

Self-Regulation Predictability on Active and Passive Procrastination Among Academics in Higher Education

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Abstract Article Info.

The study investigates the predictive role of self-regulation on active and passive procrastinatory behaviors among higher education academics. Data were collected through a survey of 409 respondents and analyzed using descriptive and inferential statistical methods. The findings reveal that self-regulation significantly influences both types of procrastination, identifying it as a strong predictor of procrastinatory behavior. This suggests that individuals with higher self-regulatory abilities are less likely to engage in procrastination, whether active or passive. The study also highlights differences in how self-regulation affects active versus passive procrastination, offering deeper insights into the mechanisms underlying these behaviors. These results contribute to a better understanding of the dynamics between self-regulation and procrastination in academic settings. Moreover, the study provides a valuable framework for designing targeted interventions aimed at enhancing self-regulatory skills among higher education faculty. Such interventions can potentially reduce procrastination, thereby improving the efficiency and effectiveness of the teaching and learning process. Overall, the research emphasizes the importance of strengthening self-regulation to mitigate procrastinatory tendencies in academic professionals, supporting improved educational outcomes.

Keywords: self-regulation, active procrastination, passive procrastination, higher education academics

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Article History

Received: 2025, March 20 First Revised: 2025, April 24 Second Revised: 2025, July 28 Accepted: 2025, August 26

Cite

Bhusal, N., & Bhattarai, R. K. (2025). Self-regulation predictability on active and passive procrastination among academics in higher education. New Perspective: Journal of Business and Economics, 8(1), 135–145. https://doi.org/10.3126/npjbe.v8i1.85409

Introduction

Procrastination is a common behavior observed among working individuals (Ferrari et al., 2007). It involves the unintentional diversion of focus from important tasks, leading to delays and often regret due to failure to complete those tasks on time (Klingsieck, 2013; Milgram, 1988; Silver & Sabini, 1981; Steel, 2007). However, some researchers like Chun Chu and Choi (2005) view procrastination as a strategic behavior that may enhance future work performance. They classify procrastination into two

types: Passive procrastination as individuals delay tasks due to inability to make timely decisions or actions and Active procrastination as individuals deliberately delay tasks while planning to finish them effectively before deadlines.

Similarly, Ferrari and Emmons (1995) proposed two forms—functional procrastination, seen as intentional and purposeful delay for better results, and dysfunctional procrastination, which is self-defeating delay. While these perspectives expand on the traditional Oxford English Dictionary

definition of procrastination as 'informed delay' or 'wisely chosen restraint' (Ferrari et al., 1995), Klingsieck (2013) argued that positive delays should be termed 'strategic delay' rather than procrastination. Steel (2007) further clarifies procrastination as a voluntary delay resulting from self-regulatory failure.

Self-regulation refers to the ability to modify and adapt one's thoughts and behaviors according to situational demands (Baumeister & Heatherton, 1996). Steel (2007) explains that individuals cannot irrationally delay all tasks but tend to prioritize some over others, indicating voluntary choice influences procrastination. However, choice alone does not fully explain procrastinatory behavior; it also depends on the energy required to initiate and maintain task execution (Ajzen, 1985; Baumeister, 2003). Kuhl (1992) notes that failure to disengage from intentions damages concentration and performance.

Thus, procrastination can be understood in two ways i.e as postponement caused by depletion of self-regulatory energy, leading one to focus on less demanding tasks and as an energy-restoring delay to facilitate better task execution later.

Both involve restraint in efforts toward the main task, with outcomes determining whether procrastination is seen positively or negatively. Accordingly, this study assumes that regulating allocation of effort is a self-regulatory phenomenon, and whether tasks meet deadlines or are missed defines procrastinatory behavior.

In higher education, procrastination among academics is a prevalent concern that significantly impairs productivity, teaching quality, and research output. Understanding predictors of procrastination is vital for improving academic performance and institutional effectiveness. Self-regulation, which governs control over thoughts, emotions, and actions, plays a critical role in managing both active and passive procrastination by influencing how academics plan, monitor, and complete their tasks.

Active procrastinators delay tasks intentionally for strategic purposes, while passive procrastinators fail to act timely due to self-regulatory deficits. Investigating the degree to which self-regulation predicts these procrastination forms is crucial for developing interventions that promote healthier academic habits

Higher education refers to post-secondary education courses delivered by universities. culminating in degree certification and fostering personal, social, economic, and technological development (UNESCO, 2025). As of this study period, Nepal had 17 registered local universities with over 1,400 campuses and 57 foreign universityaffiliated colleges (University Grants Commission [UGC], 2023). Approximately 590,000 students pursue higher education supported by some 22,600 full-time faculty members.

This scale highlights the necessity to understand the challenges faced by faculty, including workload pressure and limited resources, could contribute which to procrastinatory behaviors. Consequently, exploring the role of self-regulation in mitigating procrastination among Nepalese academics is especially relevant.

Problem Statement

Despite its importance, empirical research on procrastination among higher education faculty in Nepal remains limited. Most studies have focused on school-level teachers (Dilmac, 2017; Laybourn et al., 2019; Mohsin & Ayub, 2014; Verešová, 2013; van Wyk, 2004), with some exploring hospital teachers (Hen, 2018). Research specific to university faculty procrastination is scarce, with Ackerman and Gross (2007) as one of the few exceptions, focusing mainly on task-related variables.

The recent work of Ananda et al. (2025) highlights the significant potential of Artificial Intelligence (AI) architectures to transform educational environments. Their research emphasizes how technology integration enhances governance, management, and operational efficiency in higher education institutions. Such advancements provide new opportunities to analyze behavioral patterns like procrastination using precise, data-driven self-regulation assessments, cognitive and operational thereby aligning processes for improved educational outcomes.

Mishra's studies (2022, 2023, 2024) on academic operations and digital transformation in Nepalese universities illustrate the dynamic and complex environment in which faculty operate. These works stress the growing importance of investigating psychological factors, such as procrastination, that affect academics' teaching and research responsibilities. Strengthening selfregulation can curtail procrastination, promote academic productivity, and advance institutional goals including quality assurance and accreditation (Mishra & Jha, 2023).

Considering the theoretical perspectives, empirical gaps, and evolving educational landscape, there is a clear need for focused research on the role of self-regulation in predicting active and passive procrastination among higher education faculty in Nepal. This study seeks to fill this gap by examining the predictive relationship between self-regulation and procrastination behaviors. The findings aim to offer valuable insights for educational policymakers, leaders, and academics themselves to develop targeted strategies that enhance time management, motivation, and academic performance.

Research Objective

In this context, the study aims to understand how self-regulation influences both active and passive procrastination among academics in higher education along with the key factors affecting their procrastination to inform the design of programs to improve self-regulation skills among teaching faculty, reducing the negative effects of procrastination in the teaching and learning processes.

Literature Review

Action Control Theory

The action by itself is one of the mostly explored construct in human behavioral psychology.

However, there are still debate on what makes the people act on their will. In this regard, Kuhl (1985, 1992) propounded the theory called action control theory. This theory stated that, focus on what and how to do leads to effective action rather than orientation on the conditions or state. This theory tries to solve the gap of traditional theories where multi-behavioral tendencies' influences on action and altering the strength for that action was not explored.

According to self-control theory, some people do not always do what they intend to do, even if able and well-motivated, because they are subject to various external and/or internal forces that arouse alternative or complementing action tendencies (Kuhl, 1985). So, to have any outcome from the action multiple behavior tendencies acted simultaneously which also reduces the competitive strength. However, the persistency an individual shows, that leads to goal accomplishment is due to an individual's self-regulation or can be termed as control function.

He also stressed that, the need of self-regulatory behavior that targets to accomplish the high level of utility action for defined goals. This regulatory behavior is preceded by three major preferences, i.e., cognitive preferences (intention), emotional preferences (desire, wishes, temptations), and procedural preferences (habit, dominant action). But in the case of state orientation, it distorts such functional quality. This regulatory function gets activated when automatic responses get disturbed or interrupted or suffer for any problems.

Further, the action on the task no longer adequately depended on motivation but rather the control on the task that is helpful in goal achievement (Gollwitzer, 1990; Kuhl & Beckmann, 1985). Therefore, it is important to have the self-regulation to act effectively on any needed activities.

Relationship Between Self-Regulation and **Procrastination**

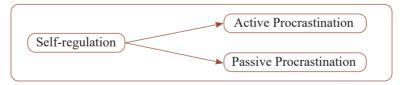
Self-regulation is defined as the capacity to alter behavior to adjust and adapt with the changing

social and situational demands (Baumeister & Heatherton, 1996). It is the "energy resource" that makes an individual to be involved in the action for the tasks which requires self-control (Baumeister, 2003). Pychyl and Flett (2012) claimed that, weak self-regulation likely causes the procrastinatory behavior. In addition, procrastination is an inability to control oneself from the deviation of regular course of action towards hedonic task for discomfort reduction caused by the action itself (Ellis & Knaus, 1979; Ferrari et al., 1995). Likewise, procrastinators are unable to suppress the irrational belief and thus end up with "fancying on what one ought to be doing" (Silver & Sabini, 1981). Further, Lay (1986) and Dewitte and Lens (2000) claimed that procrastinators are cognitively disorganized, unable to see the high action identities and less probable to task completion, however, knew their actions and possible consequences. Moreover, procrastinators are less prepared on a job's time demand and underestimate overall time requirement for a job completion (Lay, 1986; McCown et al., 1987). However, self-regulatory behavior visualizes the high action identities that insured the timely decision making and effective jobs completion (Baumeister et al., 2006).

Since self-regulatory resources are depletory in nature so people choose the work that demands less energy and prone to be deviated from the assigned task (Baumeister, 2003). In addition, when an individual is unable to disengage from an intention when required then individual's ability to initiate novel activities with the required concertation may impaired (Kuhl, 1992). Therefore, it is essential for an individual to ensure the continuous restoration of energy sources of self-regulation for having consistency in the self-regulatory effort to minimize the procrastinatory behavior at work (Baumeister & Vohs, 2007; Milgram, 1988; Steel, 2007).

self-regulation components like The perceived professional efficiency (Dilmac, 2017), psychological resilience (Öksüz & Guven, 2014), Time management and Self-control (Zhao et al., 2021), Conscientiousness and Self-efficacy (Hackman & Lawler, 1971) are the strong predictor of procrastination especially in the case of teachers. In almost all the studies, self-regulation shows negative relationship with procrastinatory behavior. So reduction of self-regulation might encourages task procrastination behavior (Khattak & Ilyas, 2017). Besides, in terms of active procrastination, Vincent et al. (2024) found positive relationship between self-regulation and stating it as a cultivating factor of active procrastination, supporting the Chun Chu & Choi (2005) claim of positive restraining feature of active procrastination. Likewise, Taura et al. (2015) also stated the selfregulation mediation between the self-efficacy and active procrastination. On these regards, conceptual framework as in Figure 1 was derived.

Figure 1 Conceptual Framework Depicting Relationship Between Self-regulation and Procrastination Types



Hypotheses

- H1: There is significant difference in selfregulation between high and low active procrastinators.
- H2: There is significant difference in self-
- regulation between high and low passive procrastinators.
- H3: Self-regulation can effect both active and passive procrastinatory behavior.

Methodology

Research Design

This study assumes procrastination and selfregulation are behavioral phenomena and can be measurable: hence, the deductive methodology with cross-sectional research design following quantitative methods were used (see, Ferrari et al., 1995; Metin et al., 2019; Steel, 2007; Strunk et al., 2013; Van Eerde & Klingsieck, 2018; Weymann, 2017). The sample were chosen under convenience sample methods, considering all higher education teaching in Nepal as a population. In addition, survey questionnaire was used as a source of data collection. However, to control likely selective bias a criterion of at least 6 months of teaching experience within the exploration period was taken. Apart from that, response bias was mitigated by providing prior information regarding survey and by taking consent beforehand with the teaching faculties.

Sample size

With the total population of higher education teaching faculties around 22.600 derived from student teacher ratio (see, Felix Chama, 2020; UGC, 2023; UNESCO, 2013) using Cochran's sample determination formula under defined population, it suggests 379 as required sample size. However, this study ends-up with 409 samples out of 600 questionnaire distributed. In addition, it also helps in securing better effect size and power in the study (Serdar et al., 2021). Out of the refined samples, majority of them i.e. 73.8% are Master's degrees holders and most of them teaching experience lie in-between 1 to 10 years. In addition, there is a dominance of male numbers in higher education, and are mostly private colleges' teachers.

Ouestionnaire

Self-Regulation Scale

This scale was designed to examine the general ability of self-regulatory behavior with 31 items final questionnaire. The developer computed the Cronbach alpha value of 0.92 with the highest correlation item of 0.92 (Carey et al., 2004). However, in this study, all together, only 27 questionnaire were supposed to be relevant and used for initial data collection. The Cronbach value derived of total items was 0.877. The correlation values of each items with their total average, for validity were also examined where all the values ranges from minimum of 0.325 to maximum of 0.873 with significant p-value less than 0.01, thus, confirming the scale validity. For simplicity, the scale is designed under five point Likert type with unipolar continuum ranging from 1 to 5 i.e. almost never true to almost always true respectively. Apart from that, the questionnaire were rephrased and reversed questions (all together, eight questions) were managed in the process of data refinement.

Active Procrastination Ouestionnaire

This scale contains seven items, selfreport measure of active procrastination. The scale used five-point linear measure to maintain higher variance in items with scale precision. The items are presented in Likert-type with unipolar continuum ranging from 1(almost never true) to 5 (almost always true). The dimension of active procrastination includes positive improvement at work, increased motivation, thrill experience, no difficulty at work. The items like "I put off starting task to increase my level of motivation at work", "I delay or postpone task because I perform better under time pressure" were used to gauge the active procrastination. In addition, the needed rephrases were also done to meet the contextual requirements. Besides, the measure had the Cronbach Alpha of 0.81 with the items factor loadings of 0.5 to 0.84 and claimed to be one of the effective tool for the procrastination measures (Strunk et al. 2013). Further, in this study, Cronbach value was 0.763 ensuring the scale reliability and the correlation (r) of each items to their summated value were ranges from 0.418 to 0.781 with significant p-value thus, providing the validity assurance.

Irrational Procrastination Scale

This scale was designed to address the negative connotation of procrastination, thus measuring passivity in such behavior. It contains nine items with three reverse questions. However, the eighth item was dropped before the data collection because "I procrastinate" question was considered very direct approach to be asked in the examination of the procrastination behavior among teachers (Steel, 2007). Therefore, there were only eight items in the beginning of the data collection. For simplicity, the scale is designed under five point Likert type with unipolar continuum ranging from 1 to 5 i.e. almost never true to almost always true respectively. The dimension of passive procrastination includes, "I put things off so long that my well-being or efficiency unnecessary suffers"

and I do everything when I believe it need to be done (Reverse). These statements were rephrased to overlap with contextual boundaries. The Cronbach alpha ascertained by the developer of this scale was 0.89, which is also ascertained by the researchers (Svartdal, 2017). Further, for this study purpose, Cronbach alpha value was remained 0.711 retaining only the four items of the scale and suggesting the reliability of the scale. Besides, the validity was examined by using correlation between each items with their summative correlation coefficient. The study found that correlation coefficients ranges from 0.698 to 0.770 with p value < 0.01 indicating the significant accuracy to use the scale.

Table 1 Reliability and Validity of Measurement Scales

Variables	No. of Items	Cronbach (α)	Validity (R-calculated range)
Self-Regulation	27	0.877	(0.325 to 0.654)**> r-tabulated
Active Procrastination	7	0.763	(0.418 to 0.781)**> r-tabulated
Passive Procrastination	4	0.711	(0.698 to 0.770)**> r-tabulated

Results and Discussion

Table 2 showcases higher self-regulation i.e. with an average of 3.921 among teaching faculties and is significantly negatively correlated with passive procrastination. However, the relationship with active procrastination is also found to be

negative and the relationship in both procrastinatory types with self-regulation are weak. Apart from that, the mean value around three units of both passive and active procrastination highlights the occasional procrastinatory behavior of academics in higher education.

Table 2 Descriptive Statistics With Bi-variate Pearson's Correlation Coefficient of the Variables

Variables	Mean	Std. Dev	1	2	3
Self-Regulation	3.921	0.479	1		
Active Procrastination	2.621	0.729	237**	1	
3. Passive Procrastination	2.745	0.855	286**	.340**	1
Skewness			-0.237	0.001	-0.267
Kurtosis			-0.146	-0.344	-0.690

Note. Correlation is significant at the 0.01 level (2-tailed); Researchers' own calculations 2024

Table 3 presents mean difference of selfregulatory behavior within active and passive procrastinatory under high and low categories. It is found that higher the self-regulatory mean, lower the

active and passive procrastination, thus, supporting both H1 and H2 hypotheses and presenting the evidences of the significant differences in selfregulation among procrastinatory categories.

Table 3 Mean Difference in Self-regulation Among Active and Passive Procrastinators' Categories

Active	Passive	SR(Mean)	Mean diff.	CI=Confidence Interval
Low		3.982	(0.170)**	0.830-0.256
High		3.812		
	Low	4.052	(0.269)**	0.180-0.358
	High	3.782		

Note. ** Correlation is significant at the 0.01 level (Researchers' own calculations 2024)

Table 4 highlights the likely changes in procrastinatory behavior (i.e. active and passive) with the unit change in self-regulatory behavior. It is found that, both active and passive procrastinatory behavior is significantly negatively influenced by unit change in self-regulation, highlighting the affecting behavior of self-regulation on procrastination and thus supporting H3 hypothesis. Further, when comparing the degree of effect, passive procrastinators get relatively higher influence from self-regulation with the beta value of -0.510 units.

Table 4 Regression Analysis of Study Variables

Variables	Intercept	β	R2	F-values	t-values
SR → AP	4.033	-0.360	0.056	(24.171)**	(-4.916)**
SR → PP	4.747	-0.510	0.082	(36.379)**	(-6.031)**

Discussion

The study found that higher education teaching faculties are more than average self-regulators with mean value lies at 3.921. In addition, they also accept on showing both the types of procrastinatory behavior occasionally supporting the finding of (Ackerman & Gross, 2007). However, majority of them stated showing passive procrastination relative to active procrastination.

In terms of bivariate relationship, the study found weak but significant negative correlation between self-regulation and both active and passive procrastination. In contrary, (Chun Chu & Choi, 2005; Taura et al., 2015; Vincent et al., 2024) found positive association when examining the active procrastination and self-regulation. In addition, self-regulation found to be high with those who shows relatively low procrastinatory behavior in both active and passive procrastination cases. In similar vein, it is also found that there is likely reduction in procrastinatory behavior as the regulatory behavior get improved. These findings

are tallied with the studies viz. (Hackman & Lawler III, 1971; Khattak & Ilyas, 2017; Milgram, 1988; Pychyl & Flett, 2012), where they highlighted the need of self-regulatory behavior to reduce the task procrastination behaviour. Apart from that, Baumeister (2003) also claimed that, the depletory nature of self-regulation energy might have the impact on deviation of individual toward less energy consuming task compared to high energy consumption tasks. Likewise, Prem et al. (2018) also found the positive association between selfregulation effort with work-place procrastination. Further, Ferrari (2001) claimed that regulatory behavioral ineffectiveness likely induce to procrastination under work pressure. Moreover, it can also be said that, the negative association and effect of self-regulation on active procrastination are due to the higher effort requirements on teaching learning jobs to self-regulate oneself (see, Laybourn et al., 2019). Therefore, it indicates the need of selfregulation among higher education academics to reduce the negative effect of procrastinatory behavior.

Conclusion

Under the examination of predictability of self-regulation on active and passive procrastination of higher education teaching academics in Nepal using the adequate samples size through cross-sectional strategy, it is conclude that, selfregulation do predict the likely behavior of both the procrastination types. It implies that, as the self-regulatory behaviour get improved both the procrastinatory behavior get reduced. Besides, as of higher education academics being occasional procrastinators, there is still the need for them to improve their self-regulatory effort. Therefore, this study also suggest higher academic institutions to conduct the training and development programs that help in improving the self-regulatory components like planning, self-efficacy, goal orientation and perfectionism that reduces their procrastinatory behaviors.

Besides, the study conducted under the limitations of few colleges' faculties i.e. 409, covering only five provinces out of seven provinces in Nepal. Even though, the study convenience-sampling followed techniques, which cannot escape the selective bias, the study tries to scrutinize the whole sampling process by determining the criteria. So, future researchers can work on random sampling with increasing sample size for better generalization. Similarly, study only focus on higher education teaching faculties as a whole, so future studies can compare the types of colleges and the procrastination. Apart from that, the negative relationship between active procrastination and self-regulation can also be examined under other contextual grounds. Further, second generation statistical tools can be helpful to maintain the robustness in new studies.

Acknowledgment

We would like to thank all the higher education teaching faculties who provide valuable responses using their time and effort. Thank you.

Funding

The authors received no funding for this research.

Conflict of Interest

There is no conflict of interest in either authorship or publication.

References

- Ackerman, D. S., & Gross, B. L. (2007). I can start that JME manuscript next week, can't I? The task characteristics behind why faculty procrastinate. Journal of Marketing Education. https://doi. 29(2), 97–110. org/10.1177/0273475307302012
- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl, & J. Beckmann (Eds.), Action control (pp. 11-39). Springer Berlin Heidelberg. https://doi. org/10.1007/978-3-642-69746-3 2
- Ananda, N., Mishra, A. K., & Aithal, P. S. (2025). AI architecture for educational transformation in higher education institutions. Poornapraina International Journal of Management, Education & Social Science (PIJMESS). 58–73. https://doi.org/10.5281/ 2(2). zenodo.16976456
- Baumeister, R. F. (2003). Ego depletion and self-regulation failure: A resource model of self-control. Alcoholism: Clinical and Experimental Research, 27(2), 281–284. https:// doi.org/10.1097/01.ALC.0000060879.61384.A4
- Baumeister, R. F., & Heatherton, T. F. (1996). Selfregulation failure: An overview. Psychological Inquiry, 7(1), 1–15. https://doi.org/10.1207/ s15327965pli0701 1
- Baumeister, R. F., & Vohs, K. D. (2007). Selfregulation, ego depletion, and motivation. Social and Personality Psychology Compass, 1(1), 115–128. https://doi.org/10.1111/j.1751-9004.2007.00001.x
- Baumeister, R. F., Gailliot, M., DeWall, C. N., & Oaten, M. (2006). Self-regulation and personality: How interventions increase regulatory success, and how depletion moderates the effects of traits on behavior. Journal of Personality, 74(6), 1773–1802. https://doi.org/10.1111/j.1467-6494.2006.00428.x

- Carey, K. B., Neal, D. J., & Collins, S. E. (2004). A psychometric analysis of the self-regulation questionnaire. Addictive Behaviors. https://doi.org/10.1016/j. 29(2), 253–260. addbeh.2003.08.001
- Chun Chu, A. H., & Choi, J. N. (2005). Rethinking procrastination: Positive effects of "active" procrastination behavior on attitudes and performance. The Journal of Social Psychology, 145(3), 245-264. https://doi. org/10.3200/SOCP.145.3.245-264
- Dewitte, S., & Lens, W. (2000). Procrastinators lack a broad action perspective. European Journal of Personality, 14(2), 121–140.
- Dilmac, B. (2017). An analysis of teachers' general tendency to procrastinate, perception of professional efficiency/self efficiency and altruism. Electronic Journal of Research in Education Psychology, 7(19), 1223–1338. https://doi.org/10.25115/ejrep.v7i19.1332
- Ellis, A., & Knaus, W. J. (1979). Overcoming procrastination. A Signet Book.
- Felix Chama, A. (2020). Application of sampling technique to teacher-student ratio in post primary schools of Adamawa State, Nigeria. Mathematical Modelling and Applications, 5(1), 8–15.
- Ferrari, J. R. (2001). Procrastination as selfregulation failure of performance: Effects of cognitive load, self-awareness, and time limits on "working best under pressure." European Journal of Personality, 15(5), 391-406. https://doi.org/10.1002/per.413
- Ferrari, J. R., & Emmons, R. (1995). Methods of procrastination and their relation to self-control and self-reinforcement: An exploratory study. Journal of Social Behavior and Personality, 10(1), 135-142.
- Ferrari, J. R., Díaz-Morales, J. F., O'Callaghan, J., Díaz, K., & Argumedo, D. (2007). Frequent behavioral delay tendencies by adults: International prevalence rates of chronic procrastination. Journal of Cross-Cultural Psychology, 38(4), 458–464. https://doi. org/10.1177/0022022107302314

- Ferrari, J. R., Johnson, J. L., & McCown, W. G. (1995). Procrastination and task avoidance: Theory, research and treatment (1st ed.) Springer Science Business Media.
- Gollwitzer, P. M. (1990). Action phases and mindsets. In E. T. Higgins, & R. M. Sorrentino (Eds.), *Handbook of motivation and cognition*: Foundations of social behavior (Vol. 2, pp. 53-92). The Guilford Press.
- Hackman, J. R., & Lawler, E. E. III. (1971). Employee reactions to job characteristics. Journal of Applied Psychology Monograph, 259-286. https://doi.org/10.1037/ 55(3), h0031152
- Hen, M. (2018). Causes for procrastination in a unique educational workplace. Journal of Prevention & Intervention in the Community, 46(3), 215–227. https://doi.org/10.1080/1085 2352.2018.1470144
- Khattak, A. N., & Ilyas, M. (2017). Task procrastination: Overcoming through reestablishment of psychological association. Journal of Business Strategies, 11(2), 73–88. https://doi.org/10.29270/JBS.11.2(17).005
- Klingsieck, K. B. (2013). Procrastination in different life-domains: Is procrastination domain specific? Current Psychology, 32(2), 175-185.https://doi.org/10.1007/s12144-013-9171-8
- Kuhl, J. (1985). Volitional mediators of cognitionbehavior consistency: Self-regulatory processes and action versus state orientation. In J. Kuhl, & J. Beckmann (Eds.), Action control (pp. 101-128). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-642-69746-3 6
- Kuhl, J. (1992). A theory of self-regulation: Action versus state orientation. discrimination. and applications. some Applied Psychology, 41(2), 97–129. https:// doi.org/10.1111/j.1464-0597.1992.tb00688.x
- Kuhl, J., & Beckmann, J. (1985). Action control: From cognition to behavior. Springer-Verlag. https://doi.org/10.1007/978-3-642-69746-3

- Lay, C. H. (1986). At last, my research article on procrastination. Journal of Research in Personality, 20(4), 474-495. https://doi. org/10.1016/0092-6566(86)90127-3
- Laybourn, S., Frenzel, A. C., & Fenzl, T. (2019). Teacher procrastination, emotions, stress: A qualitative study. Frontiers in Psychology, 10, 2325. https://doi.org/10.3389/ fpsyg.2019.02325
- McCown, W., Petzle, T., & Rupert, P. (1987). An experimental study of some hypothesized behaviours and personality variables of college student procrastinators. Personality and Individual Differences, 8, 781–786. https://doi.org/10.1016/0191-8869(87)90130-9
- Metin, U. B., Taris, T. W., Peeters, M. C. W., Korpinen, M., Smrke, U., Razum, J., Kolářová, M., Baykova, R., & Gaioshko, D. (2020). Validation of the procrastination at work scale: A seven-language study. European Journal of Psychological Assessment, 36(5), 767–776. https://doi.org/10.1027/1015-5759/a000554
- Milgram, N. (1988). Procrastination in daily living. Reports, 63(3),752-754. **Psychological** https://doi.org/10.2466/pr0.1988.63.3.752
- Mishra, A. K. (2022). Teaching and research operation at Pokhara University. Pokhara University. https://doi.org/10.5281/ zenodo.7045640
- Mishra, A. K. (2023). Digital academic operation: A case of Nepal. In P. K. Paul, D. Gurrapu, & E. K. Roy (Eds.), Digital education: Foundation and emergence with challenges, cases (pp. 219-228). New Delhi Publishers. https://doi. org/10.5281/zenodo.8066273
- Mishra, A. K. (2024, April 4-5). Harmony in innovation: Navigating global business landscapes through emerging technologies and dynamic management strategies. Proceedings of the International Conference on Harmony in Innovation: Navigating Global Business Landscapes through Emerging Technologies and Dynamic Management Strategies. Dr. D. Y. Patil B-School. https://doi.org/10.5281/ zenodo.13627751

- Mishra, A. K., & Jha, P. B. (2023). Emergence of quality assurance and accreditation—Context of higher education in Nepal. In P. K. Paul, P. K. Aithal, V. T. Shailashri, & S. Noronha (Eds.). Emergence and research in onterdisciplinary management and information technology (pp. 167-182). New Delhi Publishers. https://doi. org/10.5281/zenodo.8065756
- Mohsin, F. Z., & Ayub, N. (2014). The relationship between procrastination, delay of gratification, and job satisfaction among high school teachers. Japanese Psychological Research, 56(3), 224–234. https://doi.org/10.1111/jpr.12046
- Öksüz, Y., & Guven, E. (2014). The relationship between psychological resilience procrastination levels of teacher candidates. Procedia-Social and Behavioral Sciences. 116, 3189–3193. https://doi.org/10.1016/j. sbspro.2014.01.732
- Prem, R., Scheel, T. E., Weigelt, O., Hoffman, K., & Korunka, C. (2018). Procrastination in daily working life: A diary study on withinperson processes that link work characteristics to workplace procrastination. Frontiers in Psychology, 9, 1-11. https://doi.org/10.3389/ fpsyg.2018.01087
- Pychyl, T. A., & Flett, G. L. (2012). Procrastination and self-regulatory failure: An introduction to the special issue. *Journal of Rational-Emotive* & Cognitive-Behavior Therapy, 30(4), 203-212. https://doi.org/10.1007/s10942-012-0149-5
- Serdar, C. C., Cihan, M., Yücel, D., & Serdar, M. A. (2021). Sample size, power and effect size revisited: Simplified and practical approaches in pre-clinical, clinical and laboratory studies. Biochemia Medica, 31(1), 27–53. https://doi. org/10.11613/bm.2021.010502
- Silver, M., & Sabini, J. (1981). Procrastinating. Journal for the Theory of Social Behaviour, 11(2), 207-221. https://doi. org/10.1111/j.1468-5914.1981.tb00033.x
- Steel, P. (2007). The nature of procrastination: A meta-analytic and theoretical review of quintessential self-regulatory failure. Psychological Bulletin, 133(1), 65–94.

- Strunk, K. K., Cho, Y., Steele, M. R., & Bridges, S. L. (2013). Development and validation of a 2×2 model of time-related academic behavior: Procrastination and timely engagement. Learning and Individual Differences, 25, 35-44. https://doi.org/10.1016/j.lindif.2013.02.007
- Svartdal, F. (2017). 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, 61(1), 18–30. https://doi.org/10.10 80/00313831.2015.1066439
- Taura, A. A., Abdullah, M. C., Roslan, S., & Omar, Z. (2015). Relationship between self-efficacy, task value, self-regulation strategies and active procrastination among pre-service teachers in colleges of education. International Journal of Psychology and Counselling, 7(2), 11-17. https://doi.org/10.5897/IJPC2014.0297
- UGC. (2023). Education management information system: Report of higher education 2021/22. University Grants Commission.
- UNESCO. (2013). Education for all global monitoring report 2013/4: Teaching and learning—Achieving quality for all. UNESCO. https://doi.org/10.54676/cmse2898
- UNESCO. (2025, June 23). What you need to know about higher education. UNESCO.
- Van Eerde, W., & Klingsieck, K. B. (2018). Overcoming procrastination? A meta-analysis of intervention studies. Educational Research Review, 25, 73-85. https://doi.org/10.1016/j. edurev.2018.09.002

- van Wyk, L. V. (2004). The relationship between procrastination and stress in the life of the high school teacher. University of Pretoria.
- Verešová, M. (2013). Procrastination, stress and coping among primary school teachers. Procedia-Social and Behavioral Sciences. 106, 2131–2138. https://doi.org/10.1016/j. sbspro.2013.12.243
- Vincent, I. J., Law, M.-Y., Chew, Z. L.-K., & Lai, C.-S. (2024). Self-regulation and resilience: The role on active procrastination of young adults. International Journal of Public Health Science (IJPHS), 13(4), 1538. https://doi. org/10.11591/ijphs.v13i4.23945
- Weymann, E. C. (2017). Procrastination in the workplace: Dispositional and situational determinants of delay behavior at work. Academy of Management Proceedings, 1988(1), 226-230. https://doi.org/10.5465/ ambpp.1988.4980589
- Zhao, J., Meng, G., Sun, Y., Xu, Y., Geng, J., & Han, L. (2021). The relationship between selfcontrol and procrastination based on the selfregulation theory perspective: The moderated mediation model. Current Psychology, 40(10), 5076-5086. https://doi.org/10.1007/ s12144-019-00442-3

