Review Article

Procrastination in Nursing and Education: A Concept Analysis

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ABSTRACT

Procrastination is widely observed in academic and professional settings, yet its meaning and implications are not always clearly understood. In nursing and education, procrastination can hinder learning, affect time management, and negatively influence professional development. The purpose of this concept analysis was to clarify the meaning of procrastination, identify its attributes, antecedents, and consequences, and highlight its relevance for nursing students and educators. Published literature was reviewed to examine how procrastination is defined and applied in academic and professional contexts. Walker and Avant's approach to concept analysis guided the identification of defining attributes, antecedents, and outcomes. Procrastination was identified as a voluntary delay in planned tasks despite potential negative outcomes. Key attributes include avoidance, indecision, and task delay. Antecedents involve lack of motivation, ineffective time management, fear of failure, and emotional stressors. Consequences include decreased academic performance, higher stress levels, poor self-esteem, and limited professional growth. The following sections were structured to move logically from definitions to nursing, teaching, and student contexts, followed by attributes, antecedents, consequences, and illustrative cases, ensuring smoother transitions across topics. This analysis provides clarity on procrastination by distinguishing its essential features and practical implications. Understanding the concept can support the development of strategies to reduce procrastination among nursing students, enhance their learning experiences, and strengthen their professional identity.

INTRODUCTION

Procrastination, or the voluntary delay of intended tasks despite expecting negative consequences, is a widespread phenomenon in everyday life, academic environments, and professional practice. In daily routines, it may appear as postponing correspondence, delaying morning activities, or last-minute shopping. In academic contexts, procrastination often manifests as completing assignments right before deadlines, returning library books late, or wasting time on irrelevant activities while preparing for exams [1, 2]. Among nursing students, procrastination is closely tied to academic anxiety, where delayed preparation for clinical responsibilities or examinations may impair performance [3]. At the workplace, it can be seen in postponing critical duties while engaging in non-work activities [4]. Scholars often view procrastination as a self-regulation failure [1]. Research distinguishes between intentional procrastination (deliberate task delay) and unintentional procrastination (difficulty initiating tasks due to low self-control), with the latter measurable using scales such as the Unintentional Procrastination Scale [5]. Its negative effects extend beyond academics. Procrastination is linked to poor health, reduced well-being, and limited career growth [6]. Nursing students and young adults appear especially vulnerable, experiencing heightened stress, academic underperformance, and restricted professional

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development [3, 7]. At its core, procrastination reflects an imbalance between planning/prioritizing tasks and executing them effectively. In nursing education and practice, where timely decision-making is crucial for both learning and patient care, understanding procrastination within broader frameworks of decision-making, stress, and coping is essential [8]. This review article aims to clarify the meaning, attributes, antecedents, and consequences of procrastination in nursing and education, highlighting its impact on academic preparation, clinical responsibilities, teaching effectiveness, and professional identity.

This concept analysis followed Walker and Avant's eight-step framework, which involves selecting the concept, determining the purpose of analysis, identifying uses, defining attributes, constructing model cases, identifying borderline and contrary cases, determining antecedents and consequences, and specifying empirical referents. A literature review was conducted across PubMed, CINAHL, and Google Scholar using keywords such as "procrastination," "nurses," "academic procrastination," "task delay," "antecedents," and "implications," with Boolean operators applied for refinement. Inclusion criteria were peer-reviewed English-language articles published between 1990 and 2023 that addressed procrastination in academic, healthcare, or educational contexts, while non-English, irrelevant, or purely opinion-based studies were excluded. From 68 records initially identified, 36 full texts were reviewed and 23 were included, with reference lists screened to capture additional sources. This process ensured comprehensive integration of both classical and contemporary perspectives on procrastination.

Although several studies highlight procrastination among university students, many rely heavily on self-reported questionnaires, which may introduce response bias. Moreover, most investigations are conducted in general educational settings, limiting their direct applicability to nursing education. For instance, while meta-analyses consistently associate procrastination with lower academic performance, very few studies examine how delayed clinical preparation or incomplete documentation directly affect patient safety. This gap highlights the need for nursing-focused research.

Although procrastination has been widely studied in general academic populations, its conceptual clarity within nursing and educational contexts remains limited. Existing literature often relies on self-reported measures and focuses on academic outcomes, with minimal attention to nursing-specific responsibilities such as clinical preparation, documentation, and patient safety. Moreover, few studies systematically examine procrastination through a structured concept analysis framework. This gap necessitates a focused conceptual exploration to better understand procrastination and its implications in nursing education and practice.

Definition and Use of Concept

Dictionaries commonly define procrastination as the tendency to delay tasks because they are unpleasant or boring, yet such definitions fail to capture its professional significance in nursing and education, where procrastination involves the intentional delay of academic or clinical responsibilities such as exam preparation, documentation, or medication administration, despite awareness of harmful consequences. Psychological research emphasizes that procrastination not only delays task completion but also evokes guilt, dissatisfaction, and stress, reinforcing its characterization as a self-regulatory failure. Attributional theories further highlight differences in perception, with some individuals internalizing procrastination as personal weakness while others attribute it to external factors such as workload or stress. Historical perspectives trace its meaning to the sixteenth century as the deliberate postponement of duties despite awareness of worsening outcomes. Within healthcare settings, procrastination carries unique risks, undermining student learning and threatening patient safety, thus necessitating its clarification in the context of nursing education and practice (Figure 1).
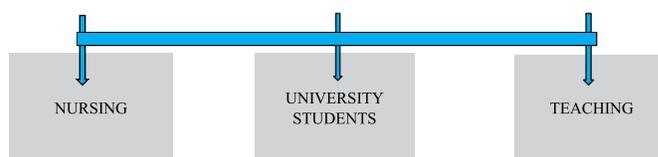
Figure 1: Use of Concept

To create a smoother flow, the discussion now transitions from general definitions to their practical impact in nursing, followed by teaching and student settings.

Procrastination in Nursing

Procrastination in nursing directly affects patient care for instance, delayed medication administration, postponed documentation, or incomplete patient education may compromise safety and quality of care. Healthcare organizations keep an eye on patient experiences to assess and enhance the standard of care. Nurses have a significant influence on patient experiences since they spend a lot of time with patients. In order to enhance patients' perceptions of the quality of treatment, nurses must be aware of the factors that impact the nursing work environment [9]. In addition to providing patients with complicated mental activities, nurses are in charge of saving lives. As a result, time management is crucial for nurses, but job procrastination has gotten little attention from the nursing community [10]. For new nurses in particular, it can be quite upsetting to be unable to satisfy

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the expectations of their jobs. Nurses who struggle with time management may decide to quit their position or even wonder if it's the appropriate fit for them. Effective time management is essential to the success and retention of novice nurses. Even experienced nurses find it difficult to handle their heavy workloads, which they frequently cite as a reason for quitting their jobs. Prioritizing tasks and attending to patients' needs efficiently are essential for handling a demanding workload. Time management is a difficult skill for new nurses to acquire, but it does get better with practice, and several techniques can benefit preceptors and newly graduated nurses equally[11].

Procrastination in University Students

Academic procrastination is one of the difficulties that students face in their educational journey. It denotes "a delay in completing an activity." Academic procrastination may be reduced by recognizing relevant elements because it may have an impact on several personal and social aspects of students' lives [12]. Students who delay doing their schoolwork are more prone to stressors and react to them more strongly. They are more prone to feel irritated and unsatisfied as well as psychological stress, which can cause worry, fear, fatigue, headaches, gastrointestinal problems, and feelings of guilt. The low-performing group generally experiences much higher levels of stress. Students who perform poorly are more likely to be lazy, unmotivated, and to procrastinate. The self-control, organization, and structure of their activities are attributes of successful students [13]. While these findings highlight the psychological burden of procrastination, most of these studies rely on self-reported data, which may introduce bias. Few directly measure the impact on clinical performance, indicating a gap in nursing-focused research.

Procrastination In Teaching

In a small pilot classroom survey conducted with 15 nursing educators, more than half admitted to delaying grading assignments and lesson planning, which negatively influenced timely student feedback. Such primary insights underline the real-world relevance of procrastination in teaching. Teachers who experience stress and negative emotions may develop occupational burnout, poor classroom performance, and reduced job satisfaction, with these effects extending beyond the individual to negatively influence students and their academic outcomes. Procrastination has been hypothesized as a potential contributor to stress among teachers, and since teacher procrastination is closely associated with stress, improving workplace conditions could serve as a cost-efficient strategy to reduce stress levels by minimizing procrastination[14].

Attributes Of Procrastination

Defined attributes are characteristics of a concept that appear consistently once the phenomenon arises and are dominant in the study (Walker & Avant). Based on the literature review, the defining attributes of procrastination include delaying tasks, difficulty with time management, and procrastination as a habitual behavior. Procrastinators often perceive delayed projects as requiring greater effort and clarity for completion, while also believing that task completion would have had personal benefits. Lower satisfaction with delayed tasks has been predicted by higher levels of procrastination [15]. Difficulty with time management is another defining attribute, as procrastinators often struggle to organize tasks effectively and resort to last-minute efforts. Regaining control requires altering how one works, thinks, and manages responsibilities, focusing on fewer impactful activities rather than being overwhelmed by many. As Wolfgang von Goethe observed, "We always have time enough, if we will but use it aright" [16]. Finally, procrastination can develop into a habitual response to tasks, known as trait procrastination, where individuals consistently postpone necessary actions and goal-directed behaviors[17].
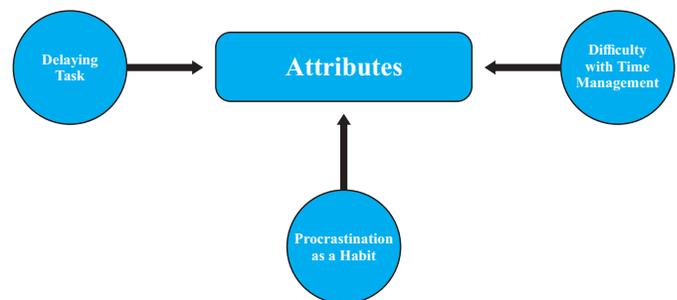
Figure 2: Attributes of Procrastination

Antecedents of Procrastination

Antecedents are incidents or circumstances that may occur before the concept's occurrence (Walker & Avant). The antecedents of procrastination in the light of the literature review are task difficulty, lack of motivation, low self-efficacy, poor time management skills, and fear of failure. Procrastination often occurs when tasks seem overwhelming or challenging, leading individuals to delay starting them. Intervention tactics that address evaluative anxiety, perfectionism, and poor self-confidence may be appropriate for the subset of procrastinators who indicate fear of failure [18]. Another reason people put things off is when they have doubts about their own ability [19]. Procrastination is linked to low self-esteem and low self-efficacy [2]. Believing in one's ability to succeed is the first step towards organizing work and developing time management abilities, and with experience and time, improvement is possible [20, 21]. Fear and anxiety are also related to failure, where such individuals worry more about the work they have to perform than actually finishing it [19].

Fear of failure makes it difficult to satisfy the demand for autonomy, which in turn increases the likelihood that academic and everyday tasks will be problematically delayed[22-24].

Consequences

Consequences are the events that arise as a result of the concept's occurrence (Walker & Avant). Procrastinating costs more than just the person doing it, since we are all part of a social environment, and the procrastination of others can and typically does hurt people around us [22]. The consequences of procrastination can have various impacts on an individual's personal and professional lives, which include increased stress and anxiety, decreased productivity, poor academic or work performance, damage to relationships, negative impact on health, reduced opportunities for growth, loss of reputation, and financial costs.

Attributes	Antecedents	Consequences
• Delaying task • Difficulty with time management • Procrastination as a habit	• Task difficulty • Low self-efficacy • Poor time management skills • Fear of failure	• Increased stress and anxiety • Decreased productivity • Poor academic or work performance • Damage to the relationship • Negative impact on health • Reduced opportunity for growth • Financial cost • Loss of reputation

Figure 3: Attributes, Antecedents, and Consequences of Procrastination

Conceptual Definition

Procrastination comes from the Latin "pro," meaning "forward, forth, or in favour of," and "crastinus," meaning "of tomorrow"[25-27]. Synonyms include cunctation, meaning putting off or deferring an action to a later time; shillyshally, meaning postponing what one should be doing; and dilatoriness, meaning slowness as a result of not getting around to tasks. Dictionary definitions also capture its essence: The American Heritage Dictionary of the English Language: Fourth Edition describes it as putting off tasks out of carelessness or laziness and postponing needlessly [28, 29]. Webster's Revised Unabridged Dictionary (1913) defines it as the act or habit of procrastinating, delaying, or being dilatory; and *The Cambridge International Dictionary of English* describes it as continuously delaying something that must be done, often because it is unpleasant or boring [30-32]. While procrastination can take various forms, most involve unjustified and needless delays, often resulting in unfavorable outcomes. Klingsieck defines it as "the voluntary delay of an intended and necessary and/or personally important activity, despite expecting potential negative consequences that outweigh the positive consequences of the delay," incorporating all three defining characteristics[28, 29, 33].

Modal Case

An ICU nurse, Iqra, has a patient with complex medical needs who requires regular monitoring and care. Despite knowing the importance of completing patient assessments and administering medications on time, she consistently delays these tasks. Instead, she engages in unimportant activities such as chatting with colleagues, checking personal messages, or taking longer-than-necessary breaks. A particular task that Iqra repeatedly procrastinates on is updating patient charts. Although she understands that accurate and timely documentation is critical for continuity of care and patient safety, the overwhelming thought of handling the paperwork fills her with anxiety, leading her to postpone it until later in the shift.

Borderline Case

Sarah, a certified nurse working in a busy hospital emergency room, generally demonstrates a strong work ethic but sometimes delays certain administrative responsibilities. One day, an unusually large number of patients arrive simultaneously, making the emergency room extremely busy. As the shift progresses, patient flow stabilizes, and Sarah has a brief pause in her duties. She knows she must complete documentation, record treatments, and restock supplies, but becomes distracted by phone calls, staff requests, and social interactions with patients and families. Near the end of her shift, she realizes she has not made sufficient progress on the administrative tasks. Feeling guilty, she hastily attempts to complete them before leaving.

Contrary Case

Sumaira, a 20-year-old fresh nursing graduate assigned to the CCU ward, demonstrates the opposite of procrastination. She begins by planning her duties, creating a list of patients, highlighting critical tasks, and prioritizing them according to patient needs. This structured approach helps her remain organized and focused throughout her shift. Even when faced with unexpected challenges or emergencies, Sumaira stays composed and proactive, showing no signs of procrastination but instead a responsible and professional attitude toward her duties[34].

Limitations and Future prospects

This concept analysis is limited by its reliance on published literature, which may be influenced by reporting bias and variability in definitions of procrastination across studies. Additionally, most included studies emphasize academic settings, limiting direct evidence from clinical nursing practice. Future research should include empirical, nursing-focused studies examining the impact of procrastination on clinical performance and patient outcomes. Longitudinal and intervention-based research

may further support the development of effective strategies to reduce procrastination among nursing students and professionals.

CONCLUSIONS

People procrastinate in many different ways, and the effects of this universal behavior may be seen in a variety of areas of life, including relationships, social interactions, finances, education, and the workplace. In addition to avoiding tasks and obligations they find unpleasant, procrastinators also refuse to take responsibility for their delay by making up justifications. The unreal expectations, poor time management, and disorganized tendencies of procrastinators develop worry and anxiety about the work at hand, which in turn creates doubt about their ability on both a personal and professional level.

Authors' Contribution

Conceptualization: IN, SS
Methodology: IN, SS
Formal analysis: IN, SS
Writing and Drafting: IN, SS
Review and Editing: IN, SS

All authors approved the final manuscript and take responsibility for the integrity of the work.

Conflicts of Interest

All the authors declare no conflict of interest.

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