



A QUANTITATIVE ANALYSIS OF STUDENT COMPETENCIES IN MANAGING DUAL ROLES IN HIGHER EDUCATION

ANALISIS KUANTITATIF KOMPETENSI MAHASISWA DALAM MENGELOLA PERAN GANDA DI PENDIDIKAN TINGGI

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ABSTRACT

The increasing phenomenon of student employment affects approximately 30% of Indonesian students, creating complex challenges in balancing academic and professional responsibilities. This quantitative descriptive study examined competency levels among working students managing dual roles in higher education. Using a structured 4-point Likert scale questionnaire, data were collected from 67 working students across UNRIKA, UT, and UNIMED, with supplementary interviews and observations for validation. Descriptive statistical analysis examined eight competency dimensions through frequency distributions and cross-tabulation methods. Results indicated predominance of young females (18-25 years) among working students. High competency levels were demonstrated across multiple areas: 87.5% completed assignments punctually, 76.5% managed stress effectively, and 87.5% exhibited strong communication abilities. Task management and adaptability showed positive outcomes, with 82.9% successfully adjusting academic schedules for work demands and 87.5% prioritizing tasks effectively. However, workload management presented challenges, as 65.7% reported feeling overwhelmed by responsibilities. The statistical findings highlight the need for institutional support mechanisms including flexible learning frameworks, accessible counseling services, and enhanced digital resources. This research contributes empirical evidence for developing targeted interventions to optimize working student competencies, providing measurable insights into dual role management patterns that can inform evidence-based educational policies and support program development in higher education institutions.

Keywords: Competence, Dual Roles, Higher Education, Time Management, Working Students

ABSTRAK

Meningkatnya fenomena pekerjaan mahasiswa mempengaruhi sekitar 30% mahasiswa Indonesia, menciptakan tantangan yang kompleks dalam menyeimbangkan tanggung jawab akademis dan profesional. Studi deskriptif kuantitatif ini meneliti tingkat kompetensi di antara mahasiswa pekerja yang mengelola peran ganda dalam pendidikan tinggi. Menggunakan kuesioner skala Likert 4 poin terstruktur, data dikumpulkan dari 67 mahasiswa pekerja di UNRIKA, UT, dan UNIMED, dengan wawancara tambahan dan observasi untuk validasi. Analisis statistik deskriptif meneliti delapan dimensi kompetensi melalui distribusi frekuensi dan metode tabulasi silang. Hasil menunjukkan dominasi perempuan muda (18-25 tahun) di antara mahasiswa pekerja. Tingkat kompetensi yang tinggi ditunjukkan di berbagai bidang: 87,5% menyelesaikan tugas tepat waktu, 76,5% mengelola stres secara efektif, dan 87,5% menunjukkan kemampuan komunikasi yang kuat. Manajemen tugas dan kemampuan beradaptasi menunjukkan hasil yang positif, dengan 82,9% berhasil menyesuaikan jadwal akademik untuk tuntutan pekerjaan dan 87,5% memprioritaskan tugas secara efektif. Namun,

manajemen beban kerja menghadirkan tantangan, karena 65,7% melaporkan merasa kewalahan oleh tanggung jawab. Temuan statistik menyoroti perlunya mekanisme dukungan kelembagaan termasuk kerangka kerja pembelajaran yang fleksibel, layanan konseling yang mudah diakses, dan sumber daya digital yang ditingkatkan. Penelitian ini memberikan bukti empiris untuk mengembangkan intervensi yang ditargetkan untuk mengoptimalkan kompetensi mahasiswa yang bekerja, memberikan wawasan yang terukur ke dalam pola manajemen peran ganda yang dapat menginformasikan kebijakan pendidikan berbasis bukti dan mendukung pengembangan program di lembaga pendidikan tinggi.

Kata kunci: Kompetensi, Peran Ganda, Pendidikan Tinggi, Manajemen Waktu, Mahasiswa Pekerja,

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INTRODUCTION

The phenomenon of students working while studying has been increasing in recent years. According to data from BPS-Statistics Indonesia (2021), around 30% of students in Indonesia have dual roles as workers and students. Not only in Indonesia but also globally, based on data from the Statistics et al., (2023), approximately 43% of full-time undergraduate students and 81% of part-time undergraduate students in the United States work while attending college. In Spain, Tumin et al., (2020) noted that the proportion of working students increased from 35% in 2015 to 48% in 2021. In Australia, Kahu et al., (2022) found that more than 50% of undergraduate students work at least 20 hours per week. This global trend is driven by various factors, including rising education costs, the need for work experience, and a paradigm shift in higher education towards greater flexibility (Knight, 2013). This condition creates a unique challenge in managing time, energy, and resources to achieve success in both fields.

The dual role as a student and worker requires a set of specific competencies to effectively perform both roles. Mardelina and Muhson (2017) state that working students face more complex challenges compared to regular students, especially in terms of time management, stress management, and adaptability. These findings are supported by Fahimah et al (2021), who identified that working students require better time management skills and effective coping strategies to handle academic and work pressures; Patel et al. (2022), who found that students working more than 20 hours per week need higher adaptability and self-regulation abilities to maintain academic performance; Hakim & Hasmira (2022) who noted that the success of working students heavily depends on their ability to manage the various demands of both roles; and Dalimunthe et al. (2024) who highlighted that self-management and resilience competencies are key factors in the success of students balancing dual roles.

On the other hand, the development of technology and changes in the learning system, especially since the COVID-19 pandemic, have presented new challenges for working students.

Kaur, (2025) shows that 67% of working students had difficulty adapting to online learning during the pandemic, especially in terms of time management and the use of learning technology. This is supported by Kindler et al (2023), who revealed that adapting to online and hybrid learning is not only an additional competency that must be mastered but also affects the stress levels and academic performance of working students. Sunardi (2021), adaptation to online learning and hybrid learning has become an additional competency that must be mastered by working students. Rafiq (2024) further identify that the success of working students in the digital era depends on their ability to integrate learning technology with their work routines. This situation further emphasizes the importance of identifying and analyzing the key competencies needed by working students to succeed in fulfilling their dual roles, as noted by (Jackson et al., 2020).

Several previous studies have examined certain aspects of working students with a limited focus. Tumin et al (2020) most of the research on working students tends to focus on single aspects,

such as Kurniati et al (2023) study which focuses on time management, and study which discusses mental health aspects (Aloysius & Salvia, 2021). (Nuvianto Al Azis & Yusanti, 2021) explored the impact of part-time work on academic performance, while (Aye & Biswa, 2025) examined aspects of the psychological well-being of working students. (Libago et al., 2024) revealed that this fragmented approach has yet to capture the complexity of the challenges faced by working students. However, (El-Koumy, 2013) still identifies a significant gap in research that comprehensively analyzes the various competencies needed by working students to manage their dual roles in higher education.

This article provides novelty through a comprehensive approach in analyzing the competencies of working students by integrating eight key competency aspects: time management, stress management, communication, adaptability, task management, self-learning, financial management, and workload management into a holistic research framework. This novelty is reinforced by the use of diverse actual data. The combination of a comprehensive approach and data diversity allows the research to produce a deeper and more representative understanding of the competencies needed by students in managing their dual roles, while also providing a strong empirical foundation for the development of support programs in higher education. This distinguishes this research from previous studies that tend to focus on specific aspects of competence or use data with a more limited scope.

MATERIAL AND METHODS

This research employed a quantitative approach with a descriptive design to analyze the competencies of working students in managing dual roles in higher education. According to (Creswell & Creswell, 2018), a quantitative approach enables researchers to measure and analyze relationships between variables systematically through numerical data. The descriptive design was chosen because this study aimed to describe and analyze the level of competencies among working students based on eight predetermined competency aspects (Fraenkel & Wallen, 2019).

The population of this study consisted of all active students who are currently working (full-time or part-time) at UNRIKA, UT, and UNIMED. The sample was selected using purposive sampling techniques with the following criteria: active students currently pursuing education at a university, working actively (full-time or part-time), having varied work experience (0-2 years to over 10 years), and coming from different cohorts (2018-2023). A total sample of 67 respondents was obtained.

The research instrument utilized a structured questionnaire with a 4-point Likert scale (Very Often, Often, Rarely, Never) consisting of 26 questions. The questionnaire was designed to measure eight competency aspects: time management (8 items), stress management (6 items), communication (4 items), adaptability (2 items), task management (3 items), self-directed learning (3 items), financial management (3 items), and workload management (3 items). The instrument has been validated through expert judgment and reliability testing showed a Cronbach's Alpha value ($\alpha = 0.723$), indicating good reliability.

Data collection was conducted throughout May 2024 through survey questionnaires as the primary instrument for collecting quantitative data, supplemented with structured interviews as supporting data to enrich the interpretation of statistical results, and observations to verify the consistency of responses with actual behavior. Data analysis employed descriptive statistics including frequency distribution and percentages for each questionnaire item, measures of central tendency (mean, median, mode), and measures of data dispersion (standard deviation, range). Score categorization was established as follows: Very High (76-100%), High (51-75%), Low (26-50%), and Very Low (0-25%). The analysis included dimensional analysis calculating average scores for each competency aspect, comparing competency levels across dimensions, and identifying competency strengths and weaknesses, as well as demographic analysis through cross-tabulation between demographic characteristics and competency levels.

To ensure data quality, this research employed instrument validity through construct validity testing via expert judgment, reliability through internal consistency testing with Cronbach's Alpha, and data triangulation combining questionnaire data with interviews and observations to verify findings. The quantitative data analysis was conducted using descriptive statistical methods to provide

comprehensive insights into the competency patterns of working students in managing their dual roles in higher education.

RESULT AND DISCUSSION

Based on the questionnaire that was distributed, the data obtained was as follows table 1.

Table 1. Data distributed

Dimention		Frekuensi
Length of work	0-2 years	26
	3-4 years	15
	5 - 6 years	12
	7 - 10 years	7
	10 years and above	7
Gender	Male	26
	Female	41
Age	18-21 years	22
	22-25 years	20
	26-29 years	11
	30-34 years	7
	35-38 years	2
	39 years	5

There were 67 respondents who answered questions from UNRIKA, UT, and UNIMED. The majority of working students are in the young age range (18-25 years), indicating a high interest in continuing their education while working at an early productive age. There is a correlation between age and years of work experience where students aged 18-25 generally have 0-4 years of work experience, students aged 30 and above tend to have more than 5 years of work experience, and the majority of the age group 39 and above have more than 10 years of work experience. Gender distribution based on work experience where women dominate in all categories of tenure, with the highest proportion of women in the 0-2 years work experience category, while men have a more even distribution across various experience categories. To see how the average achievement of students' abilities in dual roles at university can be seen in Figure 1

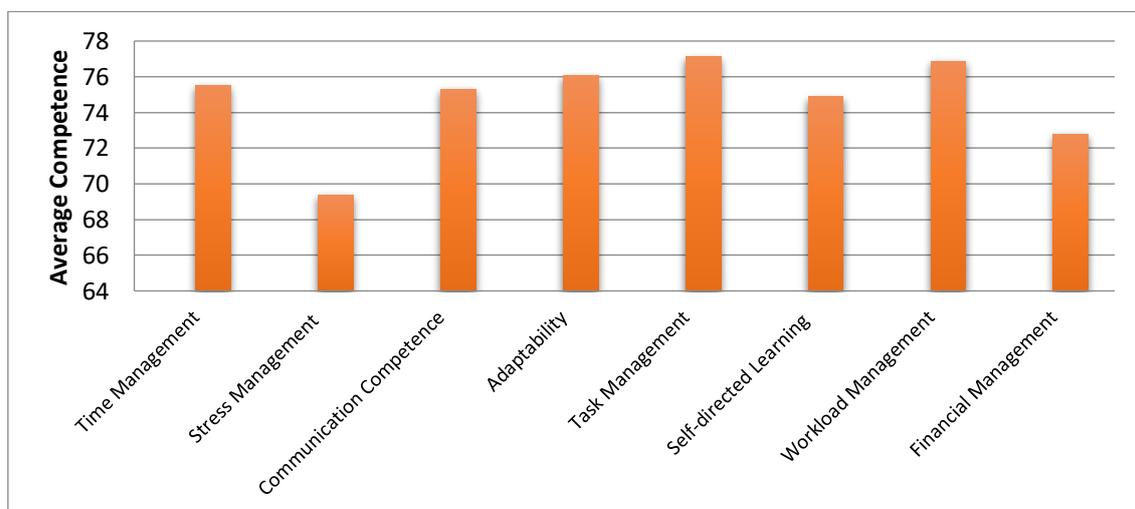


Figure 1 Student Competencies in Managing Dual Roles In Higher Education

Based on Figure 1, overall, the lowest level of student competency in managing dual roles in higher education is in stress management. Thus, the data shows that the work-study program attracts interest from various age groups and work experiences, with a dominance of young women who are just starting their careers. This indicates a positive trend in efforts to enhance educational qualifications while maintaining employment, especially among young workers. Next, the results related to time management competence are presented in Table 2.

Table 2. Percentage Management Competence

No	Question content	VO	O	R	N
		%			
1	Creating daily/weekly schedules	28.1	35.9	31.3	4.7
2	Following established routines	20.3	59.4	17.2	3.1
3.	Completing tasks before deadlines	32.8	54.7	10.9	1.6
4	Feeling overwhelmed with the amount of work	21.9	43.8	29.7	4.6
5	Setting aside time for rest and recreation	14.1	43.8	42.1	0
6	Attendance in classes and work shifts	43.8	51.6	4.6	0
7	Using notes and reminders	26.6	50	21.9	1.5
8	Managing priorities	29.7	57.8	10.9	1.6

Note: Very Often (VO), Often (O), Rarely(R), Never (N)

Based on the table 2, the information obtained is: a) The majority of students (64%) regularly create schedules to manage their time between work and study, indicating an awareness of the importance of time planning; b) Approximately 79.7% of students consistently follow the established routines, indicating a good level of discipline; c) Nearly 87.5% of students manage to complete tasks before the deadline, demonstrating good time management skills; d) About 65.7% of students feel overwhelmed by the amount of tasks, indicating challenges in balancing workload and study; e) Although the majority (57.9%) regularly set aside time for breaks, 42.1% still rarely do so, indicating a potential risk of burnout; The attendance rate is very high (95.4%) both in class and at work, showing a strong commitment to both responsibilities; f) Approximately 76.6% of students actively use organizational tools such as notes and reminders; g) The majority (87.5%) are able to manage various tasks based on priority effectively.

These findings align with the time management theory proposed by Misran et al. (2016), which emphasizes that students with good planning skills tend to be more successful in managing a dual workload. The high percentage of students completing assignments on time (87.5%) supports research by (Payusan et al., 2022), which suggests that establishing clear priorities between work and study is key to the success of working students. However, the finding that 65.7% of students felt overwhelmed by their workload confirms the challenges identified by (Mardelina & Muhson, 2017), who stated that working students face greater complexity in time management than regular students. This also aligns with research by (Fahimah et al., 2021), which emphasizes that working students require more effective coping strategies to manage academic and work pressures. A particular concern is the low percentage of students who regularly set aside time for rest (57.9%). This finding is concerning because, according to (Hollingsworth, 2018), consistent self-care routines are crucial for maintaining balance and preventing burnout in working students. Lack of rest can negatively impact academic performance and long-term work productivity. Data also shows that working students generally have good time management skills, but there is still room for improvement in work-study-life balance. The high attendance rate (95.4%) demonstrates exceptional commitment, but needs to be balanced with more effective workload management strategies to prevent excessive burnout.

Thus, the data shows that in general, working students have good time management skills, but there is still room for improvement in the aspect of work-study-life balance. The results related to stress management competence will be presented in Table 3.

Table 3 Percentage Management Competence

No	Question content	VO %	O	R	N
1	Response to stressful situations	23.4	53.1	20.3	3.3
2	Feeling overwhelmed by tasks	18.8	43.8	31.3	6.1
3.	Stress Management Strategies	15.6	35.9	32.8	15.7
4	Seeking social support	9.4	32.8	42.2	15.6
5	Focus and concentration while multitasking	20.3	64.1	14.1	1.5
6	Adjustment to changes	25	57.8	15.6	1.6

Note: Very Often (VO), Often (O), Rarely(R), Never (N)

Based on the table, the information obtained is as follows: a) The majority of students (76.5%) are able to maintain calm in stressful situations, indicating good emotional regulation skills; b) Approximately 62.6% of students feel burdened by the amount of assignments, indicating a relatively high level of stress in managing dual responsibilities; c) Only 51.5% of students regularly use relaxation techniques, showing that many have not yet utilized formal stress management strategies; d) Data shows that only 42.2% of students actively seek support when experiencing severe stress, indicating potential isolation in facing pressure; e) Most (84.4%) are able to maintain focus when handling multiple tasks simultaneously, demonstrating good adaptability; f) The majority (82.8%) show good flexibility in adjusting to changes in schedules and demands.

These findings paint a complex picture of working students' stress management abilities. The high percentage of students able to maintain composure in stressful situations (76.5%) aligns with research by Darmawati et al (2023), which states that students with work experience tend to develop greater resilience in the face of pressure. This emotional regulation ability is a crucial component of emotional intelligence, proposed by Kalpana et al (2022) as a key factor in academic resilience. However, a concerning finding is that 62.6% of students felt overwhelmed by the amount of work, confirming research by Dalimunthe et al. (2024) on the significant challenges students face in building a supportive learning environment. This also aligns with findings by Kindler et al (2023), which revealed that working students experience higher levels of stress, particularly in hybrid and online learning contexts. The most concerning aspects are the low use of formal stress management strategies (51.5%) and the low level of social support seeking (42.2%). These findings contradict the recommendations of McCue (1991), who emphasized the importance of stress management workshops, and Hollingsworth (2018) who advocated for consistent self-care routines. The low level of social support seeking confirms the findings of Kim et al. (2018) in their meta-analysis that social support is negatively correlated with student burnout, yet remains underutilized.

Conversely, the high levels of multitasking ability (84.4%) and adaptability to change (82.8%) demonstrate the strengths of working students. These results support research by Patel et al (2022), which found that students who work more than 20 hours per week develop higher levels of adaptability and self-regulation. These abilities also align with the concept of resilience proposed by Kalpana et al (2022), where adaptability is an important indicator of mental resilience. Although working students have good baseline resilience, there is still significant room for improvement in formal stress management strategies and support systems. Data suggests that educational institutions need to develop more comprehensive intervention programs, as suggested by Preston (2017), to increase access to counseling services and stress management workshops that are easily accessible to working students.

Thus, although working students have good basic resilience, there is still significant room for improvement in formal stress management strategies and support systems. Results related to communication competence will be presented in Table 4.

Table 4. Percentage Communication Competence

No	Question content	VO %	O	R	N
1	Delivery of information verbally and in writing	20.3	67.2	12.5	0
2	Activeness in group discussions/meetings	23.4	64.1	12.5	0
3.	Communication with lecturers/supervisors	17.2	53.1	26.6	3.1
4	Comfort in interacting with various backgrounds	25	60.9	12.5	1.6

Note: Very Often (VO), Often (O), Rarely(R), Never (N)

Based on the table, the information obtained is: a) The majority of students (87.5%) are able to convey information clearly and structured, demonstrating good basic communication skills; b) The high level of participation (87.5%) in group discussions indicates active involvement in collaborative communication; c) About 70.3% of students are able to communicate needs or problems to authorities well, although some are still hesitant in upward communication; d) The majority (85.9%) feel comfortable interacting with people from various backgrounds, showing good cross-cultural communication competence.

These findings reveal significant strengths in the communication competencies of working students. The high percentage of verbal and written information delivery (87.5%) aligns with research by Sumaiya et al (2022), which emphasizes that effective communication skills are a crucial foundation for professional life. This ability is particularly relevant in the context of working students who must communicate in two different environments simultaneously. Active participation in group discussions (87.5%) demonstrates strong collaborative communication skills, supporting research by Nikolopoulou and Miliopoulou (2024) on the importance of professional communication in a practical approach. This ability is a valuable asset for working students, as they often have to participate in both work teams and study groups simultaneously. The cross-cultural communication aspect also showed positive results (85.9%), confirming the findings of Jackson et al (2020) that students with work experience develop better interpersonal skills through exposure to diverse social contexts. This ability is crucial in the era of globalization, where working students frequently interact with colleagues and classmates from diverse backgrounds.

However, there are areas that require special attention in communication with lecturers/supervisors (70.3%). Although the majority of students possess good communication skills, approximately 29.7% still experience difficulties in vertical or hierarchical communication. This finding aligns with research by Locke (2008), which identified that communication in an organizational context requires specific skills distinct from horizontal or peer-to-peer communication. This gap can be explained by the perspective put forward by Scerri et al (2020) regarding the importance of mentoring programs between industry mentors and students. Student workers may require additional guidance to develop confidence in communicating with authority figures, both in academic and professional settings. Overall, student workers demonstrated good communication competencies, particularly in basic and cross-cultural communication. However, there is still room for improvement in formal and professional communication, particularly for students with less work experience. This finding supports Makinson (2002) recommendation regarding the importance of training in presentation skills and formal communication as part of student workers' competency development. Student workers' strengths in basic and cross-cultural communication can serve as a foundation for developing more advanced communication skills. Educational institutions can capitalize on this strength by providing more focused professional communication training, as suggested by Nnadozie (2015), to facilitate mentoring programs with industry professionals to increase confidence in hierarchical communication.

Thus, working students have good communication skills, especially in basic and cross-cultural communication. However, there is still room for improvement in formal and professional communication, especially for those with less work experience. The results related to the competence of adaptability will be displayed in Table 5.

Table 5. Percentage Competence of Adaptability

No	Question content	VO %	O	R	N
1	Ability to adjust class schedules to accommodate work changes	26.6	56.3	14.1	3
2	Experience completing tasks in ways different from the initial plan	23.4	54.7	20.3	1.6

Note: Very Often (VO), Often (O), Rarely(R), Never (N)

Based on the table, the information obtained is: a) The majority of students (82.9%) demonstrate good ability in adjusting their class schedules to work demands, indicating high flexibility; b) Approximately 78.1% of students show good adaptability in adjusting task completion methods, indicating flexibility in their work approach. Therefore, in general, working students have good adaptability skills, especially those with more work experience. These findings reveal one of the key strengths of working students in managing their dual roles. The high percentage of schedule adaptability (82.9%) aligns with research by Cachero–Paderog (2023), which emphasizes the importance of flexible learning in higher education institutions, particularly for students with complex scheduling challenges. This schedule adaptability indicates that working students have developed sophisticated time management skills, enabling them to navigate the often conflicting demands of work and academic schedules. The ability to adapt their task-solving methods (78.1%) confirms research by Patel et al. (2022), which found that students who work more than 20 hours per week develop greater adaptability and self-regulation to maintain academic performance. This flexibility in task-solving approaches is an important indicator of problem-solving skills and creative thinking, crucial components of adaptability, as proposed by Kalpana et al (2022). This high level of adaptability can be explained through the experiential learning theory proposed by Knight (2013), in which working students are constantly exposed to situations that require them to adapt to changing paradigms in higher education. Work experience provides them with the opportunity to face a variety of unexpected scenarios, thus naturally training their adaptability.

However, although the majority of students demonstrated good adaptability, approximately 17.1% still experienced difficulties adjusting their schedules and 21.9% struggled with changing their methods of completing assignments. This indicates that not all working students have the same level of adaptability, which can be influenced by factors such as work experience, type of employment, and institutional support. These findings support research by Richardson et al (2014) on the challenges of balancing full-time study with part-time work, which emphasized that adaptability does not develop automatically but requires appropriate support and strategies. Students with less work experience may take longer to develop this flexibility. In the context of changes in the learning system, particularly since the COVID-19 pandemic, adaptability has become increasingly important. Kaur (2025) indicated that 67% of working students experienced difficulties adapting to online learning, but the findings in this study indicate that the majority of students have developed adequate adaptability. This may indicate that working students have learned from the experience and developed more effective adaptation strategies.

However, there is still room for improvement, especially for new workers and in managing sudden changes. The results related to task management competence will be displayed in Table 6.

Table 6. Percentage Management Competence

No	Question content	VO %	O	R	N
1	Completion of tasks before the deadline	29.7	54.7	14.1	1.5
2	Ability to manage various tasks based on priority	28.1	59.4	12.5	0
3	Use of notes and task reminders	23.4	51.6	23.4	1.6

Note: Very Often (VO), Often (O), Rarely(R), Never (N)

Based on the table, the information obtained is: a) The majority of students (84.4%) successfully completed tasks on time, demonstrating good task management skills; b) Most (87.5%) were able to manage and prioritize tasks well, showing effective organizational skills; c) About 75% of students actively used organizational tools to manage tasks. These findings reveal excellent task management competency among working students. The high percentage of on-time assignment completion (84.4%) aligns with research by Szwarcfiter and Herer (2024), which emphasizes the importance of managing the balance between project value and net present value. In the context of working students, this can be interpreted as the ability to balance quality and timeliness in completing assignments. The very high task prioritization ability (87.5%) confirms the research of (Payusan et al., 2022) on the importance of prioritization and intention among working students in the face of the COVID-19 pandemic. This prioritization ability is a critical skill that enables working students to manage the often competing demands of academic and professional environments simultaneously.

The relatively high use of organizational tools (75%) supports the findings of Misran et al. (2016) on the importance of time management skills in higher education institutions, particularly in the context of engineering students facing complex workloads. The use of notes and reminders suggests that working students have adopted systematic task management strategies to address the complexity of their dual roles. This high level of task management competency can be explained through the perspective put forward by Nnadozie (2015) on the academic workload management model. Working students, forced to manage a higher workload, develop more efficient organizational systems than regular students. The pressures of these two different environments drive them to optimize their task management processes.

However, although the majority of students demonstrate good competency, 25% still do not optimally utilize organizational tools. This indicates that not all working students have access to or knowledge of effective task management tools. This finding aligns with research by Visser and Venner (2023), which emphasizes the importance of a practical approach in project-based learning, including the use of technology for task management. An interesting aspect is the high consistency in task prioritization (87.5%) compared to the use of organizational tools (75%). This suggests that prioritization ability is more of a mental/cognitive skill developed through experience, while the use of organizational tools is more related to technical knowledge and access to technology. In the context of increasingly digital learning, task management skills are becoming increasingly crucial. Research by Tabassum et al. (2024) on the impact of blended learning on student performance shows that students with good task management skills tend to be more successful in a blended learning environment, which is very relevant to the conditions of working students who have to manage formal and informal learning simultaneously.

Thus, working students generally have good task management competencies, with variations based on experience and age. Further development can be focused on strengthening task management systems and improving efficiency. The results related to self-directed learning competencies are presented in Table 7.

Table 7. percentage self-directed learning competencies

No	Question content	VO %	O	R	N
1	Use of online/library resources	25	45.3	26.6	3.1
2	Searching for additional resources/tutorials	29.7	50	18.7	1.6
3	Progress reflection and goal setting	25	57.8	15.6	1.6

Note: Very Often (VO), Often (O), Rarely(R), Never (N)

Based on the table, the information obtained is as follows: a) Approximately 70.3% of students actively use self-learning resources, showing good initiative in seeking knowledge; b) The majority (79.7%) actively seek additional learning resources, indicating high motivation in understanding development; c) Most (82.8%) regularly engage in reflection and goal setting, demonstrating awareness of self-development. These findings reveal strong self-directed learning competencies

among working-class students. The high use of self-directed learning resources (70.3%) aligns with research by Abeyrathne and Yatigammana (2021), which emphasizes that Self-Directed Learning (SDL) is an essential practice in higher education, especially for students facing time and schedule constraints, such as working-class students. The high rate of seeking additional resources (79.7%) confirms the research of El Faddoul et al (2011) on adaptive assessment in learning systems, where highly motivated students tend to seek out a variety of resources to deepen their understanding. This suggests that working-class students have developed a growth mindset that allows them to proactively seek out the information and skills necessary for success in both domains of their lives. The very high level of reflection and goal-setting (82.8%) is a significant finding, supporting Zimmerman's (2022) research on self-regulated learners. This reflective ability indicates that working-class students have developed metacognitive awareness that allows them to evaluate their progress and continuously adjust their learning strategies. This high level of self-directed learning competence can be explained through the framework proposed by Yadav (2024) regarding the impact of digital learning on education. Working students, due to the demands of flexibility in time and location, are forced to develop stronger self-directed learning skills. They must be able to study outside of traditional classroom settings and utilize a variety of available digital resources.

However, although the majority of students demonstrate good competence, approximately 29.7% still do not optimally utilize online/library resources. This may be related to digital literacy or access to technology, as identified by Burgos et al (2023) in their study of students' basic digital competence before and during the COVID-19 pandemic. The difference in percentages between seeking additional resources (79.7%) and using formal resources such as libraries (70.3%) indicates that working students tend to rely more on informal and easily accessible sources such as online tutorials, learning videos, or web articles. This aligns with research by Nurwidiyanto and Zhang (2020), which shows that modern students are more likely to use flexible and ubiquitous learning strategies.

Thus, the data shows that working students have good self-learning competencies, with variations based on experience and age. Development focus can be directed towards strengthening self-learning strategies and improving self-evaluation effectiveness. The results related to financial management competence are presented in Table 8.

Table 8. percentage financial management competence

No	Question content	VO %	O	R	N
1	Preparation of short/long-term financial plans	26.6	53.1	17.2	3.1
2	Evaluation of expenses and cost-saving efforts	29.7	51.6	17.2	1.5
3	Readiness to face unexpected costs	10.9	43.8	42.2	3.1

Note: Very Often (VO), Often (O), Rarely(R), Never (N)

Based on the table, the information obtained is: a) The majority (79.7%) of students are actively engaged in financial planning, indicating an awareness of the importance of financial management; b) Approximately 81.3% of students regularly evaluate and make savings efforts, indicating an awareness of cost management; c) Only 54.7% feel prepared to face sudden needs, highlighting an area that needs improvement in emergency financial management. These findings reveal diverse financial management profiles among working-class students. The high percentage of students in financial planning (79.7%) aligns with Geiger et al (2015) research on interpreting numerical literacy for the 21st century, which emphasized that financial planning skills are essential skills for navigating modern life. Working-class students, due to their source of income, tend to be more motivated to develop financial planning skills than regular students who still rely entirely on family support. The high level of ability to evaluate expenses and save (81.3%) confirms Britt et al's (2015) research on the importance of financial counseling in helping students manage financial stress. Working-class students, with experience managing their own income, develop a higher awareness of cash flow management and cost optimization. This suggests that practical experience in earning money fosters better financial discipline.

However, a concerning finding is the low level of preparedness for unexpected expenses (54.7%). This indicates a significant gap in emergency financial planning, which aligns with research by Makinson (2002) on the importance of building an adequate emergency fund. This gap may be due to the fact that working-class students, despite having income, often have limited financial resources because they must simultaneously finance their education and living expenses. The significant difference between routine planning skills (79.7% and 81.3%) and emergency preparedness (54.7%) can be explained through a behavioral finance perspective. According to concepts proposed in financial literacy literature, individuals tend to be better at managing predictable cash flow compared to contingency planning, which requires long-term thinking and the sacrifice of immediate gratification.

Thus, working students have a good awareness of financial management, but still need strengthening in several aspects, especially in handling sudden needs and long-term planning. Work experience and age have a positive correlation with better financial management skills. The results related to workload management competence are presented in Table 9.

Table 9. Percentage workload management competence

No	Question content	VO %	O	R	N
1	Perception of task load	21.9	43.8	29.7	4.6
2	Ability to complete college and work tasks simultaneously	23.4	54.7	20.3	1.6
3	Ability to maintain focus while multitasking	20.3	64.1	14.1	1.5

Note: Very Often (VO), Often (O), Rarely(R), Never (N)

Based on the table, the information obtained is: a) Approximately 65.7% of students feel overwhelmed by their workload, indicating challenges in workload management; b) The majority (78.1%) are able to complete college and work tasks simultaneously without sacrificing quality; c) Approximately 84.4% of students are able to maintain focus while working on multiple tasks at once. These findings reveal an interesting paradox in the workload management competencies of working students. On the one hand, they demonstrated excellent technical skills in multitasking (84.4%) and simultaneous task completion (78.1%), but on the other hand, they experienced high levels of overload (65.7%). This aligns with research by Libago et al. (2024), which revealed that being a working student has a complex association with academic performance and time management. The high multitasking ability (84.4%) confirms research presented in challenging learning contexts. Working students, forced to manage multiple responsibilities simultaneously, develop cognitive flexibility that allows them to switch between tasks more effectively than regular students. This ability is the result of neuroplasticity formed through repeated exposure to complex task demands. The ability to simultaneously complete coursework and work assignments (78.1%) indicates that the majority of students have developed effective coping strategies. These findings support research by Fahimah et al. (2021), which emphasized that working students require better time management skills and effective coping strategies to handle academic and work pressures. This high percentage indicates that most working students have successfully developed these strategies.

However, the high perception of an overwhelming workload (65.7%) indicates a significant psychological burden, despite students' technical ability to manage their tasks. This can be explained through the concept of cognitive load theory, which states that even if an individual is capable of completing a task, the required mental effort can cause ongoing psychological strain. This phenomenon aligns with research by Kim et al., (2018) in their meta-analysis on the relationship between social support and student burnout. The finding that students feel overwhelmed despite being capable suggests that competence does not automatically reduce psychological stress. This indicates the need for support systems that focus not only on skill development but also on emotional and psychological well-being. The significant difference between technical ability (78.1% and 84.4%) and perceived burden (65.7% feeling overwhelmed) indicates an emotional-behavioral disconnect. Students may have developed behavioral adaptations that enable them to function effectively, but have not yet developed cognitive reframing strategies that can reduce psychological burden.

CONCLUSION

The descriptive statistical analysis demonstrates that working students exhibit high competency levels across multiple dimensions. Specifically, 87.5% of respondents successfully complete tasks within deadlines, 76.5% effectively manage stressful situations, and 87.5% possess strong communication skills, indicating well-developed foundational competencies. In terms of adaptability and task management, the quantitative findings show that 82.9% of students successfully adjust their class schedules to accommodate work demands, while 87.5% demonstrate effective task prioritization abilities. Financial management competencies are also notably strong, with 79.7% of respondents actively engaging in financial planning activities, though only 54.7% feel adequately prepared for unexpected financial needs, suggesting an area requiring targeted intervention.

Despite these positive findings, the statistical analysis reveals significant challenges in workload management, with 65.7% of respondents reporting feelings of being overwhelmed by their academic and work responsibilities. This quantitative evidence highlights the critical need for systematic institutional support mechanisms. The research recommends the implementation of evidence-based interventions including flexible learning systems designed to accommodate working students' schedules, accessible counseling services with demonstrated effectiveness in stress management, mentoring programs that connect students with industry professionals, and enhanced digital learning resource platforms that support self-directed learning capabilities.

Furthermore, the quantitative findings suggest that students would benefit from structured competency development programs focused on advanced planning systems, digital task management tools, and evidence-based self-learning strategies. The implementation of these recommendations should follow a systematic, data-driven approach that considers the specific competency gaps identified through this quantitative analysis and addresses the evolving demands of both educational and professional environments. Future research should employ longitudinal quantitative designs to track competency development over time and assess the effectiveness of intervention programs through measurable outcomes and statistical evaluation methods.

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