Cape Peninsula
University of Technology

The Feasibility of the Todoist Application to Assist Students with Time Management.

By

Oko Janda

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Supervisor: Prof JC Cronje

Co-Supervisor: Dr R Maliwatu

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DECLARATION

I, Oko Janda, declare that the contents of this dissertation represent my own unaided work, and that the dissertation has not previously been submitted for academic examination towards any qualification. Furthermore, it represents my own opinions and not necessarily those of the Cape Peninsula University of Technology.

Signed: O Janda 11/10/2025

ABSTRACT

The growing tendency for students to use mobile applications has significant educational implications. Different educational apps are now joining forces to improve communication while also enhancing organisation and educational learning activities. The combination of mobile applications enhances material availability for students while improving their time management skills and creating new collaborative pathways. The significant issue emerges because a high number of students dedicate long periods to social media usage, resulting in decreased academic achievement. The proposed solution to this issue adopts the Todoist application. The Todoist app supports users on Android phones and iPhone devices; therefore, it offers university students a choice for implementing better time organisation through their smartphones.

The research aims to explore the contribution of the Todoist application to students' time management skills and identify the features of Todoist that are most beneficial for students in organising their academic tasks. A variety of research studies indicate that students allocate too many hours to social media activities rather than their schoolwork (Rohman, Marji, Sugandi, and Nurhadi,2020). Students verified through direct interviews that their poor time management skills represent a significant academic challenge. The analysis emphasises the importance of students managing their time effectively during their academic journey and recommends Todoist as a helpful tool to address this challenge. According to the interview participants, Todoist helps users manage their tasks effectively while also enabling them to set priorities and meet scheduled deadlines.

The research explores how Todoist enables students to schedule their tasks, prioritise activities and follow deadline requirements in their academic schedule. Research data were gathered through semi-structured interviews with five participants, comprising three undergraduate and two postgraduate students, who were selected through a selective sampling process. All participants were enrolled at the Cape Peninsula University of Technology’s District 6 campus and had a smartphone capable of downloading the Todoist application. This research gathered critical feedback from students about Todoist's practical application as a time management tool, which helps developers understand how to enhance academic time management.

Overall, data collected from students Todoist proves to be a convenient and effective time management tool for university students. Participants in the research expressed satisfaction with the app, highlighting its role in helping them manage their time more efficiently and organise tasks based on importance. However, students also suggested areas for improvement, noting that it took time to familiarise themselves with the app,

and it could be more user-friendly for individuals with limited technical experience. Despite these challenges, the feedback suggests that Todoist meets students' expectations and has the potential to improve time management for students significantly.

Keywords: Time management, Todoist application,

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CHAPTER 1
RESEARCH INTRODUCTION

1.1 Introduction and Background

This Research paper discusses the contribution of the Todoist application to students' time management skills and identification of features in Todoist that are most beneficial for students in organising their academic tasks. Students spend a significant amount of their time on social media platforms such as WhatsApp, Facebook, Instagram, and TikTok, and it is assumed that this is affecting their time spent on university work (Rohman, Marji, Sugandi, & Nurhadi, 2020). This research will focus on the time management application features and how students utilise these features. The research originates from the fact that the Cape Peninsula University of Technology has adopted online learning, which exposed students' lack of time management (Rohman, Marji, Sugandi, & Nurhadi, 2020). Globally, many students utilise social media platforms to fulfil their educational needs, with YouTube being the most widely used among students (Palla & Sheikht, 2020). Aamir (2020) found that in a specific investigation, about 71% and 65% of respondents agreed that social media harms students' health and education. The study conducted by Aamir (2020) suggests that there is a need to develop policies and guidelines regarding the use of social media by students and promote technical and ethical training about the use of this modern technology.

In 2020, a global pandemic wreaked havoc on the economy and society. Social media provided a welcome respite from being alone during the public health crisis, where social distancing, or physical distancing in public settings, had become the new normal (Greenhow & Chapman, 2020). According to estimates at the time, social media usage increased worldwide during the COVID-19 pandemic-induced lockdown (Koeze & Popper, 2020). Digital technologies, such as social media, provided affordances for schooling during the emergency, in addition to reducing loneliness (Greenhow & Chapman, 2020). Lockdown separated undergraduate students from classmates, professors, and public life. Social media offered students comfort (Greenhow & Chapman, 2020).

It was found that students developed addictions to social media platforms during this time (Sun & Zhang, 2021). The overuse of social media has been linked to poor work performance, a decline in quality social relationships, and sleep disturbances (Xanidis & Brignell, 2016). Jealousy, worry, and depression are all symptoms of low life satisfaction (Sun & Zhang, 2021). Social media addiction among undergraduate students presents potential long-term and permanent damage to their academic future(Sun & Zhang,

2021). This problem cannot be ignored now that our universities have adopted online learning and utilise social media platforms for educational purposes.

Time management is a crucial skill and capability that can be utilised to address any problem and achieve success or maximise advantages with minimal effort (Arumugam *et al*., 2021). Time is incredibly valuable in the present era, and excellent time management is the key to success. The high performance demanded by competitive situations drives youngsters to spend time wisely and necessitates the pursuit of time control (Arumugam *et al*., 2021). Today's challenging world requires people to organise and manage their time wisely, starting with their university studies (Arumugam *et al*., 2021).

The concept "time management" gained popularity in the 1950s and 1960s as a method to help people make better use of their limited time (Claessens, Van Eerde, Rutte & Roe, 2007). Time management can be defined as self-management with a strong emphasis on time (Arumugam *et al*., 2021). In the university space, time is managed by the time allotted for completing an exercise as described, scheduled, reminded of, and monitored in module outlines, prospectuses, and academic bulletins (Alias, Noor, Bhkari & Ariffin, 2019). Time management is, therefore, relevant and essential to students' academic well-being. That has made time management essential for students—especially as they increasingly study online.

1.2 Research problem

The problem driving this research is that we do not know the extent of the usefulness of the Todoist application in assisting students with their time management. Rohman, Marji, Sugandi, and Nurhadi (2020) suggest that online learning has exposed students' lack of time management skills. The lack of effective time management skills is negatively affecting the quality of work submitted by students, which in turn negatively affects their grades. This may result in underperforming students losing their bursaries and grants.

Although there is a considerable body of research on time management and mobile apps separately, there is a paucity of empirical data that relates the use of a certain mobile time management tool, which is Todoist, to academic achievement among university students. The paper bridges this gap by exploring the relationship between students and Todoist, as well as the ability of the platform to provide a better experience of time management and academic performance.

1.3 Objectives and Research Questions

Table 1.1: Research Objectives and Research Questions

Research questions	Objectives
What features of the Todoist application do the students use?	To investigate what the Todoist application features would best suit students
How do the features of the Todoist application contribute to students' time management?	To determine the contribution of Todoist applications to students' time management

1.4 Aims

This research aims to explore the contribution of the Todoist application to students' time management skills and identify the features of Todoist that are most beneficial for students in organising their academic tasks.

1.5 Significance of the Research

The research demonstrates substantial importance through its investigation into the effects of mobile applications on university students' time management, specifically regarding Todoist. University students require excellent time management skills to succeed academically, but they often struggle to maintain academic focus amid social media interruptions. This research evaluates Todoist in terms of its practical implementation and effectiveness, providing insights into how technology helps students manage their workload and adhere to deadlines. The research findings will help both undergraduate and postgraduate students understand the advantages and challenges that Todoist presents for academic use. The findings of this research could lead to the development of modern time management tools that specifically meet the demands of students, thereby boosting their academic success and productivity.

1.6 Scope of the Study

This research evaluates the effectiveness of the Todoist application as a time management tool for university students enrolled at the Cape Peninsula University of Technology (CPUT) District 6 campus. The research exclusively selects undergraduate and postgraduate mobile phone users who show a willingness to use Todoist for their academic requirements. Five students participated in this research through semi-structured interviews, comprising three undergraduates and two postgraduates, allowing researchers to evaluate their experiences with time management using Todoist. The

research investigates how this app assists users in scheduling tasks and determining the order of priority while handling deadlines when studying.

1.7 Chapter Summary

The research does not examine or factor in other time management applications. In addition, it does not consider how students manage their time outside of Todoist and beyond school, or where they do not have smartphone access. Chapter 1 presents the study of the possibility of applying the Todoist application to help students organize their time. It describes the situation whereby several students find it difficult to juggle their studies, which usually end up with lower grades and at times loss of the financial support in the form of bursaries or grants. Based on the studies conducted by Rohman *et al*. (2020), the chapter shows that online learning conditions have also revealed the weaknesses in dealing with time and pays close attention to the possibility of resolving the issue with the help of digital tools such as Todoist.

The chapter also stated the research objective and the aim of the study: to determine the effectiveness of the Todoist application in enhancing the capacity of students to organize and track academic activities. It identified research objectives and research questions that will focus on the usability of the app and the efficacy of its features. By limiting the scope and highlighting the relevance of the research, the chapter has demonstrated the importance of the research not only on the student level but also its impact on the institutions of higher learning and developers of productivity applications. This premise establishes a platform for further investigation of how technology can help students succeed.

CHAPTER 2
LITERATURE REVIEW

2.1 Introduction

The literature review is employed in this research as a systematic technique to find, assess, and synthesise research evidence on the viability of the Todoist application to help students manage their time. The goal of this systematic literature review is to offer a thorough and objective overview of the body of current literature. In this chapter, the research is divided into five sections: definition of research questions, conducting a search, screening of papers, keywording using abstracts, and data extraction and mapping process.

2.2 Process steps

To conduct a thorough literature analysis and determine how Todoist assists students in managing their time, as well as identify which features of the application are most beneficial to them, this research adhered to the principles outlined by Petersen *et al*. (2008). Figure 2.1 depicts the steps taken to conduct this research and the workflow for the literature evaluation procedure. There are steps of progression in the operation, and a result is obtained for each step.

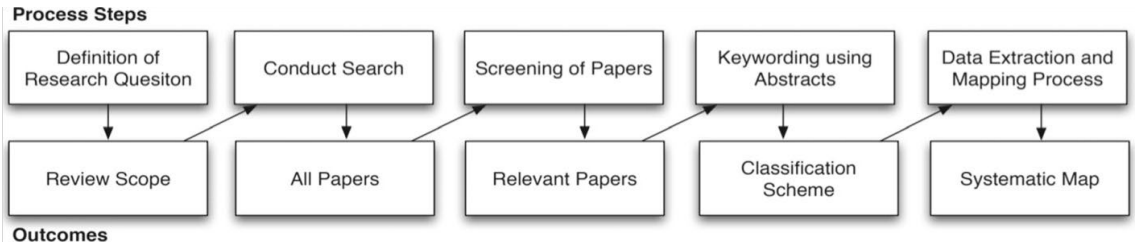

Figure 2.1: A systematic guide to literature review development

Source: Petersen *et al*. (2008)

2.3 Definition of Research Questions

Research questions are defined in Table 1.1 in Chapter 1

In this research, which explores time management applications, the related databases IEEE Xplore, ACM Digital Library, and Scopus were utilised to search for various academic sources regarding technology, software development, and human-computer interaction. They stock more than a million full-text peer-reviewed articles, journals, conference papers, and other scholarly resources, providing research collections

suitable for specialised disciplines. As with any sizable database, scholars use search terms, precise series of words and phrases connected by Boolean operators to hone their query further. An appropriate string formula not only enhances the specificity of information searches but also improves the speed and relevance of research, allowing scholars instant access to high-quality data. It is essential to know how to utilise these databases and conduct effective searches, as this skill is particularly useful for any type of research, especially when working with new technologies such as time management applications.

Table 2.1: Searches in databases

Scientific databases	Query strings
IEEE Xplore	'Smart digital personal assistant', 'task scheduling', 'Time scheduling applications', 'time management application features'
ACM Digital Library	'Scheduling app features'
Scopus	'Mobile application', 'time management' 'time management applications', 'features of time scheduling applications'

2.4 Search Conducting

The objective of this step is to compile papers from relevant scientific databases, such as IEEE Xplore, Scopus, and the ACM Digital Library. The search began in 2020. Search terms relevant to the field of study, such as "mobile applications," "time management," and "application features," were employed to locate the papers. The search engines were used to experiment with different keyword combinations. Figure 2.3 displays the query strings for every scientific database.

Upon completing this stage, we identified 25 publications, as depicted in Figure 2.3. Figure 2.3 shows how many articles were obtained from each digital database, and Figure 2.2 shows the proportion of articles that were obtained for each digital database.

2.5 Screening of papers

Ensuring the quality and applicability of the literature included in this systematic review is contingent upon the screening method. The validity and reliability of the findings were enhanced by excluding studies that did not meet the predetermined criteria.

The screening procedure consisted of two phases. First, the abstracts and titles were evaluated to determine their applicability. In the second phase, full-text publications were assessed based on the inclusion and exclusion criteria.

Twenty-five of the 60 articles found using the search approach were chosen for full-text review. After applying the eligibility criteria, ten studies were included in the final analysis.

During the screening process, several obstacles were encountered, including the challenge of applying inclusion criteria to research employing different methodologies. Notwithstanding these difficulties, the thorough application of the standards and the review procedure contributed to the selection of excellent and pertinent studies.

The screening procedure effectively reduced a large body of literature to a manageable number of quality, relevant, and appropriate artefacts, guaranteeing that solid and pertinent data support the findings drawn from the evaluation. This procedure emphasises the importance of methodical screening in generating trustworthy research results.

(See Appendix B for all articles used in the research. The abstracts of every article are also included.)

2.6 Study Selection

A set of inclusion and exclusion criteria (see Table 2.2) was used to omit the publications deemed beyond the purview of this review based on the results of the preceding stage. As a result, only research that met every inclusion requirement was included. Thus, by sifting through research according to title, abstract, and list of keywords, surveys, literature reviews, and duplicate publications were identified and eliminated. Twenty-five pertinent publications were selected for the systematic review after eliminating 80 publications because of the research selection procedure. The criteria for including and excluding studies are outlined in the table below.

Table 2.2: Inclusion and exclusion criteria for relevant works

Inclusion criteria	Exclusion criteria
Studies that present time management applications	Studies that are not written in English
Technical paper (not viewpoint or opinion)	White papers, editorial comments, and book reviews
The full text is available online	Studies that present surveys and reviews

This Pie Chart and analysis (Figure 2.2) show the breakdown of the sources utilised in this research and reveal how these papers were dispersed across the three chosen databases. Most of the literature on time management apps and other digital tools for students was retrieved from IEEE Xplore, followed by the ACM Digital Library databases, which demonstrates the importance of these specialised databases in research on technology-based solutions, such as Todoist.

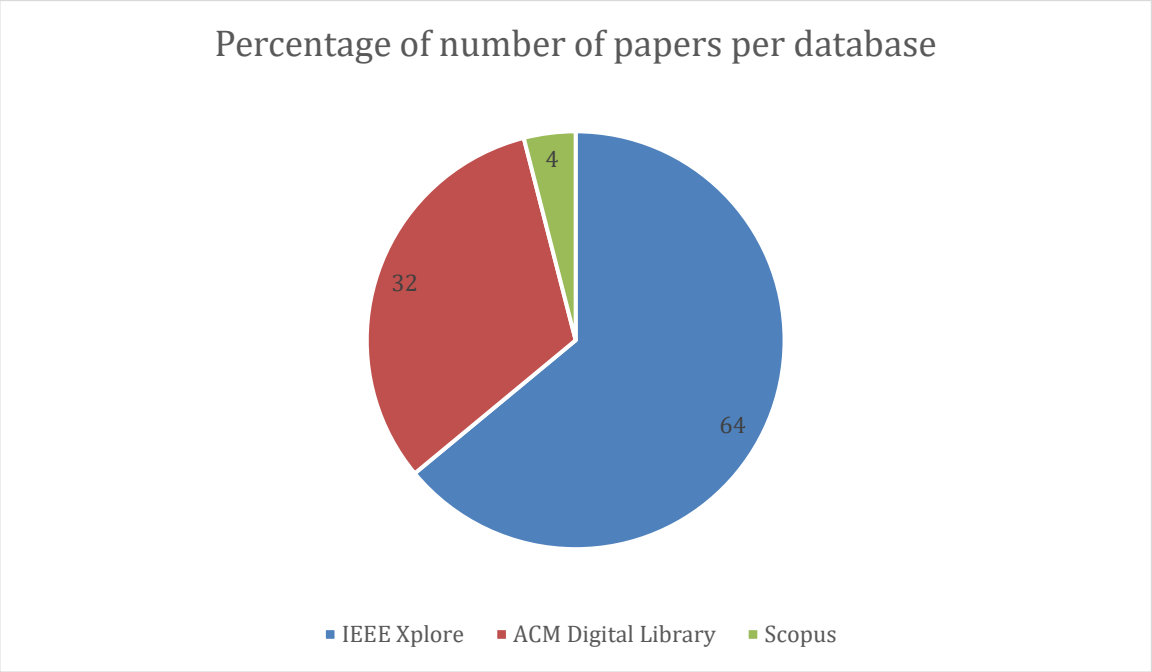

Figure 2.2: Percentage of retrieved articles per database

This section presents a bar graph illustrating the distribution of research papers retrieved from three key academic databases: IEEE Xplore, ACM Digital Library, and Scopus. Pre-selection of these databases was made to identify the most suitable for studying technology-supported tools, including Todoist, to enhance time management among

students. The number of research papers retrieved from each database also provides an overview of the research focus and which database offered the most pertinent material for this research. According to the bar graph mentioned above, the largest number of papers comes from IEEE Xplore, followed by the ACM Digital Library, and lastly, Scopus.

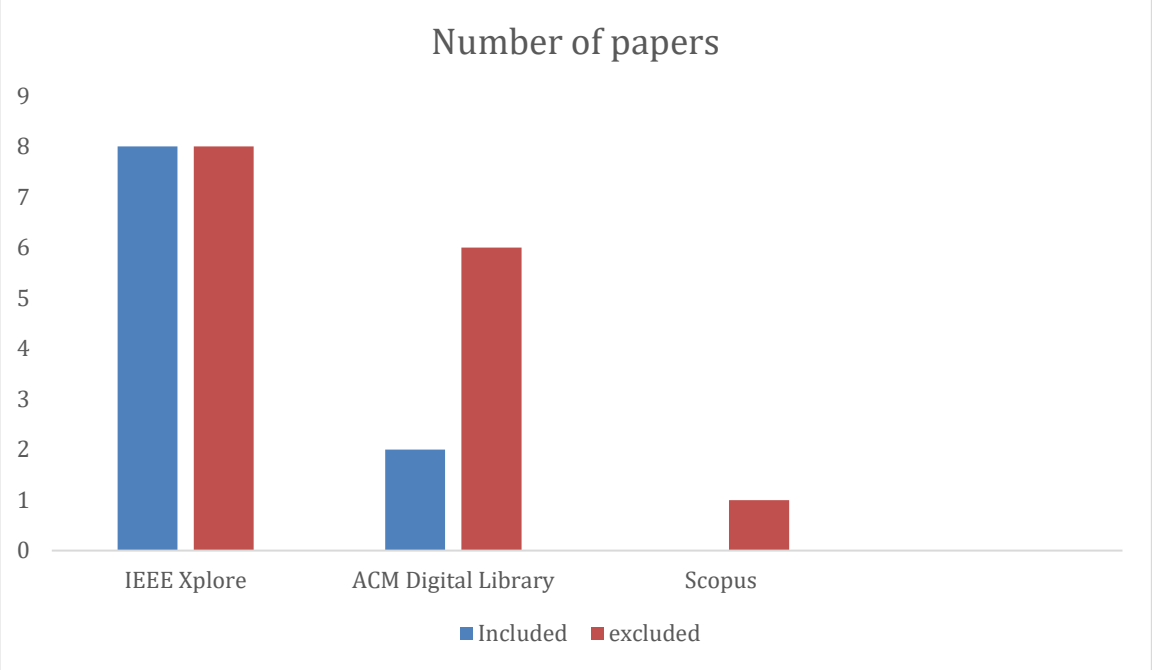

Figure 2.3: Number of papers included in and excluded from each database

2.7 Results of the mapping

All 25 of the selected papers were read by the researcher in their entirety before integrating the criteria and creating infographics to help achieve the research goals.

2.7.1 RQ1: features of time management applications

The literature and identified papers were reviewed, which discuss the features of time management applications.

Effective task management solutions are more crucial than ever in today's fast-paced world, where productivity and time management are paramount. The task of remaining organised and motivated can frequently feel overwhelming to students and others who attempt to juggle their academic endeavours with other obligations (Sharma, Maheshwari, Singla, Chopra & Khandelwal, 2024). Sharma *et al*. (2024) referred to the HeyMitra application as intended to be more than simply a conventional to-do list app. They argue that it is a dynamic and user-friendly platform designed to meet the specific needs of contemporary individuals seeking to enhance their productivity and achieve

their objectives. Fundamentally, HeyMitra provides users with a seamless experience for setting priorities, creating daily schedules, and tracking their progress over time. Sharma *et al*. (2024) stated that HeyMitra enables users to focus on what truly matters, whether those things are personal, professional, or academic obligations, by providing them with the necessary resources to plan their days efficiently.

Sharma *et al.* (2024) argue that one of HeyMitra's primary features is an easy-to-use task editor that lets users enter and rank activities based on their urgency and importance. HeyMitra encourages people to optimise their task schedules using clever algorithms, making sure that users manage their time effectively and efficiently. Furthermore, HeyMitra features time tracking that enables users to monitor their development and identify areas where their time management practices require improvement (Sharma *et al.,* 2024).

Smartphones are the preferred tool for conducting research on health and wellbeing, particularly among young people (Baras, Soares, Lucas, Oliveira, Paulo & Barros, 2018). Students frequently encounter several difficulties when they start college, including adjusting to new circumstances, forming new relationships with others, managing a greater workload and shorter deadlines, and completing teamwork assignments. Baras *et al*. (2018) stated that the findings of four studies examining students' mental health and general well-being, as well as their perceptions of the difficulties and barriers they encountered while pursuing their education, are reflect a commonality in their conclusions. Additionally, a mobile application is suggested that serves as an adjunct to a tutoring program that has been successfully adopted at the authors' university. With the application's virtual tutoring features, students can manage their timetables and due dates in one location. The application uses the student's calendar events and mood indicators to determine when to send messages. These alerts include time management advice, relaxing techniques, and inspirational quotes.

People schedule and oversee their work using various reminder systems daily. Although paper-based reminders, such as notes and memoranda, have their uses, they are challenging to plan efficiently (Chowdhury & Hadi, 2023). Chowdhury and Hadi (2023) also argued that several types of smartphone-based task schedulers are available including to-do lists and reminder apps. The development of a task list, scheduling of the work list, and notification of job completion are standard elements of all task schedulers. Context-aware task scheduling and location-aware task scheduling are two ideas that have been proposed to expand the scope of task scheduling. However, none of the task-scheduling apps are made with the user's profile in mind. Users who are students will

have different needs than users who are professionals. There are not many student time management apps available. The ClassUp software enables users to create classes, track assignments and interact with other students. The app's nature is more collaborative, allowing parents, teachers, and children to communicate with each other in both directions. Students can better plan their study-related tasks with the aid of the Study Planner app. The app keeps track of completed tasks and allows the user to add them to their to-do list and exam schedules. The Student Diary app include features such as a scheduler, notepad, and password-protected reminders. Search and filter features are included with an emphasis on simplicity of use.

Students can use the My Homework app as a planner. The app features a calendar to record any forthcoming tasks, such as projects, tests, and assignments. The app notifies users when chores are due.

2.7.2 RQ2: How do the features of the Todoist application contribute to students' time management?”

Time management is described as "achieving an effective use of time while performing certain goal-directed activities" (Claessens *et al*., 2007:262) and as "the self-controlled attempt to use time in a subjectively efficient way to achieve outcomes" (Koch & Kleinmann, 2002:201). Theorists generally present time management as a multifaceted process that involves goal setting and prioritisation, short and long-term planning, estimating time demands, tracking time expenditures, and purposefully structuring or allocating time use, despite the lack of agreement on its essential elements (Aeon & Aguinis, 2017; Britton & Glynn, 1989; Burt *et al*., 2010; Macan, 1994; Richards, 1987; Van Eerde, 2015). Effective time management is demonstrated by an individual's ability to use their time effectively and in a way that both advances their pursuit of important goals and prevents distractions, procrastination, or other time misappropriations, even when faced with changing situational demands (Claessens *et al*., 2007; Strunk *et al*., 2013). Using a planner, adhering to a daily schedule, creating to-do lists, maintaining a time-use diary, writing reminder notes, setting personal deadlines, cutting down on wasted time, and setting up one's workspace to minimise distractions are some specific strategic behaviours believed to demonstrate effective time management (Bond & Feather, 1988; Britton & Glynn, 1989; Macan *et al*., 1990). Researchers generally believe that contextual supports or well-designed treatments can improve time management (Claessens *et al*., 2007; Zimmerman *et al*., 1994).

This research focuses on university students because they are a particularly relevant demographic to examine time management, even though younger students are

increasingly faced with numerous and exacting time demands (Hilbrecht *et al*., 2008; Won & Yu, 2018; Shaunessy-Dedrick *et al*., 2015). Because they must participate in more learning activities outside the classroom, on their own schedule, and under their own supervision, students typically feel a greater sense of autonomy and responsibility as they transition from secondary school to university (Banahan & Mullendore, 2014; Terenzini *et al*., 1994). Many college students no longer regularly connect with their parents, teachers, or other adults who would have previously provided them with guidelines about when, how long, and how to complete their academic work. Additionally, students generally face more challenging and time-consuming coursework in college than they did in high school (Asikainen & Gijbels, 2017; Zusho, 2017). Furthermore, many college students are under pressure to engage in extracurricular activities, such as socialising and working, which can negatively impact their academic performance and general well-being (Fromme *et al*., 2008; Hicks & Heastie, 2008). One of the main causes of stress, and a significant obstacle for first-year university students, is juggling the numerous academic, social, and extracurricular objectives they pursue (Shaunessy-Dedrick *et al*., 2015; Van der Meer *et al*., 2010).

An academic intervention offered to college students is institutional support for better time management. According to Young and Hopp (2014), most U.S. students are required to enrol for first-year seminar course that provides this support. Building or improving students' effective time management skills is one of the most frequently mentioned objectives for these courses, despite the main objectives differing (Truschel & Reedy, 2009; Young & Hopp, 2014). Additionally, for-credit study skills classes and optional short-term workshops frequently address time management (Wolters & Hoops, 2015). Lastly, time management improvement is cited by advisors, academic coaches, counsellors, and other academic support personnel as being essential to the help they offer to specific students (Sanders *et al*., 2018). These tools for enhancing time management are designed for students of all backgrounds, and widely accessible at various educational institutions (Young and Hopps, 2014). Post-secondary schools devote significant resources to cultivating the ability to effectively manage time, which seems to be a prominent, flexible, and powerful factor in college students' academic achievement.

2.8 Theoretical framework underpinning the research.

A model that describes users' intent to adopt technology and their subsequent usage behaviour is called the Unified Theory of Acceptance and Use of Technology (UTAUT) framework (Dwivedi, Rana, Jeyaraj, Clement & Williams, 2019). It was created by

Venkatesh *et al*. in 2003 and incorporates components from several existing models, including the Theory of Planned Behaviour and the Technology Acceptance Model. Dwivedi, Rana, Jeyaraj, Clement and Williams (2019) identified four important constructs that affect user acceptance, as outlined by the UTAUT framework:

- *Performance Expectancy*, which refers to the extent to which employing technology is thought to improve work output.
- *Effort Expectancy*: The technology's perceived simplicity of use. Social Influence: The degree to which people think significant others think they need to utilise the new approach.
- *Facilitating Conditions*: The tools and assistance needed to take advantage of the technology.

Researchers "pick and choose" constructs from the models or select a "favoured model" when presented with a wide variety of similar constructions supplied by numerous theories, according to Venkatesh, Morris, Davis, and Davis (2003), which leads to the other models being largely ignored. Thus, Venkatesh *et al.* (2003) developed the UTAUT framework. Venkatesh *et al*. (2003) used data from four firms with three points of measurement and discovered that the eight models explained 17–53% of the variation in users' desire to adopt IS/IT. However, using the same data, the UTAUT framework performed better than all eight models, accounting for almost 70% of the variance in behavioural intention and 50% of the variance in technology use (Venkatesh *et al*., 2003). One significant distinction between the UTAUT framework and its forerunners was that the Unified Theory of Acceptance and Use of Technology model suggested four moderators—gender, age, experience, and voluntariness—to enhance the model's predictive capacity. Since its introduction, the UTAUT framework has been widely utilised to describe how people accept innovations.

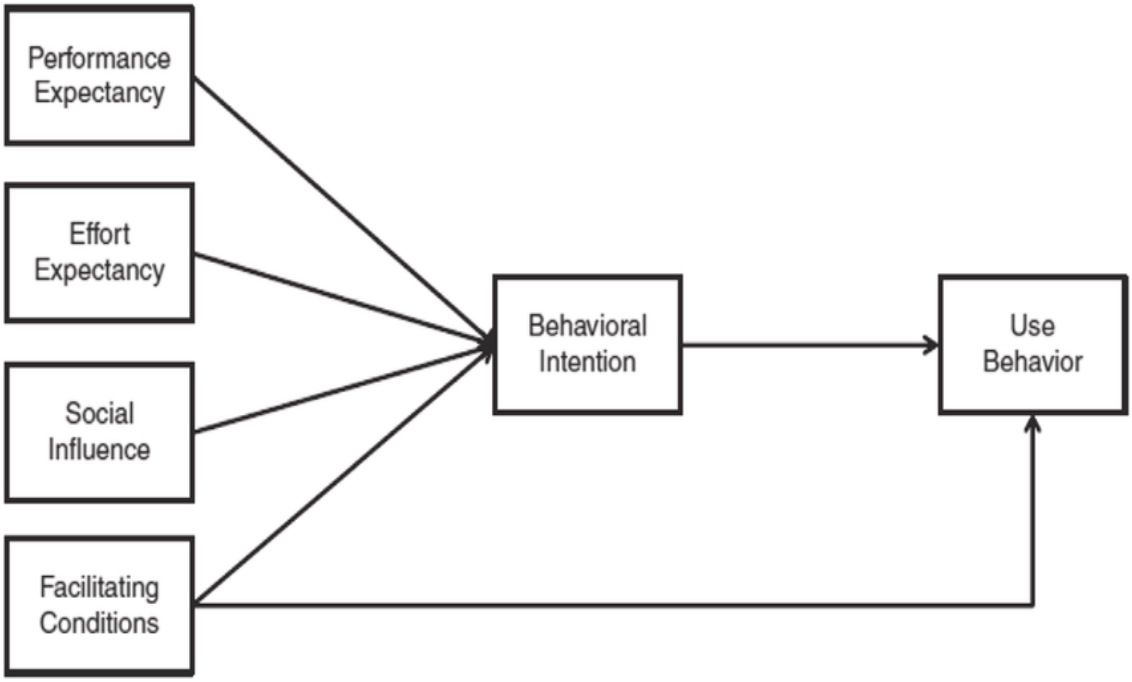

Figure 2.4: Unified Theory of Acceptance and Use of Technology Framework (Venkatesh, Morris, Davis, and Davis, 2003)

Reasons for choosing the UTAUT framework for this research include:

Expectations for Performance

Definition: How students believe utilising Todoist will help them manage their time and study more effectively.

Application: Asked students if they think Todoist improves their academic success by helping them prioritise assignments, set deadlines, and monitor their progress.

Expectancy of Effort

Definition: The user-friendliness of the Todoist app. Use: Examined the features and user interface of the app. To find out how easy and intuitive students find the app for organising their study timetables and assignments.

Social Impact

Definition: The extent to which students believe that their family, friends, or teachers promote or support their usage of Todoist.

Application: Examine the effects of suggestions made by fellow students. During the interviews, students were asked if they would recommend the Todoist application, and all of them responded affirmatively.

To ensure the Todoist app meets students' demands for efficient time management, this research identified the tool's strengths and areas for improvement by collecting data on these constructs. Designing interventions or training courses that improve students' uptake and usage of apps can also be aided by this data.

2.9 Chapter Summary

Chapter 2 provides a review of previous research on the subject covered by this thesis, specifically works connected with time management in educational institutions and the soaring impact of digital technology on student productivity. It provided the definition of time management, its relevance to academic performance, and why it is important in academic life, especially in higher educational environments where students are usually under pressure to meet various priorities. Research inquiry on the problem various students have with scheduling and prioritizing activities is also brought to the fore.

The chapter also reviewed different time management tools on digital apps, but more specifically, Todoist. It examined its functions, including task scheduling, reminders, progress monitoring, and prioritizing them, and how they match with the best practices of time management. Analysis of earlier studies identified the gaps in empirical data on the efficiency of such instruments among students. The current literature framework provided a theoretical basis for the proposed study and partially justified its orientation on the evaluation of the pragmatic usefulness of Todoist within the academic setting.

CHAPTER 3
RESEARCH METHODOLOGY

3.1 Introduction

In Chapter 2, a thorough literature review has been conducted, encompassing a systematic analysis and synthesis of time management applications, as well as an examination of their various features. This chapter presents a detailed account of the research methodology, outlining the specific procedures and methods employed to achieve the study's objectives and address its research questions.

3.2 Research Methodology Defined

Research methodology is the systematic methodology that is used to conduct inquiry (Snyder, 2019). Various procedures and guidelines in the methodological framework were used to ensure the validity of the data. In this chapter, the author details the main parts of the study, hence facilitating the investigation of the phenomena under consideration. This exposition clarifies the research design employed, consolidates the decision of the chosen methodology for performing the research work as the most appropriate instrument for the accomplishment of the effects outlined in the research aims.

The participants section outlines the type of participant being targeted, sampling strategies used to recruit participants for the study, and inclusion and exclusion criteria that have been adopted. Moreover, it describes the contextual and demographic characteristics of the sample, hence providing a complete background for the research cohort. The methodological description goes further to explain the instruments, procedures, and techniques to be utilised to obtain data (Snyder, 2019). Data collection is carried out using semi-structured interviews, and the section outlines the measures taken to ensure that the data collection process is accurate and reliable.

The chapter ends with the data analysis procedures. To produce substantial results and answer the research questions, a roadmap of methodologies is situated, which describes the data processing, coding, and interpretation. This account also details the steps taken to ensure how credibility and rigour are attained in the analytical phase. Consequently, the chapter serves as a methodological foundation for the research as it clearly specifies the scope of the study, the study design, the purpose, the rationale, and the procedural process of the research.

3.3 Research Philosophy

There exist various research philosophies that direct and guide the approach taken in the research (Potrac, Jones & Nelson, 2014). The Interpretivism model has been chosen for this research. Interpretivism focuses on interpreting and knowing about the meaning and experiences of people based on their perceptions (Scott, 2017). The objectives of this study are to investigate the role of the To-Do app in the development of time management aptitude in the respondents and the findings on the aspects of the To-Do app that can be harnessed to aid in the planning of academic activities among students.

Instead of focusing on the questions of answering pragmatic and measurable objectives, interpretivism facilitates the inquiry into subjective perceptions, whether students find Todoist helpful to them when it comes to managing their time or if they have some concerns using the service (Scott 2017).

In practice, this can be said that research using an Interpretivist model is more concerned with students' opinions, thoughts, and feelings regarding the app and how students interpret the usefulness of the app in their daily academic and personal tasks (Alturki 2021).

3.4 Research Approach

An inductive approach links to the construction of theory and the generation of insight based on empirical data, which, unlike the verification of already constructed theoretical propositions (Corbin & Strauss, 2024; Miles, Huberman & Saldana, 2019). This methodological orientation sounds consistent with interpretivist epistemology, considering that in the present study, data are elicited, and an effort is made to look for emergent patterns or themes in students' interactions with Todoist (Thomas, 2006).

Rather than making an antecedent hypothesis, the study gathered qualitative data using interviews and then built an understanding of the influence of the application on students' time management practices.

3.5 Research strategy

Palmer and Bolderston (2006) postulate that the interviews are the most efficacious modality for qualitative data collection. In accordance with this proposition, the present investigation is termed an interpretivist ontological framework, using interviews to gather an in-depth comprehension of lived narratives and interactions of students with the Todoist application (Palmer & Bolderston, 2006).

Palmer and Boldersston (2006) carried out a study on the methods of data collection on qualitative research, and in this case, they identified interviews among the data collection methods as the preferred method. Consequently, the current research employed an interpretivist philosophy, which was based on the belief that the interviews give the researcher the space to interact with the personal experience of students and their detailed story of their engagement with the Todoist app (Palmer & Bolderston, 2006).

Using open-ended inquiries, the researcher was able to question the complex elements of how students are using the application, the challenges faced, the benefits seen, and whether they think the app ensures better time management practices.

3.6 Research choice

In this study, qualitative research methodologies are used. The data collected is qualitative in nature, and the purpose is to gain a deeper insight into the experiences and perceptions of participants. Such data comprises narrative accounts, affective reactions, attitudinal statements, and reflective thoughts regarding perceived benefits of Todoist as related to time management.

As a qualitative study, the empirical approach followed established qualitative frameworks, drawing on such qualitative methods as thematic analysis and content analysis to identify salient themes emerging from across the interview transcripts (Griffée, 2005). For example, findings suggested that students see the application as a tool that makes organizing tasks easier, while on the other hand, they report difficulties in finding their footing in some features of the application.

3.7 Time Horizon

Five students were interviewed (three undergraduate and two postgraduate students), and the interview process lasted for 18 months and thus took a longitudinal time perspective.

Longitudinal Time Horizon:

The investigation was carried out over a period of 18 months, suggesting that it was not a cross-sectional study, for which data can be obtained at one point in time, but it was a longitudinal study.

At first, 15 students were invited to participate, who were asked to download and use the organization program Todoist for at least one month. Nevertheless, in the study, representatives were not obtained to a robust degree, as many students withdrew due to cancellations and dropouts, so that there remained only 5 of those students for the entire study.

Such a long period of time allows the researcher to explore changes in the students' experiences and how their use of Todoist may change. This also provides an understanding of the progression or change of the use and perception of the Todoist application in the students subjected to prolonged exposure. The time scale of 18 months reflects both positive and negative changes to their experiences, and thus gives more insight into both the long-term impact of using Todoist on their time management and how happy they are with the app.

3.8 Data collection timeline

May 2023: Start of the research in which 15 students are asked to download and use the app called Todoist.

Over the subsequent months, the 5 remaining students continued to use the app throughout the rest of the study period. Participants were requested to provide written responses to the interview questions. This was followed by 18 months to follow up on changes and get feedback.

The approach provided an opportunity to ascertain how the app had influenced the students in the long run and how they were able to change their time management techniques or the use of the app over the years.

3.9 Techniques and Procedures

In this study, purposive sampling was applied in the recruitment of participants. Purposive sampling or judgment sampling is a non-random sampling technique which can be termed as a deliberate attempt to choose participants based on their characteristics and level of expertise or knowledge (Etikan, Musa, & Alkassim, 2016)

3.10 Purposive Sampling

A purposive sample of students who were expected to bring relevant information on the effectiveness of Todoist in time management was chosen. Specifically, participants who volunteered to download and use the application for at least one month, and who were enrolled in the campus of the District Six institution, were enrolled. This methodological approach, which was adopted to target active users of the application, was considered suitable because it guaranteed that the focus of the data created would be more substantively relevant to the study.

Purposive sampling, which is most beneficial in qualitative research where the inquirer is interested in exploring a defined group of people or experiences (Etikan, Musa, & Alkassim, 2016), was used in this study. The relatively small group of students who met the criterion of having previously used Todoist allowed for a more detailed analysis of the experiences of the participants

3.11 Data Collection

The interviews were carried out with the five students who conducted the study. Because this was a longitudinal study, these interviews were repeated several times over the 18-month study period to systematically document the progression of the participant's experience with the application.

The interview model: Open-ended questions (depth) were used to try and elicit detailed viewpoints from the participants, using the stories of their initial understanding of Todoist, their actual use over time (including problems), and any amendments they think they made to their time management that can be attributed to the tool. To capture the development of understanding as the participants interacted with the app over the 18-month period, additional follow-up interviews were conducted.

3.12 Data Analysis

After conducting the interviews, thematic analysis or content analysis was used to find patterns and themes from the responses received from students.

Given the fact that the research is qualitative and longitudinal, the changes in their responses could be observed and documented over time. For example, it was noted that at first, students had difficulties using some of its features; however, with time, students became more used to the application and started to use more advanced features.

Through systematic coding and categorisation of responses, the main themes relating to the usability of the application, its efficiency in time management, and user satisfaction were ascertained.

3.13 Study Population

This study aims to recruit all eligible undergraduate and postgraduate students at the Cape Peninsula University of Technology (CPUT). The inclusion criteria also require that participants be registered students at CPUT with a functional smartphone or computer and should show interest in using the Todoist application.

Participants are also supposed to be familiar with the basic features of digital task management tools. The study explicitly excludes people who are not students at CPUT, do not have the necessary technological devices, or refuse to participate in the research. Five participants were specifically selected for inclusion in this study: three undergraduate students and two graduate students. This purposive sampling strategy was aimed at students who use the Todoist application more actively, so that the information obtained would have informed perspectives of the functionality and usability of the application.

The justification for using purposive sampling is its ability to provide participants with relevant experiences in the management of the digital tasks, to gain meaningful knowledge about the practical application of the app, as well as the user experience.

Recruitment of subjects was done via electronic mail, publicly posted announcements in locations around campus, social networking sites, and professional associations. These multiple channels were used to increase sample variability, as well as to verify that potential participants met the stipulated inclusion criteria.

3.14 Data Collection and Analysis

Pre-study interviews: To determine the status of time-management practice and familiarity with time-management applications among student participants. Design: One-month intervention using the Todoist application by pupils. Post-study interviews: Reflections on change in time-management skills, productivity, and satisfaction. Analysis: Before and after intervention measurements are essential for measuring the effectiveness of Todoist.

3.15 Narrative Analysis process

The initial phase of the narrative analysis conducted in this study aimed at scrutinising the contribution of the application of Todoist in students' time management competencies and identifying what features of Todoist are most beneficial for students when it is to organise their academic tasks. Narratives were elicited through semi-structured interview questions, which students responded to in relation to their utilisation of the application. These responses are verbatim life narratives that were later divided into analytical chunks. The next step involved the identification of narrative structure, where the goal was to find how the stories of the various participants expressed the story of their beginnings, development, and endings. It also included determining how students were introduced to Todoist, the issues they faced while using the tool, and their developing perceptions of the tool. Furthermore, the focus of the analysis was on contextual elements of interest such as perceived ease of use and usefulness, preferred features, effects on productivity, and barriers to adoption.

The social and learning contexts of the students attending Cape Peninsula University of Technology were investigated, as well as their individual circumstances, which included their previous experience with digital task management tools. The next stage focused on the re-evaluation of the meanings participants ascribed to their experiences with the application during the process of participant observation. This comprised an analysis of how students interpreted difficulties and issues they encountered and framed possible ways of solving or coping with these. These narratives were then synthesised by bringing to light the convergencies as well as the divergences by incorporating direct quotes throughout the study.

Ethical considerations were of paramount importance at every stage of the research process and included the need for informed consent, protection of participant anonymity, and presentation of accounts sensitively and respectfully. Accordingly, this paper in turn speaks with a qualitative approach as the most suitable methodology to convey the storytelling of how students used Todoist, the main problems that were observed, and the personal value that the application had for the students in their problems in school and in their personal lives.

3.16 Ethical Considerations

In any research, ethical implications play an important role in making the research process clean and in ensuring the participants respond safely. In this study on the

utilisation of the Todoist application among students, a number of ethical considerations have been addressed.

3.17 Table 3.1: Ethical Considerations

Principle	Considerations
Legitimacy	Selected students at Cape Peninsula University of Technology were required to sign a consent form before participating in this research. Ethical clearance was obtained from the institution before collecting the data.
Prudence	The collected data will be destroyed in accordance with the guidelines of the Cape Peninsula University of Technology. Interviews are recorded before interviewees are asked to give consent.
Objectivity	The interviewer has disclosed his interest in this research to the interviewees
Confidentiality	Participants' personal information was hidden. Data collected has been managed following Cape Peninsula University of Technology guidelines
Transparency	Students were allowed to add their views and opinions to this research.
Integrity	The interviewer has signed an ethical declaration form provided by the institution to agree that the data provided is trustworthy and original
Respect	Data collected will not be shared with anyone except the Researcher Supervisor, who is Cape Peninsula University of Technology Staff The data collected is the property of the institution

3.18 Chapter Summary

This study adopts the qualitative approach in conducting the research. The methodology is outlined in Chapter Three, based on the interpretivist school of thought. The chapter argues that this paradigm is the most helpful in gaining insight into the daily experiences of participants and what they make of them, and why it is the most appropriate method for researching the interaction of students with the Todoist application in managing their time.

The chapter outlines that data collected in the form of semi-structured interviews, which provide very open questions that give deep insights into the participants. In the chapter, the procedure of narrative analysis that was employed in making sense of the interview data by determining the patterns, themes, and underlying stories to the experiences that the participants offered is also explained. This method was effective in offering significant insight into the perception and use of the app by the students, which supports the overall objectives of the study.

CHAPTER 4
DATA ANALYSIS AND DISCUSSION OF FINDINGS

4.1 Introduction

This chapter attempts a systematic analysis of the data and enters a rigorous discussion of the resultant findings. The analysis was carried out with the general research goal to outline the contribution of the Todoist application to the time management competencies of students, and the features of the application that best helped students in managing their academic tasks. The chapter is structured into three sections, each of which discusses a different analytical need. First, the general process of data analysis is described by analysing the methods and tools that are used to support a systematic appraisal of the data set. Second, the data are contextualised by Activity Theory, which helps to provide a conceptual framework to explain how Todoist helps students to manage their academic assignments and achieve their goals, to explain more clearly the interconnections between the features of the application and divergent student behaviours relating to time management. This interpretation shows the relationship between the features of an application and how different behaviours of students related to time interact. Finally, the chapter ends with a summary of the findings, emphasizing their relevance to the goals and purpose of the research.

4.2 Primary data analysis process overview

Interviews were conducted with five students, consisting of three undergraduates and two postgraduates. The volunteers were second and third-year undergraduate students across a variety of humanities and scientific fields. One student was working towards a master's degree, and another was engaged in doctoral research, forming part of a group of postgraduate students who all had substantial experience within the domain under investigation. This diverse group achieved a balanced perspective on the research topic.

The interviews were carried out with five students, three of whom are undergraduate students and two are Postgraduate students. The volunteers were second and third-year undergraduate students taken from a diverse number of disciplines across the humanities and sciences. Two participants were enrolled as master's students at the same university, and one participant was conducting a doctoral study; they thus form a group of postgraduate students who had major

knowledge in the relevant content area under study. The diverse population provided a balanced view of the research topic.

4.2.1 Emerging themes

The present study explored the utilisation of the application of Todoist as a tool to facilitate time management practices done by the students. Different emerging themes were found that shed light on the application's ability to make users better understand its efficient role in helping them achieve their academics. Two main themes, Goal Setting and Performance Monitoring, were outlined, discussing how Todoist helps the learners set academic goals and track progress towards these goals.

The application's internal tracking features, along with continuous assessment and guidance, offer suggestions on strategies that the users may adopt to stay on track. A second salient theme would be Time Tracking and Reporting, which focuses on the way that Todoist accounts for the time spent on various tasks, as well as how efficient the user is. This theme provides the opportunity to determine whether the usage of the application contributes to the improvement of students' work and study process, and to what degree it influences the relationship to the successful completion of tasks within a stipulated deadline. Moreover, the study encompasses a theme, which is Task and Project Management, as it is recognised that Todoist enables students to plan their activities and break up the projects into individual tasks, which are, in turn, manageable. This functionality can lead to organisation competence, the ability to help prioritise, help efficient handling of several concurrent tasks, in all to better time management performance. Ultimately, the theme of user engagement and retention has been identified; students who engage with the system daily in Todoist are likely to cultivate effective time management skills and, in turn, manifest observable improvements over a period.

Coordination and Cooperation, as well as Group Project Management, can be a large field of study, especially in relation to how the application enabled a group of students to collaborate on one project. The current functionality allows the collective to delegate tasks to the individual participants, set due dates, and track the progress in real-time. App-related issues may be a theme that cuts across the others and under which the following subthemes may be found: reluctance to use digital tools, limited understanding of application functions, and perceived ease of use. Additionally, integration with other tools is a separate theme of its own, dealing with how Todoist integrates with other tools

that can be used for productivity, such as Google Calendar, Microsoft Office Suite, and cloud storage platforms. Task automation and efficiency are seen as the fourth theme that could arise, and the automation possibilities of Todoist, the recurring tasks and reminders, could offer huge savings of time to students.

Communication and Cooperation, as well as Group Project Management, could also be useful, especially in how Todoist assists students working on projects together by setting tasks among team members, setting due dates, and sharing task and progress reports. On the other hand, Time Management Challenges and Barriers to Adoption might appear as an essential theme; it will analyse issues like resistance to using a digital tool or the lack of appropriate knowledge, on the one hand, or problems with incorporating the app into everyday life, on the other hand. Furthermore, Integration with Other Tools could also become a theme: how does Todoist complement other applications that students use to organise their work, starting from Google Calendar and ending with Microsoft Office and cloud storage services? Time and Task Management efficiency is yet another theme that illustrates how students benefited from using Todoist by minimising the number of manual actions needed to complete daily tasks, such as utilising the feature of recurring tasks and reminders.

Finally, the theme of Academic Performance and Productivity could emerge, showing whether the use of Todoist improves:

- outcomes,
- timely submissions,
- assignment productivity by the students.

Such an understanding was obtained by exploring these emerging themes, which gave the research an overall insight into the aspects of Todoist used by students, how they are used in practice, and their significance for student life.

Table 4.1 below shows the themes that were identified through the research process and displays extracts from the data of the students. These themes were discovered during the analysis of the students' use of the Todoist application in the time management process. Analysis is based on goal setting and performance monitoring, time management and reporting, and task and project management; it provides generic paradigms of applicability as well as specific extracts reflecting students' perceptions. These extracts help provide an idea of how Todoist is used for time management at different stages: goal setting and tracking, assistance with academic tasks, and progress monitoring. The data extracts and their corresponding themes show the viability and

effectiveness of the proposed tool, Todoist, in improving the time management skills of students.

Table 4.1: Time Management Themes

Theme	Feature	Description of Feature	Participants
Task and Project Management	Task Creation and Categorisation	Create, edit, and categorise tasks by priority, deadlines, and context.	Postgraduate students, Respondent 1 ‘’Feature where you do filters/label put in your task helps to see daily routine. Also, categorise priorities, which helped me to manage my time’’. Postgraduate students Respondent 3 ‘’Create subtasks, deadline management, and task scheduling’’. Undergraduate students Respondent 2 ‘’To-do list or tasks, priority, and due date Upcoming’’.
Time Tracking and Reporting	Time Logging	Manual or automatic tracking of time spent on tasks or projects.	Undergraduate student Respondent 2 ‘’So, I use sections and subtasks the most because I use those two to customise my To-Do List and the notifications to remind me of my tasks that I have left and done’’.
Goal Setting and Performance Monitoring	Goal Definition and Milestones	Set long-term goals, track milestones, and align tasks with larger objectives.	Postgraduate student Respondent 1 ‘’Sometimes we lose track of time, but the Todoist application allows you to commit to tasks at certain times and gives you a vivid plan you need to follow.’’

4.2.2 Undergraduate students' interview data.

The three participants assert that Todoist is a robust task-management application that provides a plethora of features, thereby allowing individuals to stay organised and more efficiently manage their time. A set of functions, including philtres, labels, task prioritisation, and daily views, helps users to handle tasks and their subcomponents. Notices and alerts are crucial because they communicate to you about deadlines and the status of tasks. The application offers a whole host of customizable features, including templates, subtasks, due dates, recurrence, and task development, making it especially suitable for students and professionals who are facing an overwhelming workload. Additionally, it includes comments and file attachments in addition to the project-management tools that simplify collaborative task execution. As a task manager, task progress manager, and workflow manager, Todoist seems to be a productive tool for enhancing productivity, tracking task deadlines, and managing work activities both in groups and individually.

The results obtained show that the aspects used most in Todoist are the prioritisation of tasks, sections/subtasks, and reminder notifications. One of the respondents claimed that he used the task prioritisation techniques in the preparation of exams, which supported the significance of task prioritisation. Another respondent mentioned the importance of using sections and subtasks to optimise a to-do list and using notifications to avoid forgetting to complete incomplete tasks. These features seem especially beneficial for educational routines, since the ability to prioritise tasks based on their importance and deadlines is provided. In total, students use these features, thus showcasing the ability of Todoist in helping students manage their time and schedule their daily tasks.

According to the responses given, the least-used feature of the application is project management. One respondent noted that their use of this feature was limited because they started using the app during the last quarter of the academic year, when they had numerous end-of-term exams; however, they planned to use it in the future when researching various topics. One respondent provided more precise information about the frequency of using filters and labels, pointing out that these fields typically contain the smallest values. In general, students tend to use several aspects of project management tools and applications less frequently, likely due to their focus on specific tasks and daily activities. However, these features may become relevant in subsequent academic or working scenarios, such as when searching for information using academic databases. Based on the participants' responses, it was evident that implementing task automation

can significantly increase the use of the Todoist app, particularly among students. Primarily, a respondent suggested that the application should have the capability to recognise the patterns and habits of a specific user and then notify them of events via email or phone based on the urgency of the reminder. Specifically, one of the respondents emphasised the importance of studying and workouts, which are typical tasks for students. Moreover, the respondents highlighted the importance of the app's ability to understand the user's habits and routines. Overall, students would gain advantages if Todoist could handle regular educational tasks, such as studying, and ensure customised alarms and timetables for each student.

Based on the responses, students mainly used the application of Todoist, especially regarding activities regarding exam preparation. One respondent described using the application as much as two or three times a day during the preparation period, but after exams, she decreased to one or two times a day for personal activities and three times a week for professional activities. Another respondent said that the app was used daily, and overall, the results show that there is indeed no barrier for students considering Todoist a potential tool for school-related tasks, confirming its utility for managing and organising important tasks. Data also show that students have been using the application for different periods of time, with most saying they used the application for more than one month. Specifically, one respondent reported one to two months, another one month, while the third respondent indicated that the use extended up to four months. So, the results would indicate that students have been using Todoist for longer periods of time, giving them enough exposure to the functions and enabling them to integrate it into their workflow.

In the area of time management, students' time management capability has been significantly improved using the Todoist application, which is a crucial competence required of academic users. The platform allows definite task times to be allocated, which one respondent found helpful in keeping the plan clear with tight deadlines. In addition, Todoist has a prioritisation scheme that is not always provided in real life. The benefits of improved task organisation and having greater time management skills were highlighted by another respondent as well, but only when supported by the application. Furthermore, due to the ease of use of the list-making feature of Todoist, it has made it possible for students to prepare for tests and exams by allocating specific time periods for studying, as well as other class-related activities. In general, the application has significantly improved students' time efficiency, helping them in matching their schedules to their timetables optimally.

4.2.3 Postgraduate students' interview data

The response details reveal that Todoist offers several useful features for postgraduate students. One participant highlighted features such as the calendar feature, a notification area like email, the ability to add time to tasks, and the capability to organise tasks using filters and labels. The other respondent mentioned features such as a to-do list, reminders, priorities, due dates, upcoming events, and projects, among others. Users can use all these features to track their assigned activities, plan their work, and stay informed about various compliance dates. Among all the features available in Todoist, this program offers several useful features that are particularly beneficial for postgraduate students, who often have numerous responsibilities and require a planner that meets their specific needs.

These survey response data show that the most used feature of the Todoist app is the calendar reminder. One tester mentioned that they appreciated the reminders, yet the user also mentioned that they preferred the alarm function, which is only available on the premium version. One participant was utilising mostly the to-do list and was satisfied with basic task management. These results suggest that postgraduate students find task management support in Todoist, but that the limited functionality of the free version - specifically, missing an alarm functionality - can limit its usefulness. As a result, there could be users who do not have the option to make the best use of their time unless they subscribe to a paid version.

One of the respondents uses nearly all the features of Todoist, including the app's own functionality for keeping track of tasks and deadlines. On the other hand, the other respondent said that their use is concentrated on a single feature, the to-do checklist used to plan the tasks of the day. Some of our findings indicated that while Todoist offers a robust set of resources for improving task management, not all users take advantage of all the available features (tools such as reminders and labels), and they instead use relatively simpler features like the to-do checklist. This trend highlights the possibilities of a less-than-ideal use by some users of the ancillary technology of the app, depending on their needs.

According to the responses, both respondents agree that the application of Todoist should include the fact of automated reminders about tasks. One of the respondents provided the suggestion of integrating the notifications, which would alert the users about

tasks, hence removing the need for regular manual checking. The other respondent emphasised the need for the app to offer other features that can help users do their jobs without having to pay for a subscription. The implication is that while post-graduate students understand the usefulness of basic notification functionality, they understand that this should be provided for free without having to purchase a premium tier. This represents an increase in demand for improved functionalities of the free version of the application, which will allow for more effective time management for the student.

The answers to the fourth question indicate an active use of the application by students, i.e., one of them uses the application very rarely because of personal time management

(still checks and updates the tasks at least once in day), and the other respondent says that he uses the application every day. Collectively, these data suggest that although some students use Todoist sporadically, some use it daily to organise their tasks and receive updates. Consequently, Todoist is useful for students, regardless of the diversity in the way the individual uses his or her time.

According to the data provided, students have failed with the Todoist application for a period; one user has used it for about two months, another for about five weeks. This means the students have used the application for more than a month's duration, which means that they have been given enough time to put all the features available into practice and make the tool part of their regular activities.

The responses showed that students have found the Todoist application instrumental to time management, especially for tasks that let them work better on prioritisation and deadlines. Another respondent noted that they were able to manage deadlines and set personal goals, and that their prioritisation of tasks enabled them to get the right things done in Todoist. Another respondent mentioned that using the app gave them the possibility to use filters. The working time per item was defined as "Time available working time in hours," and the primary filter was defined as "Deadlines" to make a distinction between work that was urgent and work that was less urgent. Moreover, many users said that the app provided them with a list of tasks and helped them to achieve daily, weekly, and monthly goals.

However, the participants had different perceptions regarding the convenience of the app. One participant found it easy to use and regarded the tool as useful in the process of task organisation; the others found it a little time-consuming, especially in the early weeks. This team pointed out that the interface and design might be confusing, especially for users who were not very literate in IT. This means that, while Todoist can do miracles regarding time management, the interface may be slightly cumbersome for certain users

or, at the very least, for all those who have never used a similar app before. As well, we observed that all the features are available only after paying a subscription fee, as one of the respondents mentioned.

Overall, the empirical results show that Todoist significantly increases the students' organisational clarity and productivity. Nonetheless, users indicated a need for acclimatisation, and there are minor refinements that can be implemented in the interface design and layout, especially with a correlation to the user not being so technologically (or conceptually) proficient.

The results of the study also showed that the use of the Todoist application had a significant positive effect on the time management results of postgraduate students. In terms of task organisation, one user said that with Todoist, they are able to prioritise tasks based on deadlines and importance, which improves their temporal efficiency. Another respondent noted the app assists in daily planning, leading to enhanced productivity and improved time management skills, and this, in turn, helps in meeting deadlines.

Overall, from the responses obtained, the use of Todoist helps the students with the management of their time and makes a positive impact on their overall time management abilities.

4.3 Findings

Using the UTAUT model, especially the constructs performance expectancy and satisfaction, the efficiency of the application of Todoist for students was evaluated. It is among the constructs that are proposed by the framework; performance expectancy can be used extensively in a justified evaluation of the value of Todoist. It proves to be effective in terms of students because the categories can be created by subject, specific projects, or due dates to make it easier to monitor progress and study time. Possible features include the ability to set priorities, add due dates, reminders, and subtasks. Through this functionality, students can accomplish big assignments by splitting them into manageable chunks. All these features allow students to control and finish that task on time, which enhances their performance.

In terms of effort expectancy, there is no problem finding a platform to use, and that platform is easy to navigate and, as a result, does not require too much effort to enact. Owing to its ease of use without any extraneous features, students of different technical levels academically can operate and construct tasks extensively. Some users have complained about the excessive load of the application, especially those who are less

experienced with running two or more programs at once. Nevertheless, after some days or weeks, they get used to it. Moreover, Todoist can be accessed with mobile, desktop, and web interfaces, and students can see their tasks at any time. This helps to make the application more usable, as there are no barriers that would slow down the user experience.

A facilitating conditions framework is also included in the application of this system and highlights the resources available to users. Its integration with tools such as Google Calendar, Slack, and Dropbox allows for the association of tasks with scheduling and instructional materials, which increases the organisational abilities of students. By having functions incorporated into one, these integrations limit the need to rely on multiple applications and keep students organised. Furthermore, the functions of Todoist itself, such as sharing and synchronisation of tasks, are in accordance with collaborative study and assignment management, making it a useful and very beneficial tool for students.

Todoist supports temporal efficiency, which is also an important aspect for students to juggle social and academic obligations. Feedback from many users suggests that the application significantly helps reduce the level of procrastination and improves proficiency in time management. Features such as task prioritisation, deadline setting, and repeated assignments allow students to stay on track with important tasks. Consequently, through strategic goal setting and to-do list construction, the platform provides a structured framework to keep the student productive during his/her academic career, thereby reducing stress, haste, and frustration in pursuit of exemplary performance.

While some students took a little time to master it, the outcomes of Todoist correspond well with the three key determinants in the Unified Theory of Acceptance and Use Technology model, such as performance expectancy, effort expectancy, and facilitating conditions. This makes it very useful to students, aiding in task assignments, team collaborations, and time management. Since Todoist is a cross-platform application with basic yet effective organisational abilities, it plays a significant role in students' productivity, academic success, and effective time management.

4.4 Chapter Summary

The results from the research show that Todoist turns out to be extremely valuable in providing students with the tools and features they need to meet their time management needs. This efficient way of subject/project organisation, due date assignments, and reminder utilisation contributes to more effective workload management for students. Consequently, these features allow students to break down a large amount of work into

small increments, hence increasing the rate of completing tasks and reducing procrastination.

CHAPTER 5
CONCLUSION

5.1 Introduction

This chapter elaborates on the findings, considering the research objectives mentioned in Chapter One, and analyses the findings based on the Unified Theory of Acceptance and Use of Technology framework. This chapter is divided into two sections, highlighting important aspects of the research to improve clarity and coherence. Part One is an exploration of the Todoist application and primarily focuses on how these students experienced the app in relation to the core UTAUT framework constructs: Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions. Part Two concludes with a summary of key findings and their significance in relation to the UTAUT model, also offering some insight into the contribution to understanding how students utilise Todoist. It also includes recommendations to guide future research and application enhancements, along with limitations that outline the factors involved in the research's results, culminating in practical advice on better incorporating the UTAUT constructs into Todoist to facilitate a better user experience.

5.2 Performance Expectancy

One of the major findings derived from the interviews is that the students were highly convinced that Todoist served to improve their time management and performance. It was particularly challenging for students who struggled to balance these assignments with other academic activities.

Undergraduate Students: Todoist helped them accomplish large research tasks in their coursework by subdividing them into manageable subtasks. These students found this app most useful for specific elements, such as managing stress over deadlines and studying schedules.

Undergraduate student: *''Prior to this, I mostly forget about my tasks or simply procrastinate till the very last moment possible. I no longer feel overwhelmed because, with Todoist, I can always break everything down into smaller subtasks. I understand that I have more time management now''*.

Postgraduate Students: They observed that Todoist could be useful in tracking long-term research papers and in balancing coursework, research and personal commitments. However, these students were generally more demanding of a task management tool that could be prioritised in other ways.

Postgraduate Student: *''In fact, being a postgraduate student, most often it is difficult to coordinate a research project with class attendance. Todoist, I work on a submission and research agenda, and for that, there is nothing more helpful than tracking all our deadlines here. This is something I like; it allows me to create repeating tasks for Literature reviews in my work''.*

In general, the performance expectancy construct was officially the most influential among the choices made by both undergraduate and postgraduate students, as the application was considered a powerful means to increase efficiency in managing the learning process.

5.2.1 Effort expectancy

The theme of ease of use was explored and analysed, with the recommendations of the students depending on their experience with time management applications.

Undergraduate Students: They reported slight difficulty in using Todoist or no difficulty at all, depending on whether they had previously used other digital task management tools. Nonetheless, a few new users complained of minor difficulties during their first few uses, especially those who wanted to utilise features such as labels and filters.

Undergraduate student: *"At first, when I used Todoist to put down all the things that I wanted to do, I did not know how I was going to categorise everything. However, I figured out how to use projects and labels to sort it all out within two days, I think. In one instance, it became much easier after I had understood the procedures involved in it."*

Postgraduate Students: Their perceptions were much higher in terms of customisation and additional functionality.

Postgraduate student: *"Todoist is very simple to use. I would like it if there were more ways of sorting tasks according to how complex the postgraduate research may be. It's effective for temporary assignments but not suitable for projects that will take some time to complete."*

General Observations: When students were introduced to Todoist, most students reported not spending much time getting familiar with the interface; however, it was noted that the app could be improved for first-time users. Almost all students who had not used task management tools before required some level of training in the tool; however, after using it, the participants found that Todoist was an easy-to-use tool.

While most students found the app relatively simple to use, it was noted that there could be improvements in the app's user interface, particularly for newcomers. Many of the

participants who had not used task management tools before needed some time to familiarise themselves with the features, but after initial usage, they found Todoist to be an intuitive tool.

5.2.2 Social influence

The use of Todoist by other students influenced many of the students' decisions to use Todoist, with most of these decisions stemming from encouragement from their fellow students, particularly the undergraduate group. Many students noted that they discovered the possibility of using Todoist through their friends or classmates who were already using it.

Most undergraduate participants suggested that their friends influenced them to join Todoist. They said that mainly the way their classmates work, manage their tasks, and succeed in achieving their deadlines encouraged them to use the application.

‘’I learned about it from a classmate who seemed efficient, and I wanted to be like that too. Then I asked them how they accomplished all of that, and they mentioned Todoist to me. So, I did the latter, and it really helped me with my planning time as well’’.

The postgraduate experience differed somewhat from that of undergraduate students. Other influences include recommendations from peers; however, such tools were sought specifically for more complex and focused task management solutions related to research and academic projects. Postgraduates were also subject to social influence, although not as strongly as undergraduates.

Postgraduate student *‘’Some of the colleagues have mentioned Todoist, but frankly speaking, I got used to it on my own because of the necessity to coordinate several projects and due dates. My peers didn’t pressure me as much, but they assured me that it was helpful."*

In general, social influence played a moderate but significant role among undergraduate students, while postgraduate students were relatively independent in choosing their tools.

5.2.3 Facilitating conditions

It is postulated that facilitating conditions, namely the availability of technology and good connectivity, played a role in students consistently practising the effective use of Todoist. A vast majority of students reported constant use of the app since they had smartphones, laptops, and reliable internet.

Undergraduate Students: They were not faced with any challenges in accessing technology for Todoist use. They commented that they could conveniently and efficiently open the app on their smartphones to manage their tasks better, as they reside in the Cape Peninsula University of Technology students' residence, which has Wi-Fi.

Undergraduate student: *''Well, mainly I employ Todoist on my phone, BUT I also have it on my computer because I need to be able to edit my tasks during the shuttle ride to residence or between the classes. It makes life easier—all possible things are just a phone call away."*

Postgraduate Students: They reported good accessibility to the technology and found the syncing of tasks across various devices particularly helpful as they updated their tasks between their laptops and phones. One postgraduate student found that he sometimes experienced difficulties in using the interface when working in facilities with slow connections.

Postgraduate student: *''You can easily sync all the devices, and I can get to the app anywhere, which is helpful for me since I sometimes work at home and then go to the university library. However, occasionally, connectivity issues disrupt; one can mention that things get harder to update tasks in real-time with weak internet connection occasionally''.*

General Observations: The option of using Todoist on any device was mentioned by the students more often as a facilitating condition, as it allowed them to support the Learning Management System across various contexts (study, office, home, etc.). There were no technology access problems; however, the Internet connection was problematic for some users in remote or restricted Wi-Fi zones.

5.3 Contributions of the research

Therefore, the outcome of this research provides further insight into the Todoist application as a time management tool among students. The results of the research are useful for the development of both theories and practices, increasing the knowledge of factors that affect the adoption of technological interventions in learning environments.

5.3.1 Theoretical Contribution.

This research will contribute to the body of knowledge on the impact of time management applications on improving students' time management skills and identifying the time management app features most suitable for students. By exploring the practical impact of these tools, the research will provide insights into how digital solutions can enhance academic productivity and personal organisation among students. Additionally, it will

highlight the most effective features that cater to students' unique schedules and responsibilities, offering a framework for future app development. This research also aims to bridge the gap between theoretical time management strategies and their digital application in a student-centric context.

5.3.2 Practical contribution

This research will also help time management application developers in designing innovative features tailored to the specific needs of students, such as personalised schedules, reminders, and progress tracking. It provides insights into the key challenges students face in managing their time, allowing developers to address these gaps effectively. Additionally, this research has explored how time management applications assist students in prioritising tasks, setting achievable goals, and maintaining a balanced workload. By understanding the preferences and behaviours of students, developers can create more intuitive and user-friendly applications that enhance productivity and academic success.

5.4 Limitations of the Research

A limitation of this research is that it was conducted at the District Six Campus of the Cape Peninsula University of Technology. This is considered a limitation as the researcher could not travel to other Cape Peninsula University of Technology campuses, thus not being able to select students from those campuses.

5.5 Technical Recommendations:

- Todoist application to function without an internet connection to accommodate the limitation in students’ budgets.
- To make the application user interface easy to navigate
- To make a reminder feature available for university students.
- To make the application sync across multiple devices

5.6 Recommendations for Future Work

It is recommended that the viability of mandating the use of the Todoist app as a tool to improve students' time management abilities be pursued: students should consider using Todoist as their preferred time management application.

Time Management developers should consider developing student-centric time management applications.

5.7 Conclusion

Chapter 5 concludes the study by reflecting on the most relevant findings and their implications. The research explored the issue whether the Todoist application has a significant impact on improving time management skills and how students use it in managing their academic load. This was done by conducting a qualitative analysis of the interviews. According to the results, some of the features of the app such as task scheduling, reminders, and prioritisation, were helpful to students in handling their tasks. The participants found that the use of Todoist improved awareness of deadlines and reduced academic stress.

Such findings give validity to the notion that Todoist can be a feasible and benefits-giving tool to promote time management among students. Moreover, the research indicates that the use of digital self-tools in the learning process is becoming an indispensable element as students contend with mounting time demands. It will be helpful to app developers and educational security to develop more resources that are able to improve the well-being and productivity in students.

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APPENDICES

The research's appendices include additional data that bolsters the key conclusions and analysis in the main body of the work. This section contains two important tables that provide a thorough overview of the characteristics of time management apps, as well as an in-depth look at the body of research in this field.

Appendix A: Features of Time Management Apps by Theme and Related Literature provides a systematic classification of the various aspects frequently present in time management apps. This table provides a clear framework for understanding the various functionalities by grouping these aspects into relevant themes. Each feature's function and purpose within the app are explained in a brief description. Importantly, by referencing the Author and works that explore or support the features' theoretical foundations or empirical evidence, this table connects each characteristic to the pertinent scholarly literature. This link between established scholarly work and app functionalities demonstrates how app design aligns with existing research, providing a valuable resource for understanding the practical application of time management concepts in digital technologies.

Appendix B: Synopsis of Related Research on Time Management Applications complements Appendix A by providing a concise summary of key studies that have investigated time management applications. For each article name, the table lists the author's name and the Year of publication, providing essential bibliographic information. Furthermore, a brief Abstract is included, encapsulating the research's primary objectives, methodologies, and key findings. By presenting these synopses, Appendix B contextualises the current research within the broader academic conversation, allowing for a quick understanding of different research approaches and the contributions of prior work to our understanding of time management applications.

Together, these tables serve as important reference points for the reader. Appendix A offers a feature-centric view grounded in relevant literature, while Appendix B provides a research-oriented perspective by summarising key empirical studies. The detailed information contained within these appendices enriches the analysis presented in the main body of this research by offering specific examples of app features and contextualising the research within the existing scholarly landscape of time management applications.

Appendix A: Features of Time Management Apps by Theme and Related Literature

Theme	Feature	Description of Feature	Author	**L**iterature
Task and Project Management	Task Creation and Categorisation	Create, edit, and categorise tasks by priority, deadlines, and context.	Liyanage, A. N., Jayarathne, W. D., Siriwardana, S., & Reyal, S Sharma, E. H., Maheshwari, S., Singla, S., Chopra, S., & Khandelwal Gupta, K. D., Cengiz, K., Awasthi, C., Ramini, S. A., Chatterjee, S., & Pavithra, M	1.Adding\scheduling of tasks 2. Task/ appointments prioritisation 3. user-friendly task editor, which allows users to input and prioritise tasks according to their importance and urgency 4. task deadline 5. priority of tasks
Time Tracking and Reporting	Time Logging	Manual or automatic tracking of time spent on tasks or projects.	Murray, J. M., Magee, M., Giliberto, E. S., Booker, L. A., Tucker, A. J., Galaska, B., & Rajaratnam, S. M. Yeo, J. L., JosephNg, P. S., Alezabi, K. A., Eaw, H. C., & Phan, K. Y. Chowdhury, M., & Hadi, N	1. a schedule management calendar for work and personal commitments 2. notes taking, timer, reminder 3. Add bus schedules, students' attendance taking,
Goal Setting and Performance Monitoring	Goal Definition and Milestones	Set long-term goals, track milestones, and align tasks with larger objectives.	Baras, K., Soares, L., Lucas, C. V., Oliveira, F., Paulo, N. P., & Barros, R.	1. keep their schedules and deadlines in one place. 2. using events from the student's calendar and their mood indicators, the application sends notifications accordingly. These notifications include motivational phrases, time management guidelines, and relaxation tips.

Appendix B: Synopsis of Related Research on Time Management Applications

#	Name of article	Name of Author/s	Year	Abstract
1	ScheduleME-Smart Digital Personal Assistant for Automatic Priority Based Task Scheduling and Time Management	Liyanage, A. N., Jayarathne, W. D., Siriwardana, S., & Reyal, S.	2021	Currently, it has become challenging for university students to manage their workload, assignments, projects, and other tasks alongside their day-to-day responsibilities and personal chores. It has become hard to spend time efficiently on tasks that should be prioritised and to decide what the best way to spend their remaining time is. Although integration methods and multi-functional Time Management Tools (TMTs), such as Trello and Asana, exist, finding, following, and implementing them can be time-consuming and monotonous. ScheduleME is a smart digital personal assistant, presented as a mobile app that collects and stores all the tasks a student must complete, prioritises them according to their importance, and schedules them intelligently across the student's remaining time, considering their existing academic and personal timetables and daily routines. A user-friendly and comprehensible mobile app is designed to present the right amount of information to the user without including key details that can be configured, overridden, or omitted to prevent overwhelming the user with too much information. This overcomes the weakness found in many time-management and to-do list apps. (e.g., Trello, Microsoft Tasks, Todoist) where the user must manually enter all

#	Name of article	Name of Author/s	Year	Abstract
				task details and set the priority. The main emphasis of our suggested system is four primary components. They include data engineering, Intelligent task breakdown and scheduling, Personalised task scheduling, and User-centred interaction design. Aside from that, this system utilises a range of technologies and algorithms to enhance the accuracy and efficiency of the research.
2	My Household' Application: A Smart Mobile Application for Household Management	Almenhali, H., Almansoori, M., Alhamed, N., & Shuhaiber, A.	2023	Abstract— Households usually consist of stay-at-home spouses and family members who are connected to housekeepers to accomplish specific chores. However, UAE household members find it difficult to manage their households. Therefore, 'My Household' Zayed University students have developed an application to aid in the management of family chores, allowances, and the overall household routine. The methodology used to develop this app is the Software Development Life Cycle (SDLC). Thus, the application went through the planning phase, the requirements were collected, analysed, and modelled, and the interfaces were designed. My Household application is user-friendly and easy to customise. It provides the ability to create a chore and set its deadline, frequency, priority, and reminder time, and calculates the number of completed chores, facilitating the management of household chores. Additionally,, the app can simplify the process of

#	Name of article	Name of Author/s	Year	Abstract
				cleaning rooms by allowing stay-at-home spouses and family members to add their schedules so the housekeeper knows when the room is available for cleaning. The research concluded with implications and future directions. Additionally, My Household allows you to create an unlimited number of chores.
3	SnoopMe-Interactive task scheduler mobile application for students	Dalvi, A. and Siddavatam, I.,	2019	Time management plays a vital role in student's life. Scheduling different tasks and submitting assignments on time: a must-do for students. There are various apps available to assist with task scheduling and setting reminders; however, the effectiveness of these task schedulers and reminders often goes in vain if students are distracted by excessive smartphone use. Here, we discuss the SnoopMe app, which was developed with the main objective of providing alerts to the students for completing various tasks and monitoring their mobile usage. SnoopMe is a smart scheduler that helps students accomplish their scheduled tasks. On login, students can schedule his/her different tasks by entering the due date for task submission and the expected time of task completion. SnoopMe notifies the user at regular intervals about the time remaining to complete a task. SnoopMe also tracks all mobile activities, and based on the tracked information, SnoopMe recommends that students restrict their mobile usage. SnoopMe also gives a graphical representation of

#	Name of article	Name of Author/s	Year	Abstract
				time spent on different apps. The experimental research on the effectiveness of using a task-approach for accomplishing the scheduled task was conducted with a batch of 30 undergraduate students of Bachelor of Technology in Information Technology. The students were asked to install the SnoopMe APK on their phones for one week to schedule activities and submit work. Feedback was taken on the experience of usage, which was positive.
4	Companion: A Convenient Mobile Application for School Students Attendance, Registration, Notice, Bus Schedule, Complaint, and Parent Alert Services	Chowdhury, M., & Hadi, N.	2023	Abstract—By educating students and preparing them for the future job market, schools play a crucial role in their lives. Attendance taking, course registration, fee collection, class schedules, notices, exam results publication, parent alerts, midday meals, and complaint inspection services are among the fundamental school-related tasks. The existing work on school-related services is provided offline, which is costly in terms of both time and money. By considering issues such as attendance, registration, school fee payment, notification, class schedules, bus schedules, parent alerts, and complaint services, there is a lack of practical online-based assistance systems and applications for school children in Bangladesh. The research problem of how to assist schoolchildren by developing a mobile app with multiple features is missing in the literature. This paper presents a convenient mobile

#	Name of article	Name of Author/s	Year	Abstract
				app designed to assist schoolchildren in addressing these current challenges. The proposed online-based mobile application includes features such as attendance tracking and checking, course registration, school fee payment, daily parent alerts, bus schedules, exam and class schedule notifications, exam result checking, and compliant facilities. The application rating analysis revealed that more than 62% of reviewers are satisfied with the app's design, and over 65% of reviewers provided commendable comments regarding the planned app features. Index Terms— School Education, Mobile Application, Students Assistance, Attendance, Course Registration, Notice, Complaint, Result Checking, Bus Schedule, and Parent Alert.
5	Mobile app for personalised sleep-wake management for shift workers: A user testing trial	Murray, J. M., Magee, M., Giliberto, E. S., Booker, L. A., Tucker, A. J., Galaska, B., & Rajaratnam, S. M	2023	Abstract Objective: The development of personalised sleep–wake management tools is critical to improving sleep and functional outcomes for shift workers. The objective of the current research was to evaluate the performance, engagement, and usability of a mobile app (SleepSync) for personalised sleep–wake management in shift workers, which aids behavioural change and provides practical advice through personalised sleep scheduling recommendations and education. Methods: Shift workers (n=27; 20 from healthcare and seven from other industries) trialled the mobile app for two weeks to determine its performance,

#	Name of article	Name of Author/s	Year	Abstract
				engagement, and usability. Primary outcomes were self-reported total sleep time, ability to fall asleep, sleep quality and perception of overall recovery on days off. Secondary performance outcomes included sleep disturbances (insomnia and sleep hygiene symptoms, and sleep-related impairments) and mood (anxiety, stress, and depression) pre- and post-app use. Satisfaction with schedule management, integration into daily routine and influence on behaviour were used to determine engagement, while usability was assessed for functionality and ease of use of features. Results: Total sleep time (P=.04), ability to fall asleep (P < .001), quality of sleep (P=.001), insomnia (P=.02), sleep hygiene (P=.01), sleep-related impairments (P=.001), anxiety (P=.001), and stress (P=.006) were all improved, with non-significant improvements in recovery on days off (P=.19) and depression (P=.07). Most users positively scored all measures of engagement and usability. Conclusions: This pilot trial provides preliminary evidence of the positive impact of the SleepSync app on improving sleep and mood outcomes in shift workers, warranting confirmation in a larger, controlled trial.
6	Supporting Students' Mental Health and Academic Success	Baras, K., Soares, L., Lucas, C. V., Oliveira, F., Paulo, N. P., & Barros, R.	2018	Smartphones have become devices of choice for running studies on health and well-being, especially among young people. When entering college, students often face

#	Name of article	Name of Author/s	Year	Abstract
	Through Mobile App and IoT			many challenges, such as adaptation to new situations, establishing new interpersonal relationships, heavier workload, shorter deadlines, teamwork assignments and others. In this paper, the results of four studies examining students' wellbeing and mental health, as well as student's perception of challenges and obstacles they face during their academic journey, are presented. In addition, a mobile application that acts as a complement to a successful tutoring project implemented at the authors' University is proposed. The application allows students to keep their schedules and deadlines in one place while incorporating virtual tutor features. By using both the events from the student's calendar and his or her mood indicators, the application sends notifications accordingly. These notifications encompass motivational phrases, time management guidelines, as well as relaxation tips.
7	Time Scheduling and Finance Management: University Student Survival Kit	Yeo, J. L., JosephNg, P. S., Alezabi, K. A., Eaw, H. C., & Phan, K. Y.	2020	With numerous opportunities for new social interactions, events, and diverse perspectives, it can be a challenge for students to balance both time and money simultaneously. Although there is a variety of planning and budgeting applications available on the market to assist students in their education and personal life, students should download multiple applications that serve a specific function. This multifunctional application, StuLogger, aims to improve

#	Name of article	Name of Author/s	Year	Abstract
				student knowledge and promote self-reflection, which may encourage students ’perception of their time spent and allow them to track their financial activity efficiently. It allows users to set up income and expenses from various options, such as food, transportation, and budgeting management systems, among others. Besides that, the app comes with a calendar, notes, and reminders to allow users to organise their daily activities. The research employed a mixed-method approach in which both surveys and interviews were conducted online by students from private universities.
8	Application of Software Engineering in Student Time Management Using Prototype Model	Sianturi, E. G., Suryadi, S. C., Wilman, P., Anggreainy, M. S., & Karim, S.	2022	Time management is one of the most important aspects of people’s lives, especially in student activities. In the new pandemic era, students have already adapted their learning methods to an online system, which eliminates the need for activities outside their homes. This condition may give them much time, but they cannot manage their research schedule effectively. To manage this situation, we developed a scheduler application. This application employs the Prototyping Model as its development method, as it is a user-oriented application. We are using a prototyping model to consider the upcoming details required in the development. It involves continuous communication between the user and developer to achieve the user's goals and needs. The implementation of software engineering in

#	Name of article	Name of Author/s	Year	Abstract
				student time management, utilising a prototype model, will enhance students' skills to the next level of the digital era.
	Efficient Resource Management in IoTs Using Evolutionary and Swarm Intelligence Algorithms	Gupta, K. D., Cengiz, K., Awasthi, C., Ramini, S. A., Chatterjee, S., & Pavithra, M.	2023	The proliferation of the Internet of Things (IoT) has ushered in a transformative era of connected devices, emphasising the critical need for effective resource management. This research introduces an innovative approach that harnesses Evolutionary and Swarm Intelligence algorithms for IoT Task Scheduling, addressing resource optimisation challenges. The approach offers superior resource utilisation through advanced optimisation techniques, reducing energy consumption and enhancing efficiency. Furthermore, it significantly reduces task scheduling execution time, enabling prompt decision-making in dynamic IoT environments. This results in improved task allocation quality, meeting application-specific requirements, and prioritising critical tasks. Notably, the approach excels in minimising completion time, making it particularly advantageous for real-time IoT applications. This research contributes to the advancement of IoT resource management, offering an adaptive, efficient, and intelligent solution with broad applicability. In the evolving landscape of the Internet of Things (IoT), the findings presented here lay a solid foundation for future research and practical implementations, promoting

#	Name of article	Name of Author/s	Year	Abstract
				more responsive, sustainable, and intelligent IoT ecosystems.
	HeyMitra- A Daily Life Assistant web application with Todo List and Time Tracking ability	Sharma, E. H., Maheshwari, S., Singla, S., Chopra, S., & Khandelwal, G.	2024	In the rapidly evolving landscape of education, students encounter numerous challenges that hinder their academic progress and personal growth. Among these hurdles, effective time management and research planning stand out as prominent concerns. The modern academic environment is characterised by intricate demands and abundant distractions, often leaving students struggling to maintain consistency and focus on their studies. This research paper explores the development and implementation of HeyMitra, a comprehensive daily life assistant designed to alleviate students' time management and research planning concerns. HeyMitra employs a dynamic algorithm to generate personalised to-do lists, track study sessions, and provide detailed performance reports, empowering students to optimise their productivity and academic outcomes.