

## Balancing multiple demands: A comparative analysis of students' multitasking practices in academic contexts

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### Abstract

**Aim:** This study investigated students' multitasking practices in academic contexts by analyzing student profiles and examining students' perceptions of multitasking as a tool in performing academic-related tasks. The study adopts an interdisciplinary perspective that integrates cognitive and educational theories to better understand multitasking behavior in learning environments.

**Methodology:** The study employed a quantitative descriptive-comparative research design involving 82 student participants selected through stratified random sampling. Data were collected using a validated researcher-developed questionnaire. Descriptive statistics were used to summarize students' multitasking practices, while the Kruskal-Wallis H test was applied to determine significant differences in students' assessments when grouped according to profile variables.

**Results:** Findings revealed that students generally perceive multitasking as beneficial, particularly in planning, goal setting, and task management. However, some respondents also reported impulsive behaviors and attention-related challenges while performing multiple tasks. Statistical analysis further indicated significant differences in students' assessments of multitasking when grouped according to age, sex, and section, suggesting that multitasking practices are influenced by individual and contextual factors.

**Conclusion:** The findings provide a more comprehensive understanding of multitasking as a cognitive and behavioral process within educational settings. The results highlight the importance of guiding students in developing effective task management and self-regulation strategies when handling multiple academic demands. The study contributes to pedagogical practice by informing educators on how multitasking behaviors may influence learning processes, classroom engagement, and instructional design.

**Keywords:** *multitasking, academic activities, student perception, task management, cognitive behavior*

### INTRODUCTION

Students' academic lives have incorporated multitasking as a regular feature. Incorporating smartphones, laptops, and online learning platforms leads learners to be accustomed to activities such as browsing social media during virtual classes (Amez et al., 2022). Completing assignments with entertainment activities has become a regular occurrence. Recent global studies emphasize that due to technological revolutions and shifting cognitive requirements, multitasking has transitioned from a marginal to a central behavioral pattern (Deng et al., 2022, Fan et al., 2025). Numerous studies show that although multitasking may improve cognitive flexibility and cognitive control in some circumstances, cognitive overloading hinders academic achievement, memory, and attention (Momoh et al., 2025).

The complexity of the phenomenon of multitasking clarifies the need for interdisciplinary perspectives. From the vantage point of cognitive psychology, multitasking challenges executive functioning, focus, and the available capacity of the working memory. Meanwhile, in educational technology, it facilitates the formation of various digital learning environments and media usage. From a sociological standpoint, it is influenced by demographic factors such as age, sex, and academic clustering. These various viewpoints demonstrate that multitasking is not a study habit but a cognitive, technological, and social phenomenon.

At the global level, the few studies have been consistent, but studies focusing on a specific region have focused on a specific context, especially on developing educational environments, have pronounced the issue even more because of the varying access the students have to the technologies, the varying degrees of instructional delivery, and the varying student backgrounds. In the Philippine educational context, this concern is further intensified by the rapid shift to flexible and blended learning modalities institutionalized through policies of the Department of Education and the Commission on Higher Education, particularly during and after the COVID-19 pandemic. These shifts exposed persistent challenges such as digital divide, inconsistent internet connectivity, and unequal access to devices among learners in both urban and rural areas, thereby shaping how students engage in multitasking within academic settings. Added to these challenges is the fact that students are expected to manage several academic tasks and responsibilities while also adjusting to new hybrid or flexible teaching and learning activities. For example, the studies also suggest that the impact of multitasking varies from one context to another, and one of the most pronounced areas is the impact of multitasking in digital literate learners, especially in developing educational environments where digital literate learners have been reported to have improved productivity, time management, and improved overall performance from flexible learning activities (Amez et al., 2022; Eseryel et al., 2021; Nabung, 2024). However, other studies have shown that digital multitasking significantly decreases academic engagement, comprehension, and the number of errors in a student's academic performance.

Moreover, previous research tends to examine either the cognitive consequences of multitasking or the technological dimensions, integrating demographic and situational variables, if at all. Such an approach overlooks the intersection of students' profiles and the way they perceive and practice multitasking in academic contexts. To address these gaps, the current study aims to conduct a comparative analysis of students' multitasking practices, elucidating their profiles, detailing their perception of multitasking as an academic activity, and ascertaining the presence of significant differences among the demographics. The findings of this study offer important pedagogical implications across multiple dimensions of the educational process. In terms of classroom instruction, the results may guide teachers in designing more structured and engaging learning activities that account for students' multitasking tendencies, helping them balance cognitive load while maintaining attention and comprehension. For curriculum design, the insights generated can inform the integration of flexible, technology-enhanced learning tasks that align with students' profiles, ensuring that instructional materials and assessment strategies are responsive to diverse multitasking behaviors. Regarding digital learning management, the study provides a basis for developing more adaptive and student-centered digital platforms that regulate task-switching, promote sustained focus, and incorporate features that support effective time and attention management.

### Review of Related Literature and Studies

The issue of multitasking spans multiple disciplines. It has been a growing concern in educational psychology, cognitive science, educational technology, and sociology. Within the scope of these disciplines, studies continue to suggest that multitasking is not one isolated behavior, but rather a phenomenon that can be analyzed based on the interplay of certain cognitive, technological, and social variables. This section provides an interdisciplinary review of some of the literature that is relevant to the present study.

### Multitasking in Cognitive Perspective

The relationship between multitasking, attention, working memory, and cognitive load has been an active area of research. Repeated multitasking damages attention control, and the less control a learner has, the easier it is for them to be distracted during a learning activity (Daleiden et al. 2025). Studies have also shown that the ability to switch between tasks negatively impacts the ability to process information at a deep level and retain that information in long-term memory (Muhmenthaler & Meier 2022). These studies support the theory of Cognitive Load, which argues that the human brain is limited in its ability to process information, and that learning becomes less efficient when there are multiple demands for the brain's attention at the same time. There are some studies that suggest that multitasking may in fact increase cognitive flexibility and adaptability, but only when the tasks are complementary or well-structured (Garner & Dux, 2022). This presents a strong case for considering both the positive and negative aspects of multitasking in an academic context.

### Multitasking in Sociological Perspective

Behaviors surrounding multitasking can be affected by demographic variables including age, gender, and academic grouping. Research shows that due to earlier exposure to digital technologies, younger students are media multitasking more (Rogojina et al., 2025). Furthermore, gender differences have been identified, and some studies

claim that female students have more organized approaches to multitasking; on the other hand, male students engage more in task switching (Lui et al., 2020). In addition, academic grouping, be it class section or program, influences multitasking due to disparate workloads, different instructional styles, and varying peer influences. In light of these findings, it is evident that student profiles are essential to the study of multitasking behaviors in students.

**Synthesis and Justification for the Study**

Despite the many studies done across different fields, there is still no agreement on the impact of multitasking on academic work. Further, the sociological studies show that there are varying multitasking behaviors among different demographics, yet the need to study how students view multitasking for academic purposes is still unaddressed and is perhaps the most pertinent analytical gap, especially when studied against the various profile variables.

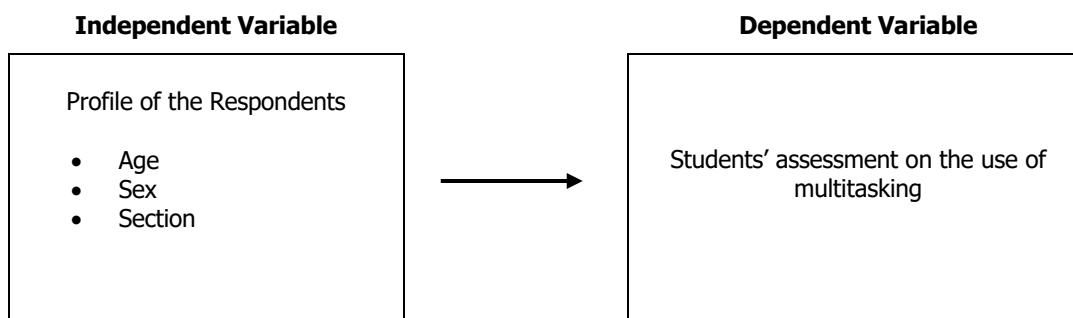
The biggest focus of the literature is experimental or generalized studies, leaving localized educational contexts with unique technology access, teaching styles, and student demographics largely ignored. Comparatively assessing students across demographics on the advantages and disadvantages of multitasking is largely absent in literature.

**Theoretical Framework**

The study is anchored from John Sweller's Cognitive Load Theory (CLT), which is used to interpret the learning process to enhance instruction. The theory explains the limitations of working memory, where learning is inhibited due to high or conflicting cognitive demands. The theory distinguishes three types of cognitive load: intrinsic load, which relates to the difficulty of the task; extraneous load, which is related to the cognitive load imposed by the presentation of the information; and germane load, which is the cognitive effort applied for the purposeful learning. In multitasking, the simultaneous execution of multiple tasks heightens the extraneous cognitive load and hinders comprehension, retention, and academic performance.

Moreover, Cognitive Load Theory offers a substantial justification for evaluating the disparity in students' perceptions when categorized by profile variables (e.g., age, sex, or section). Cognitive development, prior knowledge, and learning context are factors that influence the way students modify their cognitive load when multitasking. Older and more experienced students are more likely to employ more effective multitasking strategies, which may also be the case in different academic sections, where task complexity and instructional design vary. The theory justifies examining the extent of disparity among students' evaluations of multitasking across different demographic groups.

**Figure 1.** Research paradigm



The study's paradigm lays out an arranged relation between independent and dependent variables and describes student attributes vis-a-vis perceived impact of multitasking while working on academic tasks. The former includes profiles of respondents (age, sex, section) while the latter describes students' evaluation on the perception of multitasking as an analytic tool to be used for academic-related activities. The paradigm also posits the impact of student profiles on evaluation of multitasking activities and is in tandem to the belief that multitasking is a behavior shaped by several individual and situational variables. Additionally, the paradigm reinforces the study's basis on Cognitive Load Theory which states that individuals differ in their ability to process several streams of information.

**Statement of the Problem**

Students are increasingly required to engage in multitasking while performing academic-related activities, as they are expected to manage multiple tasks within limited time frames. In contemporary learning environments

characterized by digital technologies and flexible learning modalities, students often perform academic work while simultaneously engaging with various digital platforms and media. Although multitasking is frequently perceived as a strategy for improving productivity and efficiency, studies in cognitive psychology and educational psychology suggest that it may also lead to cognitive overload, reduced concentration, and diminished learning efficiency.

Despite the growing body of research on multitasking, many existing studies focus primarily on either the cognitive effects of multitasking or the technological contexts in which multitasking occurs. Limited research has examined how students' demographic characteristics influence their perceptions and assessments of multitasking in academic settings. Understanding how students perceive multitasking across different demographic groups may provide valuable insights into learning behavior and academic task management.

In response to this gap, the present study investigates the relationship between students' profile variables—specifically age, sex, and section—and their assessment of multitasking as a tool in performing academic-related activities. By examining students' perceptions and identifying potential differences across demographic groups, the study aims to contribute to a more comprehensive understanding of multitasking practices in educational contexts and their implications for student learning and task management.

## Research Objectives

### General Objective

To determine students' assessment of multitasking as a tool in performing academic-related activities.

### Specific Objectives

1. To describe the profile of the student respondents in terms of age, sex, and section.
2. To assess the use of multitasking as a tool in performing academic-related activities among student respondents.
3. To determine whether there is a significant difference in students' assessment of multitasking when grouped according to their profile variables.

### Research Questions

1. What is the profile of the student respondents in terms of:
  - 1.1 age,
  - 1.2 sex, and
  - 1.3 section?
2. How do the student respondents assess the use of multitasking as a tool in performing academic-related activities?
3. Is there a significant difference in students' assessment of multitasking when grouped according to their profile variables?

### Hypothesis

There is no significant difference in students' assessment of multitasking as a tool in performing academic-related activities when grouped according to their profile variables (age, sex, and section).

### Research Design

The study made use of a quantitative descriptive-comparative method to analyze multitasking behaviors exhibited by students in an academic setting. This study uses a descriptive approach to methodically organize respondent information pertaining to age and gender. The comparative approach was used to determine if there were any differences among the respondents about the use and acceptance of multitasking within different academic-related activities.

The chosen study design is appropriate given that it is conducive to the collection of data that is measurable, statistically analyzable, and capable of constructing an overall framework of relationships and distinctions between various variables. Considering that the objective of the study is to describe specific attributes and to analyze variability within the responses of different groups, as opposed to examining the phenomena being studied through a qualitative lens, a quantitative strategy will provide the study with sufficient impartiality, the ability to make broad conclusions, and enough clarity to provide an accurate interpretation of the findings.

### Population and Sampling

The study was carried out among 82 secondary school students from different schools within the Schools Division of Cavite. These participants were specifically selected because they are involved in an academic exercise that involves a significant degree of multitasking. A stratified random sampling approach was utilized to achieve a balanced distribution of the participants as per their sections. This strategy enabled the researcher to capture a broad and representative distribution of the participants based on the core constructs of the study, namely, age, gender, and section. It was believed that the chosen population is adequate to provide a strong basis for meaningful statistical analysis, as well as meaningful inter-group comparisons.

### Research Instrument

The researcher constructed the study instrument that consisted of a questionnaire designed to examine the degree of multitasking done by students while performing school-related tasks. The instrument was divided into two sections. The first section was for the collection of the demographic data of the respondents (age, sex and section), while the second section evaluated the respondents' perceived advantages and disadvantages of multitasking using a 4 – point Likert scale. To achieve the content validity, the instrument was subjected to content validation from three research and education specialists, whose feedback was used to make revisions on clarity, completeness, relevance and alignment of the research instrument to the research objectives.

An initial evaluation was carried out with a subset of a student population outside of the primary sample group. These data then underwent reliability testing using Cronbach's alpha, resulting in a reliability coefficient of 0.87, which suggests sufficient internal reliability.

### Data Collection

Questionnaires served as the primary method of data collection for all selected participants. Upon securing the necessary permissions from the school administration, data collection was formally conducted. The questionnaires were administered on-site within the school during a one-week period in the academic semester. Participants were provided sufficient time to complete the instrument, with instructions clearly explained to ensure full understanding. To maintain consistency and control over the responses, participants completed the questionnaires within the school premises under supervised conditions, thereby minimizing incomplete or improperly accomplished submissions.

### Treatment of Data

In descriptive-comparative research, the data analysis employed descriptive statistics. The data collection methodology included the use of frequency, percentages, means, and standard deviations to collect data that was needed to construct the profile of the respondents and to provide a needed construct to the profile of the respondents.

The Kruskal–Wallis H test was used to determine if there were any notable differences in students' assessments based on grouped profile variables. Since this test compares two or more independent groups without the need to consider whether the data follows a normal distribution, the researcher believed it fit the purpose. In this case, the researcher focused on finding differences in assessment scores across age, sex, and section. With the Kruskal–Wallis test, the researcher sought to determine if the differences in students' demographic characteristics had a significant influence on their assessments on multitasking. The researcher analyzed the data using the results obtained from the statistical tests to determine if the null hypothesis should be accepted or rejected.

### Ethics in Research

Informed consent was obtained from all participants prior to their involvement, ensuring that they were fully aware of the purpose of the study and their right to withdraw at any time without penalty. To ensure confidentiality, respondents' identities were not disclosed, and all data collected were treated with strict privacy. The questionnaires did not require personal identifiers, and responses were used solely for research purposes. Additionally, permission and approval were secured from the school administration before the conduct of the study. The researcher adhered to ethical guidelines in data collection, analysis, and reporting to maintain the integrity and credibility of the research.

**RESULTS AND DISCUSSION**

**Table 1.** Frequency distribution of student profile

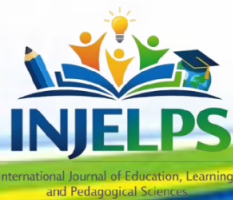
Students' Profile	f	%
<b>Age</b>		
13	77	94
14	5	6
Total	82	100
<b>Sex</b>		
Male	36	44
Female	46	56
Total	82	100
<b>Section</b>		
1	27	33
2	30	37
3	25	30
Total	82	100

Table 1 shows the breakdown of ages, sex, and sections of the student respondents. Most of the respondents are 13 years old (94%), while only 14 (6%) of the respondents are 14 years old. This means that most of the sample is made up of students that are of the same age and development. This close age and development spacing means that respondents will be similar regarding cognitive maturity and academic exposure. This age uniformity may affect the sample's perception regarding multitasking, since students of the same age are most likely to possess similar learning abilities and task management behaviors. There is a slightly higher number of female students (56%) than male students (44%), and this fairly balanced representation of male and female students allows for a meaningful comparison of assessments of multitasking students from both sexes. The female predominance may be a reflection on the class composition and may affect the perception of the respondents, particularly if there are differences in task management strategies between sexes.

Thirty-three percent of respondents are in Section 1, 37% are in Section 2, and 30% are in Section 3. The proportions of students per section are close, thus improving the reliability of the analysis. Any differences among sections may be due to differences in classroom settings, writing practices, or academic workloads, which may affect students' engagement with multitasking.

**Table 2.** Assessment of the learner-respondents on the use of multitasking

INDICATOR	MEAN	SD	INTERPRETATION
In using multitasking, I . . .			
1. unplug from technology	1.91	0.85	Sometimes true of me
2. capture fast breaking ideas with minimal interruption.	2.16	0.91	Sometimes true of me
3. monitor the moment-to-moment shifts in the attention.	3.24	0.92	True of me
4. handle interruptions with care.	2.57	0.90	True of me
5. multitask by conscious choice.	3.30	0.84	Very true of me
6. align my activities with my passion.	3.37	0.91	Very true of me
7. act on impulse.	3.05	0.89	True of me
8. act on the spur of the moment.	3.10	0.84	True of me
9. do things without thinking.	2.79	1.10	True of me
10. say things without thinking.	2.70	1.10	True of me
11. buy things on impulse.	3.00	1.10	True of me
12. plan for job security.	3.13	0.91	True of me
13. plan for the future.	3.43	0.82	Very true of me
14. save regularly.	2.98	1.02	True of me



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15. plan tasks carefully.	2.87	0.95	True of me
16. am a careful thinker.	2.72	0.91	True of me
17. am restless at lectures or talks.	2.73	1.09	True of me
18. squirm at plays or lectures.	2.61	1.04	True of me
19. concentrate easily.	2.79	0.95	True of me
20. do not pay attention.	1.94	0.89	Sometimes true of me
21. am easily bored solving thought problems.	3.02	1.07	True of me
<b>OVERALL MEAN</b>	<b>2.83</b>	<b>0.95</b>	<b>True of me</b>

**Legend:** 4.00-3.25, Very True of Me 3.24-2.50, True of Me, 2.49-1.75, Sometimes True of Me 1.74-1.00, Not True of Me

Analysis of the data shows the students' apparent propensity towards intentional and goal-directed multitasking behavior. Students rated "multitask by conscious choice" ( $M = 3.30$ ), "align my activities with my passion" ( $M = 3.37$ ), and "plan for the future" ( $M = 3.43$ ) as "Very true of me." This data shows the students are not habitual multitaskers; they go about multitasking with intentionality and guided reasoning. The focus of cognitive psychology explains this as self-regulatory behavior and exercise of executive function, which involves the purposeful directing and managing of one's focus and actions toward goal attainment. Intentional multitasking, when combined with meaningful, goal-directed tasks, has been shown to increase productivity. This supports the position that multitasking, within these constraints, can function as a productive strategy rather than a distractive one (Momoh et al., 2025).

Simultaneously, students communicated moderately with a consensus with the statements regarding the task management and attention monitoring, with the statements "monitor the moment-to-moment shifts in attention" ( $M = 3.24$ ) and "handle interruptions with care" ( $M = 2.57$ ). These results indicate that students attempt to control their cognitive processes while multitasking. This is consistent with the research on educational psychology. Although some students demonstrate greater cognitive flexibility than others, the gaps in the answers (standard deviations approaching 1.0) demonstrate that cognitive control is not uniformly distributed. Metacognitive awareness is especially crucial to the effective management of multiple tasks. When students assign a high degree of value and interest to the academic tasks, the focus of their thinking also plays a decisive role in their ability to control and manage multiple tasks and the cognitive distractions (Deng et al., 2024).

Additionally, the results point out the occurrence of less controlled and impulsive multitasking behavior. Regarding the statements "act on impulse" ( $M = 3.05$ ), "act on the spur of the moment" ( $M = 3.10$ ), and "do things without thinking" ( $M = 2.79$ ), students described themselves with a rating of "True of me." This indicates that even if students multitask for a specific purpose, they also tend to engage in impulsive, uncontrolled behavior. From the point of view of the Cognitive Load Theory, such behavior is likely to increase extraneous cognitive load and negatively affect the efficiency of learning and the performance of tasks. This is also confirmed in the research of behavioral sciences that cross the borders in different disciplines and cover impulsivity. When a person is impulsive during task performance, it is expected to have less attention and more mistakes.

Moreover, student attitudes towards multitasking are influenced by the belief that someone might be able to improve their multitasking ability through practice, as well as the student's perception of their ability to successfully do more than one thing at a time (Рассказова & Солдатова, 2023).

The fact that some indicators of attention and disengagement, including "don't pay attention" ( $M = 1.94$ ) has a rating of "Sometimes true of me", suggests that students do not perceive the ability to multitask as resulting in disengagement. However, the opposing comments, such as "I am easily bored solving thought problems" ( $M = 3.02$ ), demonstrate a more significant problem than disengagement, as does ( $M = 2.73$ ) "I am restless at lectures or talks." It appears that students want to stay engaged, but their focus may fluctuate, and their attention may peak at times. This phenomenon has been documented in cognitive and educational studies, where a focus on multitasking or divided attention often causes a lack of sustained attention. This is especially true in the case of student self-reported productivity, where the ability to direct and maintain one's attention is often compromised, resulting in lower grades and poorer comprehension, as well as a greater risk of cognitive overload (Rinella & Putnam, 2022).

These results demonstrate that multitasking is shaped by a combination of cognitive, behavioral, and motivational factors. Cognitively, students attempt to manage attention and tasks simultaneously; behaviorally, they exhibit both controlled and impulsive tendencies; and motivationally, they align multitasking with personal goals and

future planning. This integrated perspective underscores the complexity of multitasking as both a skill and a challenge in academic contexts. While students demonstrate the capacity for intentional and strategic multitasking, the presence of impulsive behaviors suggests the need for guidance in developing more effective self-regulation skills. These insights are valuable for educators in designing interventions that enhance students' ability to manage multiple academic demands while minimizing potential negative effects on learning outcomes.

**Table 3.** Significant difference in the assessment on the use of multitasking

VARIABLE	N	DF	MEDIAN	AVG. RANK	H-TEST	P-Value	REMARKS
Age	82	3	1.00	77.24	199.924	0.000	Significant
Sex	82	3	2.00	132.49			
Section	82	3	2.00	178.76			
Assessment	82	3	2.81	269.51			

In Table 3, the results from the Kruskal–Wallis H test, which assess the possibility of statistically significant differences among students' evaluations of multitasking segmented by profile variables, are presented. The results show a statistically significant difference ( $H = 199.924, p < 0.05$ ), which means students' evaluations of multitasking show meaningful differences when grouped into various demographic categories. This result answers the third research question. The findings suggest that among students, perceptions of multitasking can differ by demographic variables. At the same time, it is important to contextualize these findings, particularly in relation to age, as the respondents are concentrated within a narrow age range (13–14 years old), which provides a more focused lens for interpreting these differences.

The different perceptions of and approaches to multitasking, while evident across groups, may be better understood as reflecting distinct variations rather than broad developmental stage differences. Given that the developmental gap between ages 13 and 14 is relatively minimal, the findings highlight subtle distinctions within a closely related developmental group. Although statistical differences were detected, the highly concentrated age distribution offers an opportunity to examine these variations within a specific developmental context. This supports a more refined consideration within the sociocognitive and educational psychology constructs of theory and practice. Practical application continues to emphasize relevant constructs within cognitive developmental psychology. In this domain, executive functioning and working memory, as well as their associated cognitive demand, play important roles in shaping learners' multitasking behaviors. Young learners may experience cognitive demand differently, while older learners tend to demonstrate more flexibility in managing cognitive load. Within this narrowly defined age group, these differences may appear in more subtle forms, reflecting early shifts in cognitive maturity. This aligns with previous findings regarding cognitive development and tolerance for cognitive demand, particularly within educational settings. Broader contrasts are more evident across wider educational levels, such as between secondary and tertiary learners, where students demonstrate greater adaptability to cognitive load and multitasking demands. This progression has also been associated with increased exposure to and use of digital technologies for learning (Luo et al., 2023).

The significant cognitive load, adaptive multitasking tolerance, and metrics of multitasking also illustrate the degree of tolerance attributed to the cognitive load and adaptive multitasking tolerance associated with educational psychology. In educational psychology, cognitive science, and cognitive load theory, the metric of cognitive load tolerance among secondary level university students versus secondary level school students has drawn from the domain of gender to locate additional relevant constructs of social science. From this, differences in attention, task organization, and behavioral tendencies considerably affect how men and women multitask. In the educational discipline, females are more structured and use more goal-oriented behavioral tendencies than men, who are generally less structured and more fragmented in the task(s) they tackle (Kalsoom & Kamal, 2022).

Students' academic grouping impacts their perception of multitasking, as illustrated by differences in means by section. This is because of differences in teaching style, classroom setting, or academic workload. Educationally,

students in more intensive environments may develop more sophisticated multitasking techniques than those in more relaxed environments. This underscores the impact of teaching style, curriculum, and design on students' ability to engage in multitasking and the importance of targeted teaching strategies. The differences related to age, gender, and academic grouping form a more comprehensive picture of students' multitasking behavior (Bachmann et al., 2024; Lui et al., 2020).

The evidence suggests that multitasking is a self-regulated, context-dependent behavior that focuses on the stage of cognitive development, behavioral inclinations, and educational setting of the respondent. The implications of this finding for each discipline are numerous. From a cognitive perspective, the findings should prompt explanations for behavioral causes due to the variability of cognitive load. From an educational standpoint, it implies that the design of educational systems should cater to the equilibrium of the varying components of students. Societal views show the ecological variables that influence student responsiveness to academic requirements. Moreover, these findings carry significant practical implications for key educational stakeholders. For teachers, understanding multitasking as a context-dependent and self-regulated behavior underscores the need to design structured yet flexible instructional strategies that manage cognitive load while sustaining student engagement. For school leaders, the results highlight the importance of establishing supportive learning environments and policies that promote effective technology use and minimize counterproductive multitasking behaviors. Curriculum developers may utilize these insights to create balanced and adaptive curricula that integrate digital tools without overwhelming learners, ensuring alignment with students' developmental and contextual needs. Furthermore, teacher education programs should incorporate training on managing classroom multitasking, fostering digital discipline, and applying evidence-based strategies that enhance students' focus and self-regulation.

### Conclusion

The findings of the study reveal that multitasking is a commonly practiced strategy among students when performing academic-related activities. The respondents, who were mostly within a similar age group but varied in sex and section, demonstrated consistent engagement in multitasking behaviors characterized by both intentional and impulsive tendencies. Students perceived multitasking as beneficial in terms of planning, goal alignment, and task management, indicating a degree of self-regulation when handling multiple academic demands. At the same time, the presence of impulsive behaviors and fluctuations in attention suggests that multitasking may also introduce challenges related to cognitive control and sustained focus.

The results further indicate that students' assessments of multitasking differ significantly when grouped according to demographic variables such as age, sex, and section. These findings highlight that multitasking behaviors are shaped by individual characteristics and learning contexts. The study contributes to educational research by providing insights into how multitasking influences students' learning experiences and task management strategies in contemporary academic environments. These insights may inform teaching practices, classroom management strategies, and the design of instructional activities that promote effective multitasking while minimizing cognitive overload.

### Recommendations

1. Educators may design structured learning activities that guide students in managing multiple academic tasks effectively through clear instructions, task prioritization strategies, and attention management techniques.
2. Schools and educational leaders may implement programs that strengthen students' self-regulation and cognitive management skills, particularly in learning environments where multitasking frequently occurs.
3. Curriculum developers may consider designing balanced learning tasks that encourage productive multitasking while minimizing cognitive overload and impulsive task-switching behaviors.
4. Teacher education programs may incorporate training on cognitive load management and multitasking behavior to help teachers better support students in technology-rich learning environments.
5. Future researchers may conduct interdisciplinary studies exploring the cognitive, behavioral, and technological dimensions of multitasking among diverse learner populations and across different educational contexts.
6. Educational practitioners may adopt differentiated instructional strategies that accommodate students' varying capacities to manage multitasking, thereby promoting more inclusive and effective learning experiences.

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