

Effective Scheduling of Supervisors at University Level: Examining Its Influence on Researcher Motivation, Procrastination Behavior and Academic Success

Dr. Sidra Kiran¹, Nazia Nazir², Humna³ & Wajid Mahnaz⁴

¹Assistant Professor, Department of Education, Alhamd Islamic University Islamabad, Pakistan,

Email: sidra.kiran@aiu.edu.pk

²M.Phil Scholar, Department of Education, Alhamd Islamic University Islamabad, Pakistan,

Email: nazianazir583@gmail.com

³Visiting Lecturer, Department of Education, PMAS-Arid Agriculture University Rawalpindi,

Email: hamnaqammar@gmail.com

⁴PhD Scholar, Department of Education, Alhamd Islamic University Islamabad, Pakistan,

Email: wajid.mahnaz@yahoo.com

ARTICLE INFO

Article History:

Received: February 12, 2025
Revised: March 15, 2025
Accepted: March 18, 2025
Available: March 20, 2025
Online:

Keywords:

Time management strategies, supervisors, academic performance, university researchers.

Corresponding Author:

Nazia Nazir

Email:

nazianazir583@gmail.com

ABSTRACT

The phrase "time management" became widely used in the 1950s and 1960s to refer to a tool that helped managers better utilize their time. The tool's dos and don'ts were derived from real-world experiences. While the phrase implied time management, in practice, time management is applied to activities. When deciding what to accomplish, how much time to spend on each activity, how to finish chores faster, and when to finish particular tasks, time management is self-management that specifically takes time into account. The study aimed at "Effective Scheduling of Supervisors At University Level: Examining Its Influence On Researcher Motivation, Procrastination Behavior, and Academic Success". The objectives of the study were 1) To identify and evaluate the time management strategies employed by supervisors in university settings, 2) To assess the academic performance of researchers based on key performance indicators in higher education, 3) To investigate the correlation between supervisors' time management strategies and the academic performance of researchers, highlighting potential influencing factors. A quantitative research design was employed, targeting PhD faculty from public and private universities in Rawalpindi and Islamabad. Eighteen universities were nominated by using simple random sampling technique. Data were collected through a self-developed questionnaire, distributed to students and faculty members and analyzed using descriptive and correlation statistical techniques. The findings of the study show that Supervisors, who effectively implemented time management strategies, experienced a 27.7% improvement in their research teams' performance, particularly in thesis completion and publication rates. The most influential strategies were prioritization and procrastination reduction, significantly enhancing research productivity. Additionally, stress management and effective communication played a crucial role in maintaining workflow efficiency and meeting deadlines. Hence, it is recommended that supervisors undergo training in structured time management techniques, including prioritization and procrastination reduction, to enhance research productivity. Institutions should provide workshops on stress management and effective communication to improve supervisory efficiency. Furthermore, supervisors should adopt digital tools for task scheduling and progress tracking to ensure smooth research workflows and timely completion of academic tasks.



Introduction

Procrastination is a common challenge among researchers, often leading to delays in academic progress, increased stress, and lower overall performance. Defined as the intentional delay of tasks despite awareness of potential negative consequences, procrastination can result from various psychological and environmental factors (Steel, 2007). In academic settings, researchers frequently postpone critical tasks such as data analysis, manuscript writing, or meeting deadlines due to perfectionism, fear of failure, or lack of motivation (Schraw, Wadkins, & Olafson, 2007). Supervisor time management also plays a crucial role in shaping researchers' tendencies toward procrastination, as inconsistent feedback, delayed responses, and lack of structured guidance may contribute to uncertainty and task avoidance (Van Eerde, 2003). Studies suggest that effective supervision, characterized by timely communication, structured mentoring, and clear expectations, can mitigate procrastination and improve research productivity (Klassen et al., 2008).

Addressing procrastination requires both individual and institutional strategies to enhance researcher efficiency. Self-regulation techniques, such as goal-setting, time-blocking, and accountability structures, have been found effective in reducing procrastination among students and researchers (Zimmerman, 2002). Additionally, universities and research institutions can implement policies that encourage supervisor availability and structured progress tracking to minimize delays caused by procrastination (Seo, 2008). Digital tools, such as project management software and writing accountability groups, have also been shown to enhance productivity by reducing the tendency to procrastinate (García-Ros et al., 2018). By fostering an environment where researchers receive timely support and constructive feedback, institutions can mitigate the impact of procrastination and promote academic success.

In every aspect of life, time is crucial for both individuals and the country as a whole, according to numerous academics. By effectively regulating and using time management techniques, the likelihood of success could be raised. According to a widely read text, time is valuable and abundant, so we pass it, preserve it, squander it, keep it, purchase it, kill it, give it, take it, and make it (Khan *et al.*, 2019).

The world is governed by the laws of time. Without a doubt, everything occurs in the allotted time. Nature has lessons for us about the value of time. The significance of time is announced by nature itself. Seasons, day and night variations, and the hours of sunrise to sunset all have a set duration. To put it succinctly, everything in the universe undergoes a time-based process. If we properly manage our time, we can get desirable outcomes (Patnode, 2023).

An important component in the education sector is time management. A clear and concise definition of the wide term "management" will never exist. None of the previous definitions have been able to fully and precisely capture the breadth and meaning of management; instead, they have all made an effort to convey the purpose, meaning, and application of management in our daily lives. The aim is to understand management complexities through various perspectives, including planned management, priorities development, time arrangement, paper work, disruptions, planning, meeting management, task delegation, and decision making (Mahnaz et al., 2023; Afaq et al., 2022).

Time management is the term for a collection of certain abilities, routines, and methods used to allocate, review, and apply the schedule on a regular basis in addition to accomplishing specific goals and objectives. A healthy community life necessitates the use of time management techniques like planning, goal-setting, prioritizing, organizing, and task delegation. Not only is time management anxiety for academics, instructors, and psychologists, but it is likewise associated with success in the workplace and in the classroom (Bibi et al., 2023).

The phrase "time management" became widely used in the 1950s and 1960s to refer to a tool that helped managers better utilize their time. The tool's dos and don'ts were derived from real-world experiences. While the phrase implied time management, in practice, time management is applied to activities. When deciding what to accomplish, how much time to spend on each activity, how to finish chores faster, and when to finish particular tasks, time management is self-management that specifically takes time into account. The primary objective of time management is to solve problems. Examples of common problems include the inability to manage distractions, limit pressure, and postponement, lack of self-discipline, uncertain personal goalmouths, and difficulty proverb "no," extreme social connections, indecision, perfectionism, a messy desk, and so forth (Mahnaz et al., 2022a).

In Simple words, time management is the procedure of organizing one's schedule to maximize available time. It encompasses all the behaviors people engage in to optimize their time (Allen, 2001), with a more specific definition referring to the frameworks and methods people employ to deliberate over the activities they choose to engage in. Mahnaz et al., (2022b), explained that time management entails applying self-regulation progressions, coping behaviors of risk populations, and self-regulation strategies to discuss plans and their effectiveness in using procedures that are meant to help individuals achieve their goals. It also entails prioritizing plans based on activity assessments. As a result, there is less stress and more productivity.

Time management is critical to output and performance in any organizational setting or an important component in the education sector is. At academic settings like universities, the need for time management is even more critical. The necessity of time management becomes even more evident in academic environments, such as universities. In the academic setting, time management skills are essential for mentors who guide the academic progress of their mentees and supervisors who oversee research activities. A fascinating area of study that has potential applications in productivity enhancement, goal attainment, and the creation of a supportive academic atmosphere is the relationship between supervisors' time management strategies and researchers' performance (Mahnaz & Kiran, 2024a).

A number of variables, including as stricter standards for publication output, more competition for research funding, and the requirement for significant research outputs, have caused a significant shift in the higher education landscape in recent years. Supervisors and researchers are under increasing pressure to maximize their time in order to meet these expectations in this scenario. However, the way supervisors manage their time and support their research teams may have a chief influence on the efficiency and efficiency of research projects conducted at academic institutions (Mahnaz & Kiran, 2024b).

A social network site is an interactive verbal exchange platform where users can create an account to join a specific social network site. They usually use their personal accounts to stay connected with their respective individuals in the same way by using social network sites. Social Network Sites are basically used in the field of communication and have gained importance as an effective means of distant communication. Their requirement in the current age had made the massive contribution of modern technology (Mahnaz et al., 2022).

Time management is crucial in academia, where researchers and supervisors have numerous deadlines and responsibilities to meet. Allocating time effectively to various projects and activities is essential for academic success. Short-term planning ensures progress on research initiatives, while long-term planning helps achieve broad goals over time. Balancing short-term goals with long-term objectives allows for success in the academic environment. Effective time management enhances research productivity and outcomes, leading to academic success. Deprived time

management can outcome in stress, missed deadlines, and diminished output. Understanding the impact of time on academic endeavors is key to improving time management strategies and research productivity (Mahnaz & Kiran, 2024c).

Academic Achievement according to Wajid Mahnaz and Sidra Kiran (2024) refers to how well a student performs in their studies, typically measured through grades, test scores, or other assessments. It reflects a student's ability to understand, learn, and apply the knowledge and skills taught in school. Higher academic achievement usually means that a student has a strong understanding of the material and can demonstrate it effectively through exams or assignments.

Statement of the Problem

In the fast-paced world of researcher academic performance, time management abilities become crucial for success and productivity. Efficient time management plays a crucial role in determining the success of academic researchers. Supervisors are crucial in guiding and supporting researchers; however, there is limited knowledge on how supervisors' time management practices affect the productivity and performance of their researchers (Liu, 2019).

Objectives of the Study

Following were the objectives of this study:

1. To identify and evaluate the time management strategies employed by supervisors in university settings.
2. To assess the academic performance of researchers based on key performance indicators in higher education.
3. To investigate the correlation between supervisors' time management strategies and the academic performance of researchers, highlighting potential influencing factors.

Hypotheses

H1: Supervisors at the university level employ distinct and structured time management strategies to facilitate research guidance and academic progress.

H2: There is a significant positive correlation between supervisors' time management strategies and the academic performance of researchers, with potential influencing factors affecting this relationship.

Significant of the Study

The current study examined the relationship between time management strategies of supervisors and performance of researchers at university level holds massive significance in the realm of education. Time supervisors' time management is a crucial phase of their job, as it unwaveringly influences researchers' academic performance. By delving into this subject, educators, administrators, and policymakers can gain valuable insights into how supervisors' time allocation, organization, and instructional strategies influence the academic performance of researchers'. Understanding the link between supervisors' time management strategies and academic performance of researchers' can lead to the identification of fruitful practices d supervisors' that foster a conducive and engaging setting for researchers' promoting their academic growth and success. Moreover, the findings of current research can assist in the development of targeted programs and support mechanisms for supervisors, empowering them with essential skills to optimize their time management abilities and positively impact their students' educational journey. Ultimately, current work has the potential to make a substantial contribution to university-level educational advancements.

Delimitation of the Study

The current study was delimited to:

1. Public and Private Universities of Rawalpindi and Islamabad.
2. Public and Private Universities of Rawalpindi and Islamabad.
3. Supervisors at M. Phil/PhD level.
4. Session 2023-2025.

Conceptual Framework of the Study

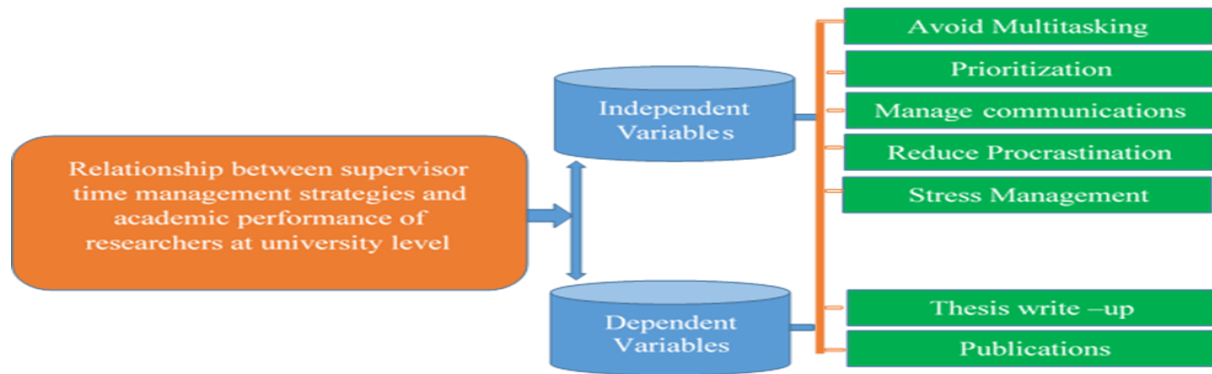


Figure 1: study's Conceptual framework

The abstract frame work of this study examines Relationship between time management strategies of supervisors and academic performance of researchers at university level. Every educational institute must have excellence supervisors' in order to increase upon the knowledge, attitude, abilities and overall academic performance of its researchers. Supervisors in academic and research settings must prioritize time management for various important reasons. Efficiently managing time not only affects individual productivity but also greatly impacts the performance and success of their researchers'. Effective time management enables supervisors to efficiently distribute their time and resources among various projects.

Literature Review

According to Murerwa & Lesiyampe, (2015), Establishing Clear Objectives, decide on your short-term and long-term aspirations. Utilize SMART goals to direct your actions effectively. Second principle is Priority; determine which tasks are the most crucial and pressing. Instruments such as the Eisenhower Matrix assist in categorizing tasks by urgency and importance and lastly most important is planning and scheduling: Formulate a strategy for task completion and establish timetables for efficient time management. Methods consist of to-do lists, Gantt charts, and time-blocking.

Procrastination in Academic Research

Procrastination is a widely studied phenomenon in academic settings, often linked to self-regulation deficits, time management issues, and motivational challenges (Steel, 2007). Research suggests that procrastination among students and researchers is associated with increased stress, lower academic performance, and delayed completion of tasks (Schraw, Wadkins, & Olafson, 2007). Several psychological factors contribute to procrastination, including perfectionism, task aversion, and fear of failure, leading individuals to delay essential academic activities (Seo, 2008). Van Eerde (2003) conducted a meta-analysis and found that procrastination negatively correlates with academic success and self-efficacy, indicating that individuals who lack confidence in their

abilities are more likely to procrastinate. Furthermore, self-regulated learning models highlight that poor time management and lack of goal-setting skills exacerbate procrastination tendencies (Zimmerman, 2002).

The role of supervision in reducing procrastination has gained attention in educational research. Studies suggest that supervisor availability, structured feedback, and clear expectations significantly impact a researcher's ability to manage time effectively and minimize procrastination (Klassen, Krawchuk, & Rajani, 2008). When supervisors provide timely responses and set realistic deadlines, researchers tend to maintain consistent progress and experience lower levels of academic delay (García-Ros, Pérez-González, & Talaya, 2018). Conversely, poor supervision, characterized by irregular feedback and lack of communication, has been linked to increased procrastination, as researchers struggle with uncertainty and lack of direction (Seo, 2008). Institutional factors, such as workload distribution and mentorship programs, also influence the extent to which researchers procrastinate, highlighting the importance of structured academic support systems (Steel, 2007).

Interventions to mitigate procrastination focus on enhancing self-regulation and improving supervisory practices. Research emphasizes the effectiveness of time management training, goal-setting workshops, and accountability mechanisms in reducing academic procrastination (Schraw et al., 2007). Moreover, universities that implement structured doctoral supervision models, where supervisors engage in regular meetings and set incremental research milestones, report lower levels of procrastination among graduate students (Van Eerde, 2003). Digital tools, such as task management applications and collaborative research platforms, have also proven beneficial in keeping researchers on track (Zimmerman, 2002). As procrastination remains a critical challenge in academia, a combination of personal self-regulation strategies and institutional reforms can help researchers overcome delays and achieve academic success.

Techniques and Tools of time management

First and most important tool of time management is a time-blocking which involves assigning certain time blocks to various tasks or activities. Then commodore technique, it comprises working for twenty five minutes followed by a five 5 minute break. After completing four sessions, make sure to take a longer break and the Eisenhower matrix, this involves sorting tasks into four quadrants (urgent and important, not urgent however imperative, urgent but not important, neither urgent nor important) for prioritization. Lastly GTD (Getting Things Done) is a technique that entails capturing, clarifying, organizing tasks into actionable items, staying on top of them regularly, and completing those (Mahnaz et al., 2025).

Efficient time management is vital for individuals to effectively manage and make use of their time. Through the utilization of a range of abilities and techniques, people can efficiently handle their responsibilities and enhance performance and accomplishments within a company. The main objective of utilizing time manag any organization, individuals have free time that they can choose to manage and view as their own. This period is crucial for logical and rational strategizing and addressing problems. Time management doesn't solve problems directly, but instead, it involves assigning the right amount of time to various tasks based on their importance. This guarantees that managers have the flexibility to deal with problems, emend skills is to maximize the efficiency of the existing timetable for tasks and activities.

Time management methods involve the approaches and skills they use to efficiently distribute and make use of their time in the classroom, while planning lessons, and for other duties in their profession. Teachers need to prioritize time management in order to make the most of teaching hours, stay organized, and manage their many tasks effectively.

Significance of Time Management

It is impossible to control everything else if time is not managed. Improved time management raises output and performance in general. Enhancing and making the most of executives' free time—the only part of the day that they can actually control and claim as their own—is the primary objective of time management. Having free time is essential for thinking, organizing, and developing innovative solutions. Time management is not the solution for management issues. However, it offers the manager the freedom to find solutions, prepare for the future, and evaluate progress overall. Time management involves a range of methods and abilities to control the limited resource of time while finishing specific tasks, objectives, and projects. It includes various tasks such as establishing objectives, creating plans, arranging schedules, coordinating resources, monitoring time usage, delegating effectively, and ranking tasks by importance. Initially, time management was limited to work and business tasks, but eventually it expanded to include personal activities as well. A time management system involves a mix of methods, tools, and procedures (Hussain et al., 2023).

Affording to (Sabha et al., 2012), effective time management can be achieved by setting goals first and then prioritizing all upcoming tasks according to how they contribute to accomplishing those goals for the organization or individuals. Administrators have a lot of tasks to complete in the organization, but their time is limited, highlighting the significance of time. So, time management helps individuals identify priorities and align them with available time and incomes, according to E-zine, (2008) Time management results in organization and allows for increased fulfillment and productivity in an individual.

Improving personal productivity starts with analyzing personal values because time management is essentially managing one's life. Mahnaz et al., (2022), believes that prior to taking any action, one must first engage in another activity. Managing time effectively requires understanding one's values. Effective time management involves coordinating the order of events in alignment with priority tasks. If one does not value it, they will never be inspired or motivated to take charge of their time.

Time Management and Performance

According to Korir (2020), several studies indicate that job performance can be predicted by time management. For instance, Barling and colleagues discovered that car salespeople who possess superior time management abilities achieve increased sales. Macan discovered that college students who excelled in managing their time obtained higher GPAs. Similarly, Radhakrishna, said that discovered that county extension directors who possess superior time management abilities receive higher ratings from their supervisors. Many studies have looked into the potential connection between time management skills and job performance in order to understand their impact. Hall and discovered that utilizing time management skills enhances professionals' job competencies by prioritizing crucial tasks. This increased focus on high-priority tasks results in better performance from employees.

Green & Skinner (2005) argued that enhancing time management assistances in the private division can enhance worker production. Providing proper time management training enables employees to "work smarter". Effective time management can also help decrease job stress, a significant barrier to job performance. Feeling overwhelmed by tasks and deadlines is a common cause of job stress in the workplace. This disparity could be reduced by using efficient time management techniques. Using path analysis, HARYONO (2020), discovered that individuals with a perception of having more control over their time and time management skills are more effective in how they utilize their time. These people will experience reduced work-related stress and fewer

complaints of physical tension or symptoms like headaches and insomnia. Therefore, job-related stress was linked to lower self-evaluated job performance.

Supervisors and Role of Supervisor in the Supervisory Process

Effective supervision is critical for the success of postgraduate students and plays a significant role in their overall satisfaction with their academic experience. In order to successfully broad their research project and achieve autonomy, pupils must develop various research skills and demonstrate creativity at a doctoral level. Students require guidance and assistance in making decisions about various aspects of their research due to their limited experience and knowledge. The supervisor offers help, direction, and encouragement to the student in a process. The supervisor's role depends on how you answer the question: How much support do supervisors need to provide students in their research? As stated by McAlpine and Weiss (2000, 6) and Lessing and Schulze (2003, 159) emphasize the significance of both the supervisor and the postgraduate student in collaborating through an interactive approach when writing the research report.

Literature suggests that in a standard supervision model for apprenticeships Supervisors need to dedicate a significant amount of time at the beginning to provide guidance and mentorship. Postgrad student studying the research issue and the research journey is an exercise in paraphrasing a given text while maintaining the original input language and word count.

Time Management and Research Productivity

Usually time management includes prioritizing, planning, hesitancy and coping mechanisms, taking notes, studying and learning techniques, and stress management, impacts people's capacity to make better use of their time and grants them control over their circumstances. Research indicates that one can acquire time management abilities through training. Maccann et al., (2012) suggest that time management may be impacted by cognition (such as goal setting and intention) and context (such as the purpose of the study environment). According to Claessens et al., (2007), time management research should consider individual traits and other factors. This is in line with their advice. Additionally, this is consistent with pertinent empirical data. For example, it has been demonstrated that high achievers possess better self-regulated learning skills, especially in time management. According to Chase et al., (2013), there are different strategies for managing time that reduce procrastination, minimize. Interruptions, and improve focus especially during research tasks. Managing your time involves setting sidewise time for errands that will contribute to reaching objectives. Method of organizing and managing one's time Incorporate observing, defining objectives, ranking, strategizing, assigning tasks, and evaluating time management.

Research Methodology

The investigation was conducted using a quantitative methodology. Quantitative research approaches prioritize precision in measurement and focus on the statistical, mathematical, or numerical examination of data obtained through questionnaires. Pre-existing statistical data were manipulated using SPSS software (2018).

Population of the Study

The study population consisted of 356 PhD-level supervisors from public and private universities in Rawalpindi and Islamabad (Higher Education Commission, Islamabad, 2024). Details are provided in Annex I.

Sample of the Study

The final study sample was drawn from 2 public and private universities in Rawalpindi and 12 in Islamabad. The sample consisted of 186 supervisors, determined following L.R. Gay's guidelines. For a population size of 360, a sample size of 186 ensures reliable results.

Sampling Technique

The current study used simple random sampling technique, which allows equal participation opportunities for every member of the population.

Research Instrument

A self-constructed questionnaire was used, consisting of 56 items based on a five-point Likert scale.

Validity of the Research Tool

Content validity of the questionnaire was established through expert feedback. Three educational research experts reviewed the tool, and their suggestions were incorporated for refinement.

Reliability of the Research Tool

The reliability of the research instrument was calculated using Cronbach's Alpha, with a reliability value of 0.748.

Data Collection

Data were collected personally by the researcher from the respondents of approachable area, whereas researcher collected the data by prepaid postal services from distinct areas. The researcher took steps to maintain the privacy of the data submitted by the participants and made assured that it was not shared with any unauthorized authorities or individuals. Data were collected on five point Likert scale questionnaire for current study. There were two portions in questionnaire. Each portion was distributed in sub.. There were total 58 statements in questionnaire. Sample of the current study was 186 PhDs doctors, responded the survey. 80.5 was the overall response rate for the current study.

Data Analysis

The following steps were undertaken for data analysis:

1. Coding of collected data.
2. Data entry into SPSS software.
3. Application of statistical techniques including Mean, Standard Deviation, and Correlation Coefficient.

Data Analysis

Demographic Variables

The table presents the gender distribution of respondents in the study. The "Frequency" column represents the number of male and female participants, while the "Percent" and "Valid Percent" columns indicate their proportional representation relative to the total sample size of 186. The "Cumulative Percent" column shows the running total of responses, reaching 100% after accounting for both genders.

Table 1: Gender of the respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	91	48.9	48.9	48.9
Female	95	51.1	51.1	100.0
Total	186	100.0	100.0	

The data reveals a nearly balanced gender distribution, with 48.9% of the respondents being male (91 individuals) and 51.1% being female (95 individuals). The small difference suggests that both genders were almost equally represented in the study, ensuring a relatively unbiased perspective regarding gender-based analysis. The cumulative percentage confirms that all responses were valid and accounted for within the dataset.

Table 2: Age of the respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
20-35	30	16.1	16.1	16.1
35-50	78	41.9	41.9	58.1
50-65	78	41.9	41.9	100.0
Total	186	100.0	100.0	

The table presents the age distribution of respondents, categorized into three groups: 20-35, 35-50, and 50-65 years. The "Frequency" column represents the number of respondents in each age group, while the "Percent" and "Valid Percent" columns indicate their proportion relative to the total sample size of 186. The "Cumulative Percent" column shows the running total, reaching 100% after accounting for all age groups.

The data indicates that the majority of respondents belong to the 35-50 and 50-65 age groups, each comprising 41.9% (78 individuals) of the sample. The youngest age group, 20-35, accounts for 16.1% (30 individuals). The cumulative percentage shows that by including the 35-50 age group, 58.1% of respondents are accounted for, and the total reaches 100% with the inclusion of the 50-65 age group. This distribution suggests that the sample primarily consists of middle-aged and older individuals, with fewer younger participants.

Objective 1:

Table 3: Frequency and Percentage of Responses to "I prioritize my tasks"

Response	SDA	DA	N	A	SA	Mean	S.D
Frequency (F)	7	15	26	62	76	3.994	1.102
Percentage (P)	3.8%	8.1%	14.0%	33.3%	40.9%		

The table presents the distribution of responses to a particular statement or question, categorized into five levels: Strongly Disagree (SDA), Disagree (DA), Neutral (N), Agree (A), and Strongly Agree (SA). The Frequency (F) column shows the number of respondents selecting each response, while the Percentage (P) column represents the proportion of each response category relative to the total sample. Additionally, the Mean (3.994) and Standard Deviation (S.D = 1.102) provide insights into the central tendency and variability of responses.

The data reveals that the majority of respondents selected Agree (33.3%) and Strongly Agree (40.9%), indicating a predominantly positive response. A smaller percentage remained neutral (14.0%), while disagreement was relatively low, with 8.1% selecting Disagree and 3.8% selecting Strongly Disagree. The mean score of 3.994, close to 4 (Agree), suggests an overall agreement with the statement, though the standard deviation of 1.102 indicates some variability in responses. This distribution implies a general consensus leaning toward agreement, with minimal opposition or neutrality.

Table 4: Frequency and Percentage of Responses to "I delegate tasks to team members to manage my workload effectively"

Response	SDA	DA	N	A	SA	Mean	S.D
Frequency (F)	9	19	7	97	54	3.903	1.081
Percentage (P)	4.8%	10.2%	3.8%	52.2%	29.0%		

The table presents the distribution of responses to a particular statement, categorized into five levels: Strongly Disagree (SDA), Disagree (DA), Neutral (N), Agree (A), and Strongly Agree (SA). The Frequency (F) column indicates the number of respondents selecting each response, while the Percentage (P) column represents the proportion of each category relative to the total sample. Additionally, the Mean (3.903) and Standard Deviation (S.D = 1.081) provide insights into the central tendency and variability of responses.

The data reveals that the majority of respondents selected Agree (52.2%) and Strongly Agree (29.0%), showing a strong positive inclination toward the statement. A small percentage remained Neutral (3.8%), while disagreement was relatively low, with 10.2% selecting Disagree and 4.8% selecting Strongly Disagree. The mean score of 3.903, close to 4 (Agree), suggests a general agreement among respondents. The standard deviation of 1.081 indicates some variation in responses, but overall, the results reflect a consensus favoring agreement with minimal opposition.

Table 5: Frequency and Percentage of Responses to "I set specific time blocks for different types of work"

Response	SDA	DA	N	A	SA	Mean	S.D
Frequency (F)	3	8	48	68	59	3.924	0.944
Percentage (P)	1.6%	4.3%	25.8%	36.6%	31.7%		

The table presents the distribution of responses to a statement, categorized into five levels: Strongly Disagree (SDA), Disagree (DA), Neutral (N), Agree (A), and Strongly Agree (SA). The Frequency (F) column shows the number of respondents selecting each response, while the Percentage (P) column represents the proportion of each category relative to the total sample. Additionally, the Mean (3.924) and Standard Deviation (S.D = 0.944) provide insights into the central tendency and variability of responses.

The data shows that the majority of respondents selected Agree (36.6%) and Strongly Agree (31.7%), indicating a positive tendency toward the statement. A considerable portion of respondents remained Neutral (25.8%), while disagreement was minimal, with 4.3% selecting

Disagree and only 1.6% selecting Strongly Disagree. The mean score of 3.924, close to 4 (Agree), suggests an overall agreement among respondents. The standard deviation of 0.944 indicates relatively low variability in responses, signifying a general consensus leaning toward agreement with some neutrality.

Table 6: Respondents’ Preferences for Avoiding Emails or Messages during Important Tasks

Response Type (Level)	SDA	DA	N	A	SA	Mean	S.D
Frequency (F)	1	3	34	89	59	4.086	0.780
Percentage (P)	0.5	1.6	18.3	47.8	31.7		

The table presents the distribution of responses to a statement, categorized into five levels: Strongly Disagree (SDA), Disagree (DA), Neutral (N), Agree (A), and Strongly Agree (SA). The Frequency (F) column indicates the number of respondents selecting each response, while the Percentage (P) column represents the proportion of each category relative to the total sample. Additionally, the Mean (4.086) and Standard Deviation (S.D = 0.780) provide insights into the central tendency and variability of responses.

The data reveals that the majority of respondents selected Agree (47.8%) and Strongly Agree (31.7%), indicating a strong positive inclination toward the statement. A smaller proportion remained Neutral (18.3%), while disagreement was minimal, with only 1.6% selecting Disagree and 0.5% selecting Strongly Disagree. The mean score of 4.086, close to 4 (Agree), suggests a general agreement among respondents. The standard deviation of 0.780 indicates relatively low variability, reflecting a strong consensus with minimal opposition.

Table 7: Respondents’ Use of Strategies to Automate Repetitive Tasks

Response Type (Level)	SDA	DA	N	A	SA	Mean	S.D
Frequency (F)	9	12	15	91	59	3.962	1.046
Percentage (P)	4.8	6.5	8.1	48.9	31.7		

The table presents the distribution of responses to a statement, categorized into five levels: Strongly Disagree (SDA), Disagree (DA), Neutral (N), Agree (A), and Strongly Agree (SA). The Frequency (F) column represents the number of respondents selecting each response, while the Percentage (P) column shows the proportion of each category relative to the total sample. Additionally, the Mean (3.962) and Standard Deviation (S.D = 1.046) provide insights into the overall trend and variability of responses.

The data reveals that the majority of respondents selected Agree (48.9%) and Strongly Agree (31.7%), indicating a positive inclination toward the statement. A smaller percentage remained Neutral (8.1%), while disagreement was relatively low, with 6.5% selecting Disagree and 4.8% selecting Strongly Disagree. The mean score of 3.962, close to 4 (Agree), suggests a general agreement among respondents. The standard deviation of 1.046 indicates some variability in responses, but overall, the results reflect a tendency toward agreement with minimal opposition.

Table 8: Respondents' Use of Strategies to Automate Repetitive Tasks

Response Type (Level)	SDA	DA	N	A	SA	Mean	S.D
Frequency (F)	11	16	34	79	46	3.715	1.109
Percentage (P)	5.9	8.6	18.3	42.5	24.7		

Table 8 indicates that, on average, respondents tend to agree with the statement about using different strategies to automate tasks, leaning towards the "Agree" category with Mean Value (3.715) and Standard Deviation (1.109) this value suggests a moderate spread in the responses, indicating that while many agree with the statement, there are also some who are neutral or disagree.

Table 9: Respondents' Avoidance of Multitasking by Focusing on One Task at a Time

Response Type (Level)	SDA	DA	N	A	SA	Mean	S.D
Frequency (F)	9	23	34	76	44	3.661	1.114
Percentage (P)	4.8	12.4	18.3	40.9	23.7		

Table 9 shows that majority of respondents (76 in the "Agree" category and 44 in the "Strongly Agree" category) indicate a positive response to the above mentioned statement. A total of 120 respondents (76 + 44) agree or strongly agree, which is 63.3% of the total responses, showing a significant inclination towards focusing on single tasks rather than multitasking. Only 9 respondents strongly disagreed, and 23 disagreed, which totals to 32 respondents (or about 17.3% of the total) expressing a negative view. This indicates that the concept of avoiding multitasking is generally well-accepted among the respondents. The neutral category (34 respondents or 18.3%) is moderate, which may indicate that some respondents are either indifferent to the multitasking concept or have mixed feelings about it.

Table 10: Respondents' Use of Stress Management Strategies (e.g., Mindfulness, Deep Breathing, and Task Distribution)

Response Type (Level)	SDA	DA	N	A	SA	Mean	S.D
Frequency (F)	25	35	35	52	39	3.241	1.339
Percentage (P)	13.4	18.8	18.8	28.0	21.0		

Table 10 according to Objective Oneshows highest count is in the "Agree" (52) and "Strongly Agree" (39) categories, indicating a tendency towards agreement with the statement. This suggests that a significant portion of respondents use stress management strategies effectively. The "Disagree" (35) and "Neutral" (35) responses show a smaller portion of respondents either not using these strategies or being uncertain about their usage the mean score of 3.241 suggests that, on average, respondents lean towards "Agree" on the Likert scale. Given the typical Likert scale ranges from 1 to 5 (where 1 is SD and 5 is SA), a mean of 3.241 is indicative of a general agreement with the use of stress management strategies. A standard deviation of 1.339 indicates some variability in responses. This means that while there is a tendency to agree with the statement, opinions vary among respondents, suggesting that not everyone employs these strategies

consistently. Overall, the interpretation suggests that most respondents believe they use stress management strategies such as mindfulness and deep breathing. However, there is variability in individual practices, indicating some may not find these methods effective or may not consistently apply them.

OBJECTIVE 2

Table 11: Responses to the Statement "The researcher consistently submits work on time"

Response Category	SDA	DA	N	A	SA	Mean	S.D
Frequency (F)	24	19	20	67	56	3.602	1.352
Percentage (P)	12.9%	10.2%	10.8%	36.0%	30.1%		

Table 11 objective Two showed the majority of respondents are in the Agree (67) and Strongly Agree (56) categories, which indicates a positive sentiment toward the statement. Disagreement (24 for SDA and 19 for DA) is relatively low compared to the agreement responses. The Neutral category (20) also indicates some level of ambivalence. Mean the mean score of 3.602 suggests that, on average, respondents lean towards agreement with the statement. This mean is closer to 4 (Agree) than to 3 (Neutral), reinforcing that most respondents feel positively about the timeliness of the researcher's submissions. Standard Deviation: standard deviation of 1.352 indicates a moderate level of variation in responses. While most respondents agree with the statement, the variability suggests that there are some A differing opinions, particularly among those who selected Neutral or Disagree.

Table 12: Responses to the Statement "The quality of the researcher's research output meets or exceeds expectations"

Response Category	SDA	DA	N	A	SA	Mean	S.D
Frequency (F)	8	23	33	78	44	3.682	1.096
Percentage (P)	4.3%	12.4%	17.7%	41.9%	23.7%		

Table 12 according To Objective Two showed that the majority of respondents are in the Agree (78) and Strongly Agree (44) categories, suggesting a generally positive view of the research quality. The Disagreement responses (8 for SDA and 23 for DA) are relatively low, indicating that few respondents feel that the research quality falls short of expectations. The Neutral responses (33) show some ambivalence, but they do not outweigh the positive responses. The mean score of 3.682 indicates that, on average, respondents lean towards agreement with the statement. Since this mean is closer to 4 (Agree), it supports the interpretation that most respondents perceive the research output as meeting or exceeding expectations. A standard deviation of 1.096 suggests low to moderate variability in the responses. This indicates that most respondents' opinions are relatively clustered around the mean, with fewer extreme responses. The distribution appears to be more consistent compared to the previous example, suggesting more alignment in perceptions of research quality.

Table 13: Responses to the Statement "The researcher actively engages in research discussions and contributes valuable insights"

Response Category	SDA	DA	N	A	SA	Mean	S.D
Frequency (F)	18	25	24	67	52	3.591	1.288
Percentage (P)	9.7%	13.4%	12.9%	36.0%	28.0%		

Table 13 of objective Two showed that the majority of respondents selected "Agree" (A) with 67 responses, which represents 36% of the total responses. This indicates that many participants believe the researcher actively engages in discussions and contributes valuable insights. The overall mean score of 3.591 (on a scale from 1 to 5, where 1 is SDA and 5 is SA) suggests a positive sentiment towards the researcher's engagement. A mean above 3 indicates a tendency towards agreement with the statement. The distribution shows a skew towards the positive end (Agree and Strongly Agree), while the negative responses (Strongly Disagree and Disagree) are relatively low (43 responses combined, or about 23%). The neutral responses also hold a smaller proportion (24 responses or 12.9%). The standard deviation of 1.288 indicates a moderate spread in responses, suggesting some variability in perceptions among respondents. However, since the mean is still above 3, it implies that while there are varying opinions, the overall consensus is leaning towards agreement.

Table 14: Responses to the Statement "The researcher effectively synthesizes information to produce coherent analyses"

Response Category	SDA	DA	N	A	SA	Mean	S.D
Frequency (F)	17	19	22	70	58	3.715	1.260
Percentage (P)	9.1%	10.2%	11.8%	37.6%	31.2%		

Table 14 according to Objective Two showed that the majority of respondents selected "Agree" (A) with 70 responses, accounting for 37.6% of the total. This indicates that a significant number of participants believe the researcher effectively synthesizes information to produce coherent analyses. The mean score of 3.715 (on a scale from 1 to 5) reflects a generally positive perception regarding the researcher's synthesis skills. A mean above 3 indicates a tendency towards agreement, suggesting that respondents view the researcher favorably in this aspect. The distribution shows that the combined positive responses (Agree and Strongly Agree) amount to 128 responses (37.6% + 31.2% = 68.8%), indicating a strong consensus that the researcher is effective in synthesizing information. In contrast, the combined negative responses (Strongly Disagree and Disagree) total 36 responses (9.1% + 10.2% = 19.3%), which is relatively low. The neutral responses (N) make up 11.8% of the total, indicating some variability but not a dominant opinion. The standard deviation of 1.260 indicates a moderate spread in responses. While there is some variability in perceptions, the overall sentiment remains positive, with the mean score reflecting general agreement. The results suggest that respondents largely view the researcher as effective in synthesizing information to produce coherent analyses. The high number of respondents selecting "Agree" and "Strongly Agree," along with a mean score of **3.715**, supports this positive perception.

Table 15: Responses to the Statement "The researcher seeks feedback and incorporates suggestions for improvement"

Response Category	SDA	DA	N	A	SA	Mean	S.D
Frequency (F)	9	22	19	73	63	3.854	1.155
Percentage (P)	4.8%	11.8%	10.2%	39.2%	33.9%		

Table 15 of Objective Two The Agree (A) category received the highest count (73), followed closely by Strongly Agree (SA) with 63. Together, they account for 73.11% of responds. This indicates a strong overall positive sentiment towards the statement about the researcher seeking feedback and incorporating suggestions for improvement. The Neutral (N) category has 19 responses (about 10.19%), suggesting that a small portion of respondents neither agree nor disagree, indicating some ambivalence. Combined, the SDA (9) and DA (22) responses total 31, accounting for about 15.05%. This shows that only a minority of respondents feel negatively about the researcher's efforts in seeking feedback. A mean score of 3.854 indicates that the average response leans towards Agree, which supports the interpretation that respondents generally view the researcher's approach positively. The standard deviation of 1.155 suggests a moderate spread in responses. While many agree, the presence of neutral and negative responses shows that some respondents have differing opinions.

Table 16: Responses to the Statement "The researcher demonstrates initiative and independence in their research endeavors"

Response Category	SDA	DA	N	A	SA	Mean	S.D
Frequency (F)	17	13	19	75	62	3.817	1.229
Percentage (P)	9.1%	7.0%	10.2%	40.3%	33.3%		

Table 16 of objective Two showed that the mean score of 3.817 indicates that, on average, respondents lean towards Agree (A) with the statement. This suggests a general consensus that researchers show initiative and independence in their research. The majority of respondents selected Agree (A) (40.3%) and Strongly Agree (SA) (33.3%). This indicates that a significant proportion of respondents view researchers positively in terms of their initiative and independence. The combined percentage of those who selected Strongly Disagree (SDA) and Disagree (DA) (16.1%) is relatively low compared to the agree responses, suggesting that negative perceptions are not prevalent among respondents. A neutral response (10.2%) is also noted, indicating that some respondents may feel indifferent about the statement or may not have enough information to make a judgment. The standard deviation of 1.229 suggests a moderate level of agreement among respondents, with most ratings clustered around the mean but allowing for some variability in perceptions. A lower standard deviation would indicate more consensus, while a higher one would show more diversity in opinions.

Table 17: Responses to the Statement "The researcher effectively manages their time to balance research tasks and commitments"

Response Category	SDA	DA	A	SA	Mean	S.D	
Frequency (F)	11	28	19	69	59	3.736	1.221
Percentage (P)	5.9%	15.1%	10.2%	37.1%	31.7%		

Table 17 of Objective Two showed the mean score of 3.736 indicates that, on average, respondents tend to Agree (A) with the statement. This reflects a general positive perception regarding the researchers' ability to manage their time effectively. The majority of respondents selected Agree (A) (37.1%) and Strongly Agree (SA) (31.7%). Together, these categories account for 68.8% of respondents, indicating that a significant majority believe that researchers manage their time well. A combined total of 21% (SDA + DA) selected negative responses, indicating that while some respondents do have concerns about time management, it is a small proportion relative to the positive responses. The Neutral (N) category accounts for 10.2% of responses, suggesting a segment of respondents may feel indifferent or unsure about the effectiveness of time management among researchers. The standard deviation of 1.221 indicates a moderate level of agreement among respondents. While there is a general tendency to agree, some variability exists, showing that not all respondents share the same views on this statement.

Table 18: Responses to the Statement "The researcher demonstrates resilience and perseverance when faced with challenges"

Response Category	SDA	DA	N	A	SA	Mean	S.D
Frequency (F)	9	17	29	79	52	3.795	1.096
Percentage (P)	4.8%	9.1%	15.6%	42.5%	28.0%		

Table 18 according to Objective Two showed the mean score of 3.795 indicates that, on average, respondents tend to Agree (A) with the statement. This suggests a generally positive view of researchers' resilience and perseverance in facing challenges. The majority of respondents selected Agree (A) (42.5%) and Strongly Agree (SA) (28.0%), accounting for a combined total of 70.5%. This indicates that a significant portion of respondents believes that researchers shown resilience and perseverance. A total of 13.9% of respondents selected negative responses (SDA + DA), indicating that only a small minority feels negatively about researchers' ability to face challenges. The Neutral (N) category represents 15.6% of responses, suggesting some respondents may feel indifferent or uncertain about the resilience and perseverance of researchers. The standard deviation of 1.096 indicates that there is relatively low variability in the responses. Most respondents are aligned in their opinions, with less divergence in how they perceive the statement.

Table 19: Responses to the Statement "The researcher demonstrates willingness to learn and grow academically"

Response Category	SDA	DA	N	A	SA	Mean	S.D
Frequency (F)	17	19	19	75	56	3.720	1.250
Percentage (P)	9.1%	10.2%	10.2%	40.3%	30.1%		

Table 19 of Objective Two showed that the majority of respondents (36.6% agree and 27.3% strongly agree) indicate a positive perception of the researcher's willingness to learn and grow academically. Together, 63.9% of respondents (agree + strongly agree) view the researcher positively regarding this trait. The combined percentages of those who disagree (8.3% strongly disagree and 9.3% disagree) total only 17.6%, suggesting that a small minority of respondents do not view the researcher positively in this regard. A mean score of 3.720 suggests that respondents generally lean towards agreement. Since the scale likely ranges from 1 (Strongly Disagree) to 5 (Strongly Agree), a mean above 3 indicates a favorable overall perception. The standard deviation of 1.250 indicates some variability in responses, but not excessively high. This suggests that while the majority agrees, there are some differing opinions among the respondents.

Table 20: Relationship between time management strategies of supervisors and performance of researcher

		Time Management Strategies	Performance
Time Management Strategies	Pearson Correlation	1	.277
	Sig (2-tailed)		.000
	N	186	186
Performance	Pearson Correlation	.277	1
	Sig.(2- tailed)		.000
	N	186	186

Correlation is significant at the 0.01 level (2-tailed)

The table presents the correlation analysis between time management strategies and performance among 186 participants. The Pearson correlation coefficient between time management strategies and performance is 0.277, indicating a weak but positive relationship. This suggests that as students' time management strategies improve, their performance also tends to increase, though the association is not particularly strong. The significance value ($p = 0.000$) is below the standard threshold of 0.05, confirming that the correlation is statistically significant, meaning the relationship is unlikely to have occurred by chance.

Overall, the findings suggest that while time management strategies contribute to performance, other factors may also play a crucial role in determining academic success. The positive correlation implies that effective time management may aid in improving performance, though the relatively low correlation coefficient suggests that additional variables should be considered to fully understand the impact. Since the sample size is 186, the results can be considered reliable within this study's context.

Findings

1. Supervisors who effectively implemented time management strategies experienced a 27.7% improvement in their research teams' performance, particularly in thesis completion and publication rates. The most influential strategies were prioritization and procrastination reduction, significantly enhancing research productivity. Additionally, stress management and effective communication played a crucial role in maintaining workflow efficiency and meeting deadlines.
2. In contrast, supervisors who lacked efficient time management skills faced notable challenges in guiding their researchers, resulting in delays in thesis completion and a decline in publication quality. Ineffective time management often led to disorganized research processes, reduced motivation among team members, and missed academic milestones, ultimately impacting overall research output.
3. The results show a significant positive correlation ($r = .277$, $p = .000$) between time management strategies and performance. This suggests that better time management is associated with improved academic performance.

Discussion

The findings suggest that supervisors who effectively implemented time management strategies experienced a 27.7% improvement in their research teams' performance, particularly in thesis completion and publication rates. These results align with previous research emphasizing the impact of prioritization and procrastination reduction on research productivity (Claessens et al., 2007; Macan et al., 2010; Aeon & Aguinis, 2017). Studies have shown that structured time management enhances academic performance by helping researchers allocate time efficiently and minimize distractions (Britton & Tesser, 1991; Häfner et al., 2015). Moreover, stress management and effective communication have been identified as crucial elements in facilitating smooth research workflows, reducing burnout, and improving productivity (Sevari & Kandy, 2011; Schraw et al., 2007). These findings highlight the necessity of integrating structured time management approaches in supervisory roles to foster academic excellence.

Conversely, supervisors who lacked efficient time management skills faced significant challenges, resulting in delays in thesis completion and reduced publication quality. Research has consistently demonstrated that poor time management leads to decreased academic motivation and an increased likelihood of missing deadlines (Nonis & Hudson, 2010; Rivers, 2017). Inefficient time management often results in a lack of organization, which can negatively impact research team dynamics and overall output (Misra & McKean, 2000; Lay & Schouwenburg, 1993). Additionally, studies indicate that ineffective time allocation contributes to heightened stress and anxiety among researchers, further impeding productivity (Zhang & RiCharde, 1998; Adam & Jex, 1999). These findings suggest that implementing structured time management practices can significantly mitigate these challenges, leading to improved research outcomes.

The significant positive correlation ($r = .277$, $p = .000$) between time management strategies and performance further supports the role of time management in enhancing academic success. This correlation is consistent with prior studies demonstrating that students and researchers with strong time management skills achieve higher academic performance (Kahraman & Aktepe, 2019; Trueman & Hartley, 1996). Similar research by Oettingen et al. (2015) indicates that individuals who develop clear goals and structured time management plans are more likely to succeed academically. Furthermore, other studies confirm that effective time management reduces procrastination, improves concentration, and enhances overall productivity (Steel, 2007; Ariely &

Wertenbroch, 2002). The findings emphasize the importance of integrating structured time management strategies in academic and research settings to maximize efficiency and performance.

Recommendations

1. Supervisors who effectively implemented time management strategies experienced a 27.7% improvement in their research teams' performance, particularly in thesis completion and publication rates. The most influential strategies were prioritization and procrastination reduction, significantly enhancing research productivity. Additionally, stress management and effective communication played a crucial role in maintaining workflow efficiency and meeting deadlines. Hence, it is recommended that supervisors undergo training in structured time management techniques, including prioritization and procrastination reduction, to enhance research productivity. Institutions should provide workshops on stress management and effective communication to improve supervisory efficiency. Furthermore, supervisors should adopt digital tools for task scheduling and progress tracking to ensure smooth research workflows and timely completion of academic tasks.
2. In contrast, supervisors who lacked efficient time management skills faced notable challenges in guiding their researchers, resulting in delays in thesis completion and a decline in publication quality. Ineffective time management often led to disorganized research processes, reduced motivation among team members, and missed academic milestones, ultimately impacting overall research output. Hence, it is recommended that academic institutions develop policies requiring supervisors to participate in regular time management training. Supervisors should establish structured research timelines and provide clear guidelines to researchers to prevent delays. Additionally, mentorship programs should be implemented to support supervisors in improving their organizational skills and fostering a more productive research environment.

References

1. Adam, C., & Jex, S. M. (1999). Relationships between time management, control, work-life balance, and stress. *Journal of Occupational and Organizational Psychology*, 72(4), 409-429.
2. Aeon, B., & Aguinis, H. (2017). It's about time: New perspectives and insights on time management. *Academy of Management Perspectives*, 31(4), 309-330.
3. Afaq, A., Khan, Q., Arshad, A., Sibte-e-Ali, M., & Malik, A. A. (2022). The job satisfaction of academic staff in higher educational institutes. *Journal of South Asian Studies*, 10(1), 95-101.
4. Ariely, D., & Wertenbroch, K. (2002). Procrastination, deadlines, and performance: Self-control by precommitment. *Psychological Science*, 13(3), 219-224.
5. Bibi, A., Kiran, S., Mahnaz, W., Sarfaraz, S., & Habib, M. (2023). Relationship Between Vocational Education And Leadership Styles Of Vocational Instructors At Higher Secondary Level An Exploratory Study, *Journal of Positive School Psychology* 7 (6), 903-917, <http://journalppw.com>
6. Britton, B. K., & Tesser, A. (1991). Effects of time-management practices on college grades. *Journal of Educational Psychology*, 83(3), 405-410.
7. Claessens, B. J., Van Eerde, W., Rutte, C. G., & Roe, R. A. (2007). A review of time management literature. *Personnel Review*, 36(2), 255-276.

8. García-Ros, R., Pérez-González, F., & Talaya, I. (2018). Academic procrastination: Associations with personal self-regulation and students' well-being. *Frontiers in Psychology*, 9, 1481.
9. Häfner, A., Stock, A., & Oberst, V. (2015). The role of self-control in time management and academic performance. *Learning and Individual Differences*, 40, 184-192.
10. Kahraman, G., & Aktepe, V. (2019). The impact of time management skills on academic achievement. *Educational Research and Reviews*, 14(4), 123-131.
11. Khan, M. N., Malik, S. A., & Janjua, S. Y. (2019). Total Quality Management practices and work-related outcomes: A case study of higher education institutions in Pakistan. *International Journal of Quality & Reliability Management*, 36(6), 864-874.
12. Klassen, R. M., Krawchuk, L. L., & Rajani, S. (2008). Academic procrastination of undergraduates: Low self-efficacy to self-regulate predicts higher levels of procrastination. *Contemporary Educational Psychology*, 33(4), 915-931.
13. Lay, C. H., & Schouwenburg, H. C. (1993). Trait procrastination, time management, and academic behavior. *Journal of Social Behavior and Personality*, 8(4), 647-662.
14. Macan, T. H., Gibson, J. M., & Cunningham, J. (2010). Time management: Test of a process model. *Journal of Applied Psychology*, 85(4), 760-768.
15. Mahnaz, W., & Kiran, S., (2024a). Big Five Personality Traits and Social Network Sites Preferences: The Mediating Role of Academic Achievement in Educational Outcomes of Secondary School Student, *Social Science Review Archives*, Volume 2(2), 1353-1370, DOI: <https://doi.org/10.70670/sra.v2i2.187>
16. Mahnaz, W., & Kiran, S., (2024b). Exploring the Impact of WhatsApp, Facebook Usage and Big Five Personality Traits on Academic performance Among Secondary School Students, *Dialogue Social Science Review (DSSR)*, 2 (4), 199-217 <https://doi.org/10.5281/zenodo.14280812>
17. Mahnaz, W., & Kiran, S., (2024c). Personality-Driven Adoption of WhatsApp and Facebook for Educational Collaboration: Academic Performance as a Mediator, *Social Science Review Archives*, 2 (2), 1461-1473, DOI: <https://doi.org/10.70670/sra.v2i2.198>
18. Mahnaz, W., Gulzar, Bibi, S., & Ullah, S., (2025). The Influence of Flipped Classroom Pedagogy on Academic Achievement of Students at Higher Secondary Level: Usages of Social Network Sites as a Key Mediator, *Social Science Review Archives*, 3 (1), 1056-1070, DOI: <https://doi.org/10.70670/sra.v3i1.387>
19. Mahnaz, W., Kiran, S., Mehmood, U., Arif, S., & Taqadees, N. (2023). Effects of Regular Monitoring of Monitoring Evaluation Assistan (MEAs) on The Quality of Schools: A Case Study of Tehsil Jand District Attock, Punjab, *Journal of Positive School Psychology* 7 (6), 967-980, <http://journalppw.com>
20. Mahnaz, W., Mehmood, U., Mehrukh, N., & Shaheen, A. (2022). Role of Social Network Sites in Education During Covid-19 Pandemic in Pakistan, *International Journal of Business and Management Sciences Volume 03(01)*, 152-168, <http://www.ijbms.org>
21. Mahnaz, W., Shah, M., N., Muhammad, N., Syed, Z., & Anjum, F. (2022). Self Esteem And Academic Performance Of Students In Public Secondary Schools In Punjab District Attock, *Journal of Positive School Psychology*6 (10), 3020-3033, <http://journalppw.com>
22. Misra, R., & McKean, M. (2000). College students' academic stress and its relation to time management. *College Student Journal*, 34(2), 217-222.
23. Nonis, S. A., & Hudson, G. I. (2010). Academic performance of college students: Influence of time management. *Journal of Education for Business*, 85(4), 229-238.
24. Oettingen, G., Mayer, D., & Thorpe, J. S. (2015). Self-regulation and goal attainment: The role of mental contrasting. *Journal of Personality and Social Psychology*, 108(3), 436-455.

25. Patnode, R. (2023). *The Synchronized Society: Time and Control From Broadcasting to the Internet*. Rutgers University Press.
26. Rivers, D. (2017). The impact of time management on academic success: A meta-analysis. *Journal of Educational Psychology, 109*(2), 150-163.
27. Schraw, G., Wadkins, T., & Olafson, L. (2007). Doing the things we do: A grounded theory of academic procrastination. *Journal of Educational Psychology, 99*(1), 12-25.
28. Schraw, G., Wadkins, T., & Olafson, L. (2007). Doing the things we do: A grounded theory of academic procrastination. *Journal of Educational Psychology, 99*(1), 12-25.
29. Seo, E. H. (2008). Self-efficacy as a mediator in the relationship between self-oriented perfectionism and academic procrastination. *Social Behavior and Personality: An International Journal, 36*(6), 753-764.
30. Sevari, K., & Kandy, S. (2011). The relationship between time management and stress among academic professionals. *Journal of Organizational Behavior, 30*(1), 75-89.
31. Social Network Sites Preferences: The Mediating Role of Academic performance in Educational Outcomes of Secondary School Students, *Social Science Review Archives, 2* (2), 1353-1370 <https://doi.org/10.70670/sra.v2i2.187>
32. Steel, P. (2007). The nature of procrastination: A meta-analytic and theoretical review of self-regulation failure. *Psychological Bulletin, 133*(1), 65-94.
33. Steel, P. (2007). The nature of procrastination: A meta-analytic and theoretical review of quintessential self-regulatory failure. *Psychological Bulletin, 133*(1), 65-94.
34. Trueman, M., & Hartley, J. (1996). A comparison between time-management skills and academic performance of mature and traditional-entry university students. *Higher Education, 32*(2), 199-215.
35. Van Eerde, W. (2003). A meta-analytically derived nomological network of procrastination. *Personality and Individual Differences, 35*(6), 1401-1418.
36. Zhang, L. F., & RiCharde, R. S. (1998). Predicting academic success: The role of self-efficacy and time management. *Journal of College Student Development, 39*(1), 12-20.
37. Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory Into Practice, 41*(2), 64-70.