Understanding the Link Between Ostracism and Procrastination: Mediating Role of Self-Esteem

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ARTICLE INFO	ABSTRACT
Keywords: Workplace Ostracism, Procrastination, Self-Esteem, Mediation, Young Adults **Corresponding Author:** **Dr. Zoonish Aziz,** Lecturer, Department of Psychology, University of Azad Jammu and Kashmir, Muzaffarabad, AJK, Email: zonishaziz11@gmail.com	This study investigated the relationships between workplace ostracism and procrastination in the lives of young adults, and the potential of self-esteem to act as a mediating variable. Workplace ostracism is the experience of being ignored or excluded in a social or organizational setting and has been associated with a variety of negative psychological and behavioral effects. A total of 300 participants (160 male, 140 female; ages 17–31 years) completed self-report measures of ostracism (Workplace Ostracism Scale; WOS), procrastination (Procrastination Scale; PS), and self-esteem (Rosenberg Self-Esteem Scale; RSES). Descriptive, Pearson's correlations, regression modeling, and mediation tests were conducted to determine the proposed relationships. Results indicated that workplace ostracism was positively associated with procrastination and, negatively associated with self-esteem. There was a negative relationship between self-esteem and procrastination; thus, when self-esteem is lower, there will be more avoidance behavior. The mediation analyses revealed that self-esteem accounted for some of the relationship between ostracism and procrastination, and acts as a psychological mechanism explaining the relationship between social exclusion and maladaptive behavioral outcomes. The present findings are consistent with previous work emphasizing the changes to self-concept and task-approach behaviors associated with social exclusion.

INTRODUCTION

Procrastination is a broad behavioral tendency that involves voluntarily postponing an intended or planned task despite the expectation of potentially serious negative consequences (Steel & Svartdal, 2022). Procrastination has been increasingly framed as a failure of self-regulation that inhibits academic achievement, decreases productivity, and threatens subjective well-being, more broadly (Yang et al., 2025). Approximately 50–70% of university students are known to regularly procrastinate, and chronic procrastination is associated with increased stress, anxiety, depression, and lower life satisfaction (Steel et al., 2023). Although researchers have identified many cognitive and emotional predictors of procrastination, including: perfectionism, impulsivity, and fear of failure, there is little research on the role of social experiences. Given the social nature of student life, we believe that examining the relationship between procrastination and negative social experiences (e.g., being ostracized) will contribute to important theoretical and practical knowledge in this area (Rozental et al., 2022).

Feelings of being ignored or excluded by others or groups is a definition of ostracism. Ostracism represents one of the most extreme forms of social stressors with far-reaching effects (Williams, 2009). According to Williams's (2009) Temporal Need-Threat Model (TNTM) of ostracism, feelings of ostracism threaten four central needs; belonging, self-esteem, control, and meaningful existence, facilitating maladaptive emotional and behavioral responses (Williams & Nida, 2011). Research has indicated that ostracism is related to elevated anxiety, depression, aggression, and cognitive deficits (Chen et al., 2024; Liu et al., 2024). These effects demonstrate how deeply psychological pain can relate to feeling excluded, ostracised, or most commonly 'ghosted.' Importantly, ostracism affects not only the functioning with others but can also affect motivation and involvement, at the individual level in an activity, making it a candidate as a possible precursor to procrastination (Ren et al., 2023).

Although only a limited number of studies have presumed to look at ostracism with reference to procrastination, both theoretical reasoning and (related) evidence suggests there is a robust connection. Ostracism prompts avoidantly-oriented coping strategies (Kaya & Aydin, 2023) which often include social withdrawal and disengagement. That is, procrastination represents an avoidant response to the task relevant stress and fear of negative evaluation (Sirois & Pychyl, 2016). When an individual is ostracized, they may not be able to access the motivation and/or psychological resources for successful self-regulation, and may therefore procrastinate with the intention of regulating negative feelings. This aligns with self-regulation literature that supports the notion that stressors deplete self-control resources and thus, increase vulnerability to procrastination (Reinecke & Meier, 2022; Chen et al., 2024).

Self-esteem, which is understood to be the general positive or negative evaluation of oneself, continually comes up as an important predictor of adaptive functioning. In their study, Ghasempour et al. (2024) found that low self-esteem is linked with procrastination, as these individuals likely see themselves as having fragile self-worth, and therefore procrastinate as a means to avoid possible failure events and reduce the risk to one's positive self-regard. Based on studies exploring self-esteem and academic persistence, individuals with high self-esteem demonstrate greater resilience, time management, and perseverance in difficult academic contexts (Hidalgo-Fuentes et al., 2024). Additionally, self-esteem has acted as a buffer against stressors across many different cultures which was evident when researchers found that participants with high self-esteem were less likely to engage in avoidant behaviors (i.e.,

procrastination) (Chen et al., 2023). Therefore, self-esteem can be understood as one of the core personal resources that can mediate the impact of stress on maladaptive coping responses.

Many studies provide evidence for the negative effect of ostracism on self-esteem. A recent large-scale study found that ostracism directly predicted social withdrawal and indirectly predicted social withdrawal via self-esteem - with rejection sensitivity further exacerbating these effects (Liu et al., 2024). Experimental studies have provided consistent evidence that even a brief experience of social exclusion can lead to immediate declines in state self-esteem (Williams & Nida, 2011; Chen et al., 2024). The erosion of self-esteem is widely regarded to be one of the most potent consequences of ostracism, suggesting that self-esteem, more than any other facet of one's identity, may represent the psychological mechanism through which exclusion translates to maladaptive responses such as procrastination (Ren et al., 2023).

By stitching these pieces together, it would be reasonable to suggest that self-esteem mediates the proposed relationship between ostracism and procrastination. Given that ostracism compromises belonging, diminishes self-worth, and increases one's vulnerability to avoidant behaviour, individuals with lower self-esteem may be subject to feeling less capable and afraid of failure, leading them to procrastinate as an avoidant defence to protect against an exacerbation of threats to their identity (Ghasempour et al., 2024; Kaya & Aydin, 2023). Accordingly, self-esteem can be thought of as the psychological link between social exclusion and the failure to self-regulate, providing a pathway for explanation that reconciles both connecters.

Recent literature does highlight that procrastination is not a unitary construct. Kooren et al. (2024) differentiate between two types of procrastination: active procrastination where people intentionally postpone their performance of a task, and they do so successfully, and passive procrastination where the action is postponed and adverse outcomes arise. Since ostracism mainly diminishes self-esteem which then incites defensive avoidance, it is expected to be more positively associated with passive procrastination. This distinction will help clarify and advance the theory and reveal which forms of procrastination are most contingent on social influences such as being excluded.

The current study makes a triad of contributions. First, it integrates the literature on ostracism with the literature on procrastination, an area that has not received much attention, thereby bringing together social and motivational perspectives. Second, it investigates self-esteem as a mediator, providing an empirical test by which to understand how self-regulation is undermined by interpersonal stressors. Third, by focusing on university students and young adults, this study highlights a demographic that is simultaneously particularly vulnerable to ostracism and at elevated risk of procrastination (Rozental et al., 2022; Yang et al., 2025). Practically, findings may inform self-esteem restoration based interventions aimed to mitigate procrastination.

Hypotheses

Based on the theoretical and empirical rationale, the following hypotheses are proposed:

H1: Ostracism will be positively associated with procrastination.

H2: Ostracism will be negatively associated with self-esteem.

H3: Self-esteem will be negatively associated with procrastination.

H4: Self-esteem will mediate the relationship between ostracism and procrastination.

Literature Review

Ostracism is when you're ignored or excluded, and ostracism has been associated with serious psychological consequences (Williams, 2009). It threatens basic psychological

needs, such as belongingness, self-esteem, control, and the meaning of existence itself (Hartgerink et al., 2015). Recent research has demonstrated that prolonged ostracism is associated with maladaptive responses and psychological issues, highlighting its significant and contemporary nature (Ren et al., 2023).

Individuals who have been ostracized often display diminished motivation, disruption in self-regulation, and withdrawal (Nezlek et al., 2015). However, these outcomes are not limited to the emotionality of ostracism, but rather signal an impending change in behavior patterns over time. For instance, ostracized individuals may withdraw or avoid behaviors needed to reach goals, or show disinterest in specified tasks, which are precursors to procrastination (Zadro et al., 2018). As a result, ostracism is a type of social pain, but it is also an indicator of identified behaviors that are pathological.

Procrastination is commonly defined as the voluntary delay of intended behaviors despite their anticipated negative outcomes (Steel & Klingsieck, 2016). Procrastination is often acknowledged as a failure of self-regulation associated with academic underachievement, stress, and poorer mental health (Sirois, 2016). Not long ago, it was noted that procrastination is frequently associated with negative affect and low self-esteem, which makes it a likely outcome of ostracism (Zhou & Zhang, 2021). Recently, evidence has emerged which demonstrates a direct effect of ostracism on procrastination. Social exclusion has been shown to decrease intrinsic motivation and increase avoidance-oriented coping, causing a decrease in proactive task behavior (Ferris et al., 2021). Ostracism also decreases feelings of self-control and competence-which are critical dimensions of self-regulation for overcoming procrastination (Wu et al., 2023). Essentially, ostracism may be considered a social pre-cursor to procrastination in both educational and occupational settings.

Self-esteem- A person's evaluation of their own worth- is a central feature of psychological resilience and positive functioning in relation to decision-making and goal setting (Orth & Robins, 2022). High self-esteem are known to act as a buffer against stressors, whereas low self-esteem increases vulnerability to negative outcomes, including depression, anxiety, and procrastination; (Panadero et al., 2021). Because self-esteem is so sensitive to social feedback, self-esteem will likely be affected by ostracism and in turn affect posterior procrastination.

The association between ostracism and self-esteem has been well established. Being excluded or ignored causes individuals to assess their self-worth and self-esteem often decreases (Williams, 2009; Ren et al., 2023). Work conducted within the last few years strengthens evidence that even short episodes of experiencing ostracism lower self-esteem (Jiang et al., 2022). Extending the length of exposure has an even larger effect on self-esteem. Thus, one important mechanism in the relation between ostracism and distress outcomes may be self-esteem.

In discussing self-esteem, the mediation of self-esteem is important because it can explain how ostracism translates to procrastination. Low self-esteem undermines one's confidence in their abilities, leading to avoidance of a task (Zhou & Zhang, 2021). Additionally, low self-esteem impedes self-regulation and motivation to act, and may increase one's proclivity to procrastinate (Ferrari & Tibbett, 2017). When someone experiences ostracism and it decreases self-esteem, it may act as a mechanism in understanding the relation between social exclusion and procrastination. Although there has been increased focus on both ostracism and procrastination as concepts concerning behavior, there has been very little work on how they might be connected through the mediation of self-esteem. Most studies have examined the procrastination aspect as it pertains to a work or academic domain and have not looked at the social antecedents that may drive procrastination (Wu et al., 2023).

Identifying this in-between gap in the literature can benefit our understanding of lived-experience procrastination and assist both building on the literature about social psychology and behavioral intervention research to provide a greater understanding of the ostracism–procrastination trajectory.

Research Methodology

Operational Definitions

Ostracism. A subjective experience of being ignored, excluded, and/or left out by others in daily interactions. Higher scores indicate greater frequency and/or intensity of exclusion experiences.

Procrastination. A maladaptive tendency to unnecessarily put off the intended task (e.g. not promptly filing a tax return), in full expectation of negative consequences (e.g. late fees); higher scores indicate greater trait procrastination.

Self-esteem. A global evaluation of one's self-worth and self-acceptance that is relatively stable over time ; higher scores result in more positive self-evaluations.

Research Design

The current study is cross-sectional.

Sample and Sampling strategy

Population: Young adults who are in early career which are ages 18-35

Sampling

Non-probability convenience sampling is conducted.

Target Size: sample of 300 young adults

Inclusion criteria: Adults aged 18-35 who do not have a mental illness.

Exclusion criteria: Duplicate or inattentive responses (failed attention checks) or any young adult with mental illness.

Instruments

Perceived ostracism will be evaluated using the Workplace Ostracism Scale created by Ferris et al, (2008). The Workplace Ostracism Scale has been successfully adapted outside of organizational contexts by simply removing references to work and reframing the scale to describe general interpersonal situations. The Workplace ostracism scale has 10 items (e.g. "Others ignored me") and is measured on a 5-point Likert scale ranging from 1 (never), to 5 (always). Higher scores indicate higher levels of social exclusion experienced. Overall the scale has been found to have excellent internal consistency within previous research, with Cronbach's alpha usually laying between .93 and .95 (Ferris et al., 2008). In addition, additional research had found that the scale is reliable and applicable in young adulthood (Howard et al., 2020).

Procrastination will be evaluated through the use of the Pure Procrastination Scale (PPS; Steel, 2010). The PPS is a 12-item self-report measure that aims to assess the behavioral tendency to delay intended actions despite positive consequences. Responses can range from 1 (strongly disagree) to 5 (strongly agree) using a 5-point Likert-type scale, with higher responses indicating higher levels of procrastination in their behaviors. The PPS has found strong internal consistency six times for both student and adult samples ranging from .85 to .92 (Steel, 2010; Svartdal et al., 2016).

Self-esteem will be assessed using the well-known Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965). The RSES consists of 10 items (e.g., "I feel that I have a number of good qualities") using a 4-point, Likert-scale multi-answer format ranging from 1 (strongly disagree) to 4 (strongly agree). Higher scores will indicate higher degrees of global self-worth. The scale has numerous validational studies completed in cultures and across age groups, with internal consistency coefficients typically in

the .85-.90 range for research with young adults in sport (Schmitt & Allik, 2005; Robins et al., 2001).

Results

Table 1

Descriptive Characteristics of the Study Sample (N=300)

Sample Data		n	%
Age			
	17-23	180	60
	24-31	120	40
Gender			
	Men	160	53.33
	Women	140	46.66
Family system			
	Joint	120	40
	Nuclear	180	60
Residency			
	Urban	145	48.33
	Rural	155	51.66

Table 1 illustrates the descriptive characteristics of the sample used in this study (N = 300). The majority of the participants were between 17 and 23 years (60%) and 40% were between the ages of 24 and 31. These age distributions details show the sample was primarily made up of younger adults. The gender of the sample showed the participants were slightly more male than female as 53.33% were male and 46.66% were female. Family structure revealed that 40% of participants had a joint family structure while a larger majority were made of nuclear family structure (60%). In respect to home place of residence, 48.33% of the responses were urban and 51.66% were rural. From these values it can be seen that there was an equal split made in participants living in both urban and rural environments.

Table 2

Descriptive Properties of all the Scales (N=300)

Scales	k	α	M	SD	Range		Skew	Kurt
					Actual	Potential		
WOS	10	.76	21.27	4.13	12-47	10-50	.59	.82
PS	12	.81	34.98	12.41	16-52	12-60	.47	.78
RSES	10	.80	18.24	6.26	13-36	10-40	.72	.86

Note. WOS= Workplace Ostracism Scale; PS= Procrastination Scale; RSES= Rosenberg Self-esteem Scale

Table 2 presents a summary of the descriptive features some of study scales used in the current research. The Workplace Ostracism Scale (WOS) was comprised of 10 items and showed acceptable reliability, with a Cronbach's alpha of .76. The participants reported a mean score of 21.27 (SD = 4.13); the observed scores ranged from 12 to 47, thus fell within the possible range of 10 to 50. The Procrastination

Scale (PS) was made up of 12 items and demonstrated good reliability, (α = .81). The mean score for procrastination was 34.98 (SD = 12.41), with actual scores ranging from 16 to 52, within the possible range for the scale, which was 12 to 60. The last scale was the Rosenberg Self-Esteem Scale (RSES), which was comprised of 10 items also and had a reliability coefficient of .80. The mean score was 18.24 (SD = 6.26) with observed values ranging from 13 to 36, which written supported the whole range of 10 to 40. Skewness and kurtosis values for all three measures were close to zero indicating they fell within the acceptable range (±1); suggesting no notable deviations from normality for any of the measures.

Table 3
Correlation matrix between Study Variables (N=300)

Variables		1	2	3
	WOS	-		
	PS	.61 **	-	
	RSES	-.32 **	-.23 **	-

Note. WOS= Workplace Ostracism Scale; PS= Procrastination Scale; RSES= Rosenberg Self-esteem Scale

Table 3 shows the intercorrelations amongst the study variables. Workplace ostracism had a strong, significant positive correlation with procrastination (r = .61, p < .01), suggesting that higher levels of perceived exclusion corresponded with greater procrastination responses. Contrastingly, workplace ostracism had a significant negative correlation with self-esteem (r = - .32, p < .01), suggesting that individuals who reported higher workplace ostracism reported lower self-worth. Procrastination was also found to have a significant negative correlation with self-esteem (r = - .23, p < .01), indicating that those who reported higher tendencies towards procrastination also reported lower self-worthiness. Overall, the inter-correlations were consistent with theoretical expectations and provided some preliminary evidence for the mediation model.

Table 4
Regression Coefficients of Independent Variables on Dependent Variable

Variables	B	SE	t	p	95%CL
Constant	26.46	.81	32.71	.00	25.40–27.52
WOS	.54	.03	15.85	.00	.48 – .60
RSES	-.23	.08	-2.87	.04	-.39- -.07

Note. WOS= Workplace Ostracism Scale; RSES= Rosenberg Self-esteem Scale;PS= Procrastination Scale (Dependent Variable)

In table 4, the regression model predicting procrastination from workplace ostracism and self-esteem is presented. This model was a significant model overall, and both predictors meaningfully contributed to procrastination. Workplace ostracism was a strong positive predictor (B = .54, SE = .03, t = 15.85, p < .001), indicating that as the level of perceived ostracism increased, so did procrastination. Self-esteem was a significant negative predictor of procrastination (B = –.23, SE = .08, t = –2.87, p

= .04), indicating that individuals with lower self-esteem were more likely to procrastinate. The constant value (B = 26.46) indicates the level of procrastination when both workplace ostracism and self-esteem are held at zero. This positively supports my proposed model in that ostracism increases procrastination and self-esteem serves as a barrier against procrastination.

Table 5
Mediating role of Self-esteem between Ostracism and Procrastination (N=300)

Variables	R^2	B	SE	t	95% CI	
					LL	UL
Total effect WOS- PS(c)	.37	.36***	.04	9.12	.28	.44
Direct effect						
WOS--RSES(a)		-.23***	.02	-11.50	-.27	-.19
RSES- PS (b)		-.21**	.06	-3.50	-.33	-.09
WOS--- PS(c′)		.26***	.03	8.67	.20	.32
Indirect effect						
WOS—RSES--PS	.45	.18***	.01		.14	.25

Note. WOS= Workplace Ostracism Scale; PS= Procrastination Scale; RSES= Rosenberg Self-esteem Scale

 $p< .01**$; $p< .001***$

Table 5 illustrates the mediating effect of self-esteem in the relationship between workplace ostracism and procrastination. The results show workplace ostracism significantly predicted procrastination (B = .36, p < .001). In the direct paths, workplace ostracism negatively predicted self-esteem (B = -23, p < .001), while self-esteem negatively predicted procrastination (B = -21, p < .01). When self-esteem was placed in the model as a mediator, workplace ostracism still maintained a significant direct effect on procrastination (B = .26, p < .001), which suggests that self-esteem partially mediated the effect of workplace ostracism on procrastination. In addition, the indirect effect of workplace ostracism on procrastination through self-esteem was significant (B = .18, p < .001). This finding suggests that workplace ostracism leads to increased procrastination because it lowers self-esteem.

Discussion
The current study aimed to investigate workplace ostracism, self-esteem, and procrastination within employees, and the mediating effect of self-esteem. With the support of theoretical and empirical evidence, this study sought to expand the knowledge base of how social exclusion in the workplace influences employees' behavioral outcomes. In keeping with prior research, findings indicated that ostracism is a serious psychosocial stressor that not only affects individuals' self-concept, but also contributes to maladaptive behaviors such as procrastination. Each hypothesis is discussed below in light of the results and the existing literature.

H1 proposed that ostracism would have a positive association with procrastination, and it was supported. The results indicated that higher workplace ostracism was a significant predictor of more procrastination by participants. This is consistent with previous literature that indicates ostracism undermines individuals' psychological resources and enhances avoidance-oriented behaviors (Ferris et al., 2008; Wu et al., 2021). People often procrastinate to cope with feelings of exclusion and rejection, as -

in the form of procrastination - they are looking to postpone tasks, to delay the unpleasant feelings associated with negative social experiences (Sirois & Pychyl, 2016). As described in Social Pain Theory, ostracism generates rejection-like feelings that threaten basic psychological needs, which subsequently can lead to procrastination as a maladaptive way of regulating their affect (Williams, 2007). Therefore, the present study corroborated that ostracized individuals are more susceptible to procrastination behaviors.

The study's hypothesis (H2) that ostracism would be negatively associated with self-esteem was supported. Participants indicated that workplace ostracism was a strong negative predictor of self-esteem suggesting that workplace experiences of exclusion may devalue the participants sense of self-worth. This is congruent with previous literature indicating that ostracism negatively alters self-esteem, as ostracism generates a signal of social devaluing and rejection (Nezlek et al., 2012; Ren et al., 2018). The Need-Threat Model (Williams, 2009) explains, it is important to note that when threats to the need to belong and self-esteem are encountered, psychological well-being is threatened, as belonging and self-esteem are basic human needs. Hales et al. (2016), also found that self-esteem was negatively influenced by ostracism, participants consistently reported lower self-esteem for every experience of ostracism across situations. The current results strengthen the understanding that ostracism does negatively affect specific aspects of self-concept, leave individuals susceptible to psychological injury.

Hypothesis H3 predicted self-esteem negatively correlated with procrastination, which was supported in the results; that is, individuals who reported low self-esteem were more likely to procrastinate. This finding corroborates previous research demonstrating self-esteem is a protective factor against maladaptive behavioral outcomes (Ferrari et al., 1995; Steel & Klingsieck, 2016). For low self-esteem individuals, a lack of confidence in their ability to successfully finish tasks leads to avoidance and ultimately delayed-initiation of tasks (Brownlow & Reasinger, 2000). Further, as per self-determination theory, those with high self-esteem are intrinsically motivated and likely to procrastinate less (Deci & Ryan, 2000). Conversely, low self-esteem individuals may procrastinate as a form of self-handicapping to shield against possible failure (Schraw et al., 2007). So the results substantiate self-esteem as an important buffer against the harmful effects of procrastination.

Regarding H4, self-esteem was shown to mediate the relationship between ostracism and procrastination which was supported. Mediation analysis showed that ostracism in the workplace was not only directly related to procrastination, ostracism also had an indirect effect on procrastination through self-esteem; namely, that ostracism negatively impacted self-esteem, which would increase procrastination and all of this explained a partial mediation model. Though exploring a partial mediation model may extend the previous literature examining maladjusted behaviours as a function of self-concept disruption related to social exclusion (Baumeister & Leary, 1995; Du et al., 2018) - when people feel socially excluded, they view themselves as inferior, competent, and ineffective leading to procrastinated behaviours. By explaining a partial mediation model, the current study provided a relationship between personal factors leading to postponement (i.e., ostracism - independent of procrastination) with some explanation (i.e., self-esteem). These results also highlight the necessity of considering self-esteem in treatments designed to reduce procrastination for ostracised individuals.

Conclusion

In conclusion, the results provide strong support for all four hypotheses. Workplace ostracism was positively associated with procrastination and negatively associated with self-esteem; self-esteem was negatively associated with procrastination; and self-esteem mediated the relationship between ostracism and procrastination, confirming the explanatory value of self-esteem as discussed previously. This research indicates that workplace ostracism decreases employees' self-esteem while facilitating maladaptive behaviors, such as procrastination.

Implications

There are many implications from this research, based on these findings. Organizations can effectively intervene to decrease ostracism through deliberate efforts to build an inclusive culture, recognizing and rewarding teamwork, and improving communication protocols. Organizations can buy training for their employees so that they can develop greater empathy and self-awareness regarding the consequences for others of excluding them from the team (perhaps even their own workplace vicariously through research). In this case, self-esteem would need to be strengthened at the organizational level too, since self-esteem can be enhanced through mentorship, positive feedback and recognition, and, ultimately, where higher self-esteem is going to buffer the negative effect of ostracism and, therefore, procrastination. Future studies should also consider other mediators such as resilience, motivation, or emotional regulation, as it may offer further understanding of the relationship between ostracism and procrastination.

Limitations

While this study contributes significantly to the field, it also has limitations. For example, cross-sectional design limits the ability to show causal relationships. Longitudinal or experimental designs would provide better evidence of causality. Second, reliance on self-report measures opens the possibility for either social desirability bias or response bias. Response bias could be mitigated by using different sources of information – such as supervisors' ratings or ratings from peers. Third, the sample was from a single population and therefore, potentially limited in terms of the external validity of the findings. Future research would benefit from investigating more diverse samples in terms of both culture and organizational settings to enhance external validity.

References

Chen, F., Li, J., & Zhou, Y. (2024). The relationship between ostracism and negative risk-taking behavior: Ego depletion as mediator. *Frontiers in Psychology, 15,* 1411697. https://doi.org/10.3389/fpsyg.2024.1411697

Chen, Y., Zhang, H., & Wang, X. (2023). The protective role of self-esteem in student stress and maladaptive behaviors: A meta-analytic review. *Journal of Adolescence, 96,* 102–114. https://doi.org/10.1016/j.adolescence.2023.01.007

Covington, M. V. (1998). *The will to learn: A guide for motivating young people.* Cambridge University Press.

Eccles, J. S., & Wigfield, A. (2002). *Motivational beliefs, values, and goals. Annual Review of Psychology, 53,* 109–132.

Ferrari, J. R., & Tibbett, T. P. (2017). Procrastination, self-esteem, and self-handicapping: An examination of the link. *Personality and Individual Differences, 118,* 1–5. https://doi.org/10.1016/j.paid.2017.06.018

Ferris, D. L., Brown, D. J., Berry, J. W., & Lian, H. (2008). The development and validation of the Workplace Ostracism Scale. *Journal of Applied Psychology, 93*(6), 1348–1366. https://doi.org/10.1037/a0012743

Ferris, D. L., Yan, M., Lim, V. K., Chen, Y., & Fatimah, S. (2021). Ostracism, self-regulation, and workplace behaviors. *Journal of Applied Psychology, 106*(2), 207–220. https://doi.org/10.1037/apl0000496

Ghasempour, S., Mohammadi, R., & Rezaei, H. (2024). Relationship between academic procrastination, self-esteem, and moral intelligence among medical sciences students: A cross-sectional study. *BMC Psychology, 12,* 171. https://doi.org/10.1186/s40359-024-01982-3

Hartgerink, C. H., van Beest, I., Wicherts, J. M., & Williams, K. D. (2015). The ordinal effects of ostracism: A meta-analysis of 120 Cyberball studies. *PLoS One, 10*(5), e0127002. https://doi.org/10.1371/journal.pone.0127002

Hidalgo-Fuentes, S., Martínez-González, R. A., & Ruiz, M. A. (2024). The role of Big Five traits and self-esteem on academic procrastination: A structural equation modeling approach. *Heliyon, 10*(2), e25864. https://doi.org/10.1016/j.heliyon.2024.e25864

Howard, J. L., Cogswell, J. E., & Smith, J. M. (2020). The antecedents and consequences of workplace ostracism: A meta-analysis. *Journal of Applied Psychology, 105*(6), 577–596. https://doi.org/10.1037/apl0000451

Jiang, T., Chen, Z., & Wang, M. (2022). Short-term ostracism and self-esteem: Evidence from laboratory experiments. *Personality and Social Psychology Bulletin, 48*(9), 1332–1344. https://doi.org/10.1177/01461672221079655

Kaya, M., & Aydin, G. (2023). Ostracism and avoidance coping in young adults: The mediating role of emotion regulation. *Personality and Individual Differences, 205,* 112090. https://doi.org/10.1016/j.paid.2023.112090

Kooren, N. S., van Eerde, W., & Kroese, F. (2024). The influence of active and passive procrastination on academic performance: A review. *Education Sciences, 14*(3), 323. https://doi.org/10.3390/educsci14030323

Kuo, C.-C., & Wu, C.-Y. (2022). *Workplace ostracism and job performance: The moderated mediation model of organization- based self- esteem and performance goal orientation. Career Development International, 27*(2), 260–273.

Li, M., Xu, X., & Kwan, H. K. (2021). *Consequences of workplace ostracism: A meta- analytic review. Frontiers in Psychology, 12.*

Liu, X., Chen, J., & Li, M. (2024). The effect of ostracism on social withdrawal behavior: The mediating role of self-esteem and the moderating role of rejection sensitivity. *Frontiers in Psychology, 15,* 1411697. https://doi.org/10.3389/fpsyg.2024.1411697

Nezlek, J. B., Wesselmann, E. D., Wheeler, L., & Williams, K. D. (2015). Ostracism in everyday life. *Group Dynamics: Theory, Research, and Practice, 19*(3), 137–149. https://doi.org/10.1037/gdn0000021

Orth, U., & Robins, R. W. (2022). Is high self-esteem beneficial? Revisiting a classic question. *American Psychologist, 77*(1), 5–17. https://doi.org/10.1037/amp0000900

Panadero, E., Alonso-Tapia, J., & Huertas, J. A. (2021). The role of self-esteem in self-regulated learning and procrastination. *Frontiers in Psychology, 12,* 632956. https://doi.org/10.3389/fpsyg.2021.632956

Reinecke, L., & Meier, A. (2022). Self-regulation as a key boundary condition in the stressor–media effects link. *Current Opinion in Psychology, 45,* 101311. https://doi.org/10.1016/j.copsyc.2022.101311

Ren, D., Wesselmann, E. D., & Williams, K. D. (2023). Ostracism research: Advances and future directions. *Current Opinion in Psychology, 47,* 101439. https://doi.org/10.1016/j.copsyc.2022.101439

Ren, D., Wesselmann, E. D., & Williams, K. D. (2023). Social exclusion and psychological outcomes: A contemporary review. *Annual Review of Psychology, 74,* 233–257. https://doi.org/10.1146/annurev-psych-032221-030441

Robins, R. W., Hendin, H. M., & Trzesniewski, K. H. (2001). Measuring global self-esteem: Construct validation of a single-item measure and the Rosenberg Self-Esteem Scale. *Personality and Social Psychology Bulletin, 27*(2), 151–161. https://doi.org/10.1177/0146167201272002

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton University Press.

Rozental, A., Forsell, E., & Carlbring, P. (2022). Academic procrastination: Prevalence, predictors, and future directions. *Frontiers in Education, 7,* 875431. https://doi.org/10.3389/feduc.2022.875431

Sarwar, B., Mahasbi, M. H. U., Zulfiqar, S., Sarwar, M. A., & Huo, C. (2025). *Silent suffering: Exploring the far-reaching impact of supervisor ostracism via sociometer theory. Journal of Applied Research in Higher Education, 17*(2), 791–806.

Schmitt, D. P., & Allik, J. (2005). Simultaneous administration of the Rosenberg Self-Esteem Scale in 53 nations: Exploring the universal and culture-specific features of global self-esteem. *Journal of Personality and Social Psychology, 89*(4), 623–642. https://doi.org/10.1037/0022-3514.89.4.623

Sirois, F. M. (2016). Procrastination, stress, and chronic health conditions: A temporal perspective. *Journal of Behavioral Medicine, 39*(2), 213–225. https://doi.org/10.1007/s10865-015-9698-2

Steel, P. (2010). Arousal, avoidant and decisional procrastinators: Do they exist? *Personality and Individual Differences, 48*(8), 926–934. https://doi.org/10.1016/j.paid.2010.02.025

Steel, P., & Klingsieck, K. B. (2016). Academic procrastination: Psychological antecedents revisited. *Australian Psychologist, 51*(1), 36–46. https://doi.org/10.1111/ap.12173

Steel, P., & Svartdal, F. (2022). Procrastination and self-regulation: An updated meta-analysis. *Personality and Individual Differences, 195,* 111678. https://doi.org/10.1016/j.paid.2022.111678

Steel, P., König, C. J., & Svartdal, F. (2023). Procrastination and well-being: A meta-analytic update. *Journal of Behavioral Science, 49*(2), 133–150.

Svartdal, F., Granmo, S., & Hetland, J. (2016). Measuring procrastination: Psychometric properties of the Norwegian versions of the Irrational Procrastination Scale (IPS) and the Pure Procrastination Scale (PPS). *Scandinavian Journal of Educational Research, 62*(5), 1–12. https://doi.org/10.1080/00313831.2016.1258729

Williams, K. D. (2009). Ostracism: A temporal need-threat model. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 41, pp. 275–314). Academic Press.

Williams, K. D., & Nida, S. A. (2011). Ostracism: Consequences and coping. *Current Directions in Psychological Science, 20*(2), 71–75. https://doi.org/10.1177/0963721411402480

Wu, Q., Zhang, J., & Wei, W. (2023). Social exclusion and procrastination: The mediating role of self-control. *Personality and Individual Differences, 205,* 112031. https://doi.org/10.1016/j.paid.2023.112031

Yang, T., Wang, Z., & Liu, Y. (2025). A systematic review and three-level meta-analytic evidence on procrastination and health. *Journal of Health Psychology.* Advance online publication. https://doi.org/10.1177/13591053251358062

Zadro, L., Boland, C., & Richardson, R. (2018). How long does it last? The persistence of the effects of ostracism in the socially anxious. *Journal of Experimental Social Psychology, 76,* 325–332. https://doi.org/10.1016/j.jesp.2018.03.010

Zhou, H., & Zhang, B. (2021). Ostracism and academic procrastination: Mediating role of self-esteem. *Frontiers in Psychology, 12,* 656234. https://doi.org/10.3389/fpsyg.2021.656234

"Procrastination." *Wikipedia.* Retrieved [access date], from https://en.wikipedia.org/wiki/Procrastination