (Teng et al., 2015). When it comes to the dynamics of psychological well-being, it's important to recognize that, to some extent, exposure to some stressful events can help people build resilience and, in turn, promote their psychological well-being (Rossetti et al., 2017). As such, perfectionist demands at lower levels can be linked to achievement and may be crucial to comprehending goal attainment(Grunschel et al., 2016; Hewitt et al., 2017). However, long-term exposure to work-related stress, even for the most resilient people, has been shown to have a negative impact on psychological well-being, In turn, a drop in psychological well-being levels may lead to significant sickness, such as cardiovascular disease, cortisol issues, and immune system malfunctions (Fogelman & Canli, 2019; Kivimäki & Steptoe, 2018).

 Earlier research has linked the traits of perfectionists and procrastinators (Kobori et al., 2020; Kurtovic et al., 2019; Smith et al., 2020). Both types of people are afraid of making mistakes (Kittinger et al., 2012), and both perfectionism and procrastination are examples of self-control failure (Pychyl & Sirois, 2016). Procrastination can be described as a spectrum of behavior that ranges from normal to bad. According to Flett, Hewitt, Davis, and Sherry (2004), the 'perfectionist procrastinator' has a lot of negative automatic thinking about obtaining perfection in order to gain praise. Procrastinators also have a tendency toward low self-esteem, low self-efficacy, an excessive dread of failure, and a high level of dysphonia (Ferrari & Díaz-Morales, 2014; Pryal, 2021; Uzun et al., 2020; Zhang & Chen, 2019). Robert (1996) discovered that perfectionism is a strong predictor of achievement motivation. However, when the level of perfectionism rises, so does the level of despair. Students high on psychological wellbeing are low on procrastinating tasks related with their studies (Riolli et al., 2012). Procrastination is more common in people who have low psychological well-being (Duru & Balkıs, 2017). Positive metacognitive beliefs are thought to boost academic confidence, lowering procrastination (Da Lama & Brenlla, 2022; Mohammadi Bytamar et al., 2020). On the other hand, ineffective metacognitive beliefs exacerbate procrastination. These empirical findings reveal that procrastination, metacognitive beliefs, and poor psychological well-being have a cyclic relationship.

Steel and König's (2006) temporal motivation theory has been emerged as more elaborative and auspicious theory which help to understand procrastination thoroughly (Schmidt et al., 2018; Steel et al., 2018). Expectancy, hyperbolic, Need and Prospect theories gave support to temporal motivation theory (Hodgkinson & Healey, 2018). Motivation among individuals and groups increases when they are sure enough to get reward of their efforts in timely manner. TMT also focuses on efficacy of long term incentive plans either workable or not.

Self-regulation theory advocate about goal setting, planning, implementation and achievement of those goals and later on to keenly check progress, evaluation and resetting to go further. In contrast to self-regulation procrastination research attribute this phenomenon as failure of self-control (Duru & Balkıs, 2017; Zhang & Chen, 2019) procrastinators fail to regulate their functioning in stressful and high cognitive load conditions, linked to students' difficulties in self- regulating their academic activities, and metacognitive self-regulation may be the second most powerful predictor of procrastination (Wolters et al., 2017).

Self-regulation is a motivational process in which one compares one's current condition to a desired one that is congruent with one's personal goals on a regular basis(Beck et al., 2000). Because of

the nature of perfectionistic objectives as well as its social-cognitive consequences, perfectionism may obstruct efficient self-regulation. For example, achieving socially prescribed perfectionism goals may have a lower impact on mood and well-being because those goals may be extrinsically motivated (Burton et al., 2006), and pursuing extrinsically motivated goals is associated with lower indices of well-being than pursuing intrinsic goals (Burton et al., 2006).

Hypotheses

1. There is positive relationship between perfectionism and academic procrastination.
2. Increased perfectionism correlates with decreased psychological well-being.
3. Increased academic procrastination correlates with decreased psychological well-being.
4. Significant differences observed based on sample demographics.

Conceptual Framework
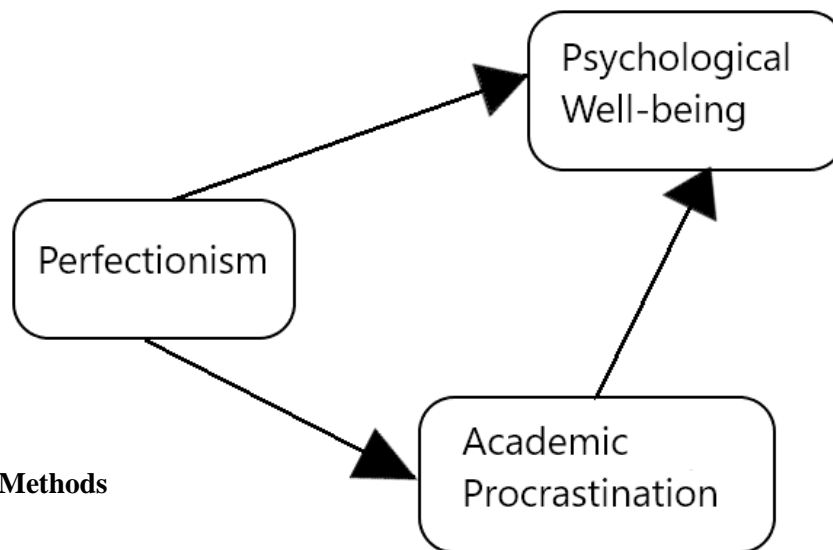
Material and Methods

Procedure

Cross-sectional research was used to investigate the relationship between procrastination, perfectionism, and mental well-being by using a questionnaire-based survey method. The questionnaire was published on the Google form and participants got there by clicking on the link they received from the researchers. On the website, they first were informed about the aim of the research and their right to withdraw from it at any time. By clicking OK, the participants agreed to the informed consent and proceeded with the questions. The questionnaire started with a demographic sheet. Afterward, the participants filled out three standardized questionnaires in total. The total questionnaire took the participants approximately 20 to 25 minutes. All the procedures were approved by the ethics committee of the National University of Modern Languages (NUML). Microsoft Excel was used for data entry, editing, and sorting. Pearson correlation and some first-order analysis (T-test) were executed using SPSS software.

Sample

The present study was conducted at universities. The sample size was calculated to be 300 students. The sample was selected by the most convenient sampling method. The research was carried out at Islamabad and Rawalpindi universities. The university ethics committee granted formal ethics approval to the research team. All participants submitted their written informed agreement to participate in the survey, which was conducted anonymously. Prior to data collection, all of the participants were given information about the purpose of the study. The consent form explained the confidentiality and anonymity of their data; (ii) the study's nature and process; (iii) the option to participate in the study; and (iv) the opportunity to remove their data from the study at any time.

Instruments

The Frost Multidimensional Perfectionism Scale

The Frost Multidimensional Perfectionism Scale was developed by Dr. Randy Frost and colleagues in 1990. The FMPS consists of 35 questions, which can be responded to on a five-point Likert scale (from 1-"strongly disagree" to 5- "strongly agree"). The total score may range from 35 to 175, with higher scores indicating higher perfectionism levels and vice versa.

Academic Procrastination Questionnaire (APQ)

The instrument used in this study was the Academic Procrastination Questionnaire (APQ, Abu-Ghazal 2012). It consists of 21 items, out of which seven are reversely coded (1, 3, 5, 6, 10, 12, and 17). Each item (statement) is given on a five-point Likert scale (1-completely disagree, 2-disagree, 3-neither agree nor disagree, 4-agree, and 5-completely agree). Cronbach's alpha coefficient of this questionnaire was calculated (α = .961).

Psychological well-being

The instrument used to measure psychological well-being is Warwick-Edinburgh Mental Well-being Scale (WEMWBS) comprises 14 items that relate to an individual's state of mental well-being (thoughts and feelings) in the previous two weeks. Responses are made on a 5-point scale, ranging from 'none of the time' to 'all of the time'. Each item is worded positively, and together they cover most, but not all, attributes of mental well-being including both hedonic and eudemonic perspectives. Higher scores indicate worse psychological wellbeing

Results and Discussion

Table 1
Cronbach's Alpha reliability of study scales Forest Multidimensional Perfectionism, Academic Procrastination, and Mental Well-Being *(N = 200).*

Scales	No. of items	Cronbach's Alpha
Forest Multidimensional Perfectionism	35	.92
Academic Procrastination	21	.62
Mental-Well Being	14	.88

The reliability of the Forest Multidimensional scale is .92, the reliability of the Academic Procrastination scale is .62, and the reliability of the of Mental Well-Being scale is .88.

Table 2
Pearson correlation between Forest Multidimensional Perfectionism, Academic Procrastination and Mental Well-Being (N = 200).

	FMPS	APQ	WEMWBS
FMPS	-		
APQ	.694**	-	
WE MWBS	.124	.286**	-

*. Correlation is significant at the 0.05 level (2-tailed).**. Correlation is significant at the 0.01 level (2-tailed).
The table shows Perfectionism found significantly positively correlated with Academic Procrastination *(r=.694, P<.001)* and non-significantly correlated to Psychological Well-Being (*r=.124, P<.081*). Academic Procrastination was also significantly positively correlated to Psychological Well-being.*(r=.286, P<.001)*

Table 3
T-test analysis of Gender on Perfectionism, Academic Procrastination and Psychological Well-being. (N=300)

Sales	Groups	M	SD	t	P	Cohen's d

Multidimensional	Male	112.0	25.39	1.045	.297	0.17
Perfectionism	Female	108.0	19.83			
Academic	Male	68.8	14.07	2.572	.011	0.28
Procrastination	Female	63.4	14.54			
Mental	Male	45.6	12.9	.398	.691	0.05
well- being	Female	45.0	10.66			

The table shows significant differences $t(198)=2.572$, $p=.011$, in the Academic Procrastination of Males (M= 68.8, S.D= 14.07) and Female (M= 63.4,S.D=14.5),No significant differences $t(198)=1.045$, $p=.297$, were found between perfectionism scores of Males (M=112.0, S. D=25.39) and Female (M= 108.0, S.D=29.83). The value of Cohen's $d = 0.17(<0.50)$ indicated a small effect size. The value of Cohen's $d=0.28$ (<0.50) indicates small effect size. Gender differences with respect to Psychological well-being, for Males (M=45.6, S. D=12.9), and Female (M= 45.0, S.D=10.86) , show no significant differences $t(198)=.398$, $p=.691$. Cohen's $d=0.05(<0.50)$ indicated small effect size.

Table 4
T-test analysis of Education on Perfectionism, Academic Procrastination and Psychological Well- being. (N=300)

Scales	*Groups*	*M*	*S. D*	*t*	*P*	*Cohen's d*
Multidimensional	Undergraduate	108.2	22.05	1.964	.051	0.31
Perfectionism	Postgraduate	115.0	21.67			
Academic	Undergraduate	64.98	14.52	1.504	.134	0.24
Procrastination	Postgraduate	68.42	13.84			
Mental	Undergraduate	46.4	12.02	2.149	.033	0.31
Well-being	Postgraduate	42.40	10.57			

The table shows significant differences $t(198)=11.964.$, $p=.051$, were found between perfectionism scores for Group 1 (Undergraduate) (M=108.0, S. D=22.05) and Group 2 (M.Phil.) (M= 115.0,S.D=21.67). The value of Cohen's $d = 0.31$ (<0.50) indicated a small effect size. There were no significant differences $t(198)=1.504,$, $p=.24$, in terms of Academic Procrastination for Group 1(Undergraduate) (M=64.98, S.D=14.52) and Group 2(Postgraduate) (M= 68.4,S.D=13.84). The value of Cohen's d = 0.24 (<0.50) indicates a small effect size. Education differences with respect to psychological well-being, for Group 1(Undergraduate) (M = 46.2, S.D = 12.02), and Group 2 (Postgraduate) (M = 42.40, S.D = 10.857), show that no significant difference exists $t(198)=2.149$, $p = 0.33$. Cohen's $d= 0.31(<0.50)$ indicated a small effect size.

Discussion

The research was conducted on perfectionism, academic procrastination and psychological well-being of university students. The main objective of the current research was to examine the relationship between perfectionism, academic procrastination, and psychological well-being in university students. This research utilized three questionnaires: The Forest Multidimensional Perfectionism Scale (Randy Forest 1990), Academic Procrastination (Abul Ghazal 2012), and the Psychological Well-being Scale (Warwick-Edinburgh 2007).

Findings from current research show that although perfectionism and academic procrastination are significantly correlated, the relationship between perfectionism and psychological well-being requires further understanding as no significant relationship was found between them. Academic procrastination and psychological wellbeing are significantly correlated, implying that students who are more likely to procrastinate are also more prone to having reduced psychological wellbeing. As such, there may be a need to investigate academic procrastination as a possible moderator, which may help in clarifying the relationship between perfectionism and psychological well being.

Findings show two significant correlations; between perfectionism and procrastination, and between procrastination and psychological well-being. This is consistent with previous studies as both

perfectionists and procrastinators are influenced by a fear of failure, and procrastinators' fear of failure paralyzes them and results in reduced psychological well being (Mitchell et al., 2022; Zarrin et al., 2020). Previous research has also linked perfectionism and procrastination as self regulation failure (Malivoire et al., 2019; Zarrin et al., 2020).

In addition, results also revealed the high reliability of the Perfectionism scale, Academic Procrastination Scale and Psychological Well- being, as shown in Table 1. No gender differences were observed except that males were more likely to procrastinate academically in comparison to females. These results are consistent with most studies as males seem to exert less academic self-control which results in higher procrastination (Liu et al., 2020). In terms of educational differences, Postgraduate students were found to score higher on the perfectionism scale, while undergraduate level students were more likely to score higher on Psychological well-being measure, indicating worse health. This could be explained as there is higher pressure of expectations and pressure to be perfect because of their higher educational level, which may result in lowered psychological health of undergraduate students, which they may adapt to later on by becoming more perfectionists as observed in postgraduate students (Mitchell et al., 2022).

Conclusion

To summarize the findings of this study, there appears to be a significant relationship between perfectionism and academic performance, as well as a significant relationship between academic performance and psychological well being. Additionally, perfectionism, academic procrastination, and psychological well-being are all prevalent among students, as evidenced by their behavior, cognition, interpersonal connections, and academic achievement. These findings could be helpful in pinpointing relevant issues and understanding the complex interplay between perfectionism, academic procrastination, and psychological well-being and developing strategies to improve conditions for students.

Recommendations

Due to a lack of time, this study is limited to being cross sectional in nature. Longitudinal studies are more preferable for in depth understanding of the topic, and including a diverse population from different cities in Pakistan would increase the study's generalizability. Based on the findings, a more detailed analysis with moderation analysis should have provided more enlightening results. For example, the topic has only been explored using correlation analysis; a moderation or mediation analysis would be recommended in future research. Consequently, in future studies, the same problem could also be investigated using a mixed method research methodology, or to gain a better understanding of this complicated phenomenon, qualitative methods such as interviews could be employed for data collection. The data was obtained using standardized tools that were not developed for the present study population. As such, the results may differ slightly if self-developed measuring equipment were to be used.

References

Beck, B. L., Koons, S. R., & Milgrim, D. L. (2000). Correlates and consequences of behavioral procrastination: The effects of academic procrastination, self-consciousness, self-esteem and self-handicapping. *Journal of Social Behavior and Personality*, *15*(5), 3.

Burton, K. D., Lydon, J. E., D'Alessandro, D. U., & Koestner, R. (2006). The differential effects of intrinsic and identified motivation on well-being and performance: prospective, experimental, and implicit approaches to self-determination theory. *Journal of Personality and Social Psychology*, *91*(4), 750.

Constantin, K., English, M. M., & Mazmanian, D. (2018). Anxiety, depression, and procrastination among students: Rumination plays a larger mediating role than worry. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, *36*(1), 15–27.

Curran, T., & Hill, A. P. (2019). Perfectionism is increasing over time: A meta-analysis of birth cohort differences from 1989 to 2016. *Psychological Bulletin*, *145*(4), 410.

Curşeu, P. L., Ilies, R., Vîrgă, D., Maricuţoiu, L., & Sava, F. A. (2019). Personality characteristics that are valued in teams: Not always "more is better"? *International Journal of Psychology*, *54*(5), 638–649.

Da Lama, R. G. F., & Brenlla, M. E. (2022). Past-Positive time perspective predicts academic achievement via motivation, and procrastination might not be as bad as it seems. *Journal of Applied Research in Higher Education*, *ahead-of-print*.

Dautov, D. (2020). Procrastination and laziness rates among students with different academic performance as an organizational problem. *E3S Web of Conferences*, *210*, 18078.

Drieberg, H., McEvoy, P. M., Hoiles, K. J., Shu, C. Y., & Egan, S. J. (2019). An examination of direct, indirect and reciprocal relationships between perfectionism, eating disorder symptoms, anxiety, and depression in children and adolescents with eating disorders. *Eating Behaviors*, *32*, 53–59.

Duru, E., & Balkıs, M. (2017). *Procrastination, self-esteem, academic performance, and well-being: A moderated mediation model*.

Fadhli, D. (n.d.). *The Intersect Between Middle Eastern Women and Mental Health: Alhumdulillah, Thank God for Everything*.

Ferrari, J. R., & Díaz-Morales, J. F. (2014). Procrastination and mental health coping: A brief report related to students. *Individual Differences Research*, *12*(1), 8–11.

Fogelman, N., & Canli, T. (2019). Early life stress, physiology, and genetics: a review. *Frontiers in Psychology*, *10*, 1668.

Garinger, L. M., Chow, G. M., & Luzzeri, M. (2018). The effect of perceived stress and specialization on the relationship between perfectionism and burnout in collegiate athletes. *Anxiety, Stress, & Coping*, *31*(6), 714–727.

Goroshit, M. (2018). Academic procrastination and academic performance: An initial basis for intervention. *Journal of Prevention & Intervention in the Community*, *46*(2), 131–142.

Grunschel, C., Schwinger, M., Steinmayr, R., & Fries, S. (2016). Effects of using motivational regulation strategies on students' academic procrastination, academic performance, and well-being. *Learning and Individual Differences*, *49*, 162–170.

Habelrih, E. A., & Hicks, R. E. (2015). Psychological well-being and its relationships with active and

passive procrastination. *International Journal of Psychological Studies*, *7*(3), 25.

Harari, D., Swider, B. W., Steed, L. B., & Breidenthal, A. P. (2018). Is perfect good? A meta-analysis of perfectionism in the workplace. *Journal of Applied Psychology*, *103*(10), 1121.

Hewitt, P. L., Flett, G. L., & Mikail, S. F. (2017). *Perfectionism: A relational approach to conceptualization, assessment, and treatment*. Guilford Publications.

Hewitt, P. L., Mittelstaedt, W., & Wollert, R. (1989). Validation of a measure of perfectionism. *Journal of Personality Assessment*, *53*(1), 133–144.

Hill, A. P., & Curran, T. (2016). Multidimensional perfectionism and burnout: A meta-analysis. *Personality and Social Psychology Review*, *20*(3), 269–288.

Hodgkinson, G. P., & Healey, M. P. (2018). The psychological foundations of strategic management: Beyond cold cognition. *The Sage Handbook of Industrial, Work, and Organizational Psychology: Managerial Psychology and Organizational Approaches*, 275–310.

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*, 15210251211019380.

Khalid, A., Zhang, Q., Wang, W., Ghaffari, A. S., & Pan, F. (2019). The relationship between procrastination, perceived stress, saliva alpha-amylase level and parenting styles in Chinese first year medical students. *Psychology Research and Behavior Management*, *12*, 489.

Kim, E.-A. (2018). Convergence Study on Stress, Stress of Clinical Practice, Coping, and Psychological well-being in Nursing Students. *Journal of the Korea Convergence Society*, *9*(3), 91–99.

Kittinger, R., Correia, C. J., & Irons, J. G. (2012). Relationship between Facebook use and problematic Internet use among college students. *Cyberpsychology, Behavior, and Social Networking*, *15*(6), 324–327.

Kivimäki, M., & Steptoe, A. (2018). Effects of stress on the development and progression of cardiovascular disease. *Nature Reviews Cardiology*, *15*(4), 215–229.

Kobori, O., Dighton, G., & Hunter, R. (2020). Does perfectionism impact adherence to homework assignment? A preliminary pilot study of perfectionism and procrastination of CBT homework. *Behavioural and Cognitive Psychotherapy*, *48*(2), 243–247.

Krause, K., & Freund, A. M. (2014). Delay or procrastination–A comparison of self-report and behavioral measures of procrastination and their impact on affective well-being. *Personality and Individual Differences*, *63*, 75–80.

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.

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.

Liu, G., Cheng, G., Hu, J., Pan, Y., & Zhao, S. (2020). Academic self-efficacy and postgraduate procrastination: A moderated mediation model. *Frontiers in Psychology*, *11*, 1752.

Lizmore, M. R., Dunn, J. G. H., Dunn, J. C., & Hill, A. P. (2019). Perfectionism and performance following failure in a competitive golf-putting task. *Psychology of Sport and Exercise*, *45*, 101582.

Malivoire, B. L., Kuo, J. R., & Antony, M. M. (2019). An examination of emotion dysregulation in maladaptive perfectionism. *Clinical Psychology Review*, *71*, 39–50.

Mitchell, K. J., Ybarra, M. L., Banyard, V., Goodman, K. L., & Jones, L. M. (2022). Impact of the COVID-19 pandemic on perceptions of health and well-being among sexual and gender minority adolescents and emerging adults. *LGBT Health*, *9*(1), 34–42.

Mohammadi Bytamar, J., Saed, O., & Khakpoor, S. (2020). Emotion regulation difficulties and academic procrastination. *Frontiers in Psychology*, *11*, 524588.

Nordby, K., Løkken, R. A., & Pfuhl, G. (2019). Playing a video game is more than mere procrastination. *BMC Psychology*, *7*(1), 1–12.

Pryal, K. R. G. (2021). Staying Focused. *Women in Higher Education*, *30*(3), 8–14.

Pychyl, T. A., & Sirois, F. M. (2016). Procrastination, emotion regulation, and well-being. In *Procrastination, health, and well-being* (pp. 163–188). Elsevier.

Qian, L., & Fuqiang, Z. (2018). Academic stress, academic procrastination and academicperformance: A moderated dual-mediation model. *Journal on Innovation and Sustainability RISUS*, *9*(2), 38–46.

Riolli, L., Savicki, V., & Richards, J. (2012). Psychological capital as a buffer to student stress. *Psychology*, *3*(12), 1202.

Rossetti, M. C., Tosone, A., Stratta, P., Collazzoni, A., Santarelli, V., Guadagni, E., Rossi, R., & Rossi, A. (2017). Different roles of resilience in depressive patients with history of suicide attempt and no history of suicide attempt. *Brazilian Journal of Psychiatry*, *39*, 216–219.

Ruiz-Esteban, C., Méndez, I., Fernández-Sogorb, A., & Álvarez Teruel, J. D. (2021). Perfectionism classes and aggression in adolescents. *Frontiers in Psychology*, 1856.

Schmidt, R. E., Courvoisier, D. S., Cullati, S., Kraehenmann, R., & Linden, M. Van der. (2018). Too imperfect to fall asleep: perfectionism, pre-sleep counterfactual processing, and insomnia. *Frontiers in Psychology*, *9*, 1288.

Schraw, G., Wadkins, T., & Olafson, L. (2007). Doing the things we do: A grounded theory of academic procrastination. *Journal of Educational Psychology*, *99*(1), 12.

Shokeen, A. (2018). Procrastination, stress and academic achievement among the B. Ed. Students. *Educational Quest*, *9*(1), 125–129.

Smith, M. M., Sherry, S. B., Vidovic, V., Hewitt, P. L., & Flett, G. L. (2020). Why does perfectionism confer risk for depressive symptoms? A meta-analytic test of the mediating role of stress and social disconnection. *Journal of Research in Personality*, *86*, 103954.

Steel, P., & Klingsieck, K. B. (2016). Academic procrastination: Psychological antecedents revisited. *Australian Psychologist*, *51*(1), 36–46.

Steel, P., Svartdal, F., Thundiyil, T., & Brothen, T. (2018). Examining procrastination across multiple goal stages: a longitudinal study of temporal motivation theory. *Frontiers in Psychology*, *9*, 327.

Stoeber, J., & Stoeber, F. S. (2009). Domains of perfectionism: Prevalence and relationships with perfectionism, gender, age, and satisfaction with life. *Personality and Individual Differences*, *46*(4), 530–535.

Teng, E., Venning, A., Winefield, H., & Crabb, S. (2015). *Half full or half empty: The measurement of*

mental health and mental illness in emerging Australian adults.

Uzun, N. D., Tekin, M., Sertel, E., & Tuncar, A. (2020). Psychological and social effects of COVID-19 pandemic on obstetrics and gynecology employees. *J Surg Med*, *4*(5), 355–358.

Wolters, C. A., Won, S., & Hussain, M. (2017). Examining the relations of time management and procrastination within a model of self-regulated learning. *Metacognition and Learning*, *12*(3), 381–399.

Wuthrich, V. M., Jagiello, T., & Azzi, V. (2020). Academic stress in the final years of school: A systematic literature review. *Child Psychiatry & Human Development*, *51*(6), 986–1015.

Zacks, S., & Hen, M. (2018). Academic interventions for academic procrastination: A review of the literature. *Journal of Prevention & Intervention in the Community*, *46*(2), 117–130.

Zarrin, S. A., Gracia, E., & Paixão, M. P. (2020). Prediction of academic procrastination by fear of failure and self-regulation. *Educational Sciences: Theory & Practice*, *20*(3), 34–43.

Zhang, Z., & Chen, W. (2019). A systematic review of measures for psychological well-being in physical activity studies and identification of critical issues. *Journal of Affective Disorders*, *256*, 473–485.