Examination Readiness among Upper Secondary and Pre-University Students: An Assessment through the SPM Booster Workshop Program

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ABSTRACT

The Sijil Pelajaran Malaysia (SPM) and Sijil Tinggi Persekolahan Malaysia (STPM) examinations shape students' academic pathways and career choices and, more broadly, the country's future human capital. In the months leading up to these examinations, many students struggle with poor time management, ineffective revision techniques, examination stress and uncertainty about what to do after school. In response, Universiti Teknologi MARA (UiTM) Cawangan Melaka organised the SPM Booster Programme, a workshop built around an SPM readiness module covering personal development, study techniques and mental resilience. This study examines the examination readiness of program participants across four dimensions: knowledge, skills, attitude and aspiration. A survey design was used involving 50 Form Five and pre-university students aged 17 to 19 from five schools in Melaka.

Data were collected through a structured 20-item questionnaire on a five-point Likert scale and supplemented by short interviews with ten purposively selected participants. The overall mean score was 3.27 out of 5.00, which is at a moderate level. Knowledge was the only dimension at a high level (3.55), followed by aspiration (3.32), attitude (3.16) and skills (3.06), all at a moderate level. More than half of the knowledge responses agreed, compared with about a quarter of the skills, where almost half were neutral. Students generally understood why time management and planned revision matter but were less confident in putting this into practice, particularly in improving weak subjects and managing their study time. Self-discipline and confidence in facing the SPM were among the weakest items.

Interview responses were largely positive, with most participants describing better study techniques, stronger motivation and clearer goals. The findings point to a gap between knowing and doing. Future programs should give more room to hands-on practice and stress management, and a four-module series with structured mentoring is proposed.

Keywords: examination readiness, SPM, study skills, time management, university school engagement

INTRODUCTION

The Sijil Pelajaran Malaysia (SPM) and the Sijil Tinggi Persekolahan Malaysia (STPM) are critical benchmarks in the Malaysian education system. Results in these examinations largely determine students' academic direction and career options and, in turn, affect the quality of the nation's future human capital. Yet as these major examinations draw near, many students face a mix of psychological and practical problems.

These include weak time management, difficulty in identifying revision techniques that actually work, emotional stress and a lack of direction about life after school. Poorly organised mental and physical preparation is often the main reason upper secondary students find it hard to keep their stress under control.

In line with its aim of empowering communities and supporting quality education, Universiti Teknologi MARA (UiTM) Cawangan Melaka organised the SPM Booster Program. The program was designed to guide students through an SPM Readiness Module that focuses on personal development, study techniques and mental resilience (UiTM Cawangan Melaka, 2023). This paper reports the findings of a survey of program participants, which examined their level of readiness in four areas, namely knowledge, skills, attitude and aspiration.

RESEARCH OBJECTIVES

This survey was carried out to obtain an overall assessment of the students, guided by the following objectives:

- To assess students' knowledge of time management strategies and systematic examination revision techniques.
- To measure students' practical skills in planning a daily study timetable and managing examination stress.
- To identify students' attitudes, including their level of discipline and motivation, in dealing with academic challenges.
- To examine students' aspirations and the clarity of their future academic and career goals.

METHODOLOGY

This study adopted a survey design to capture an overall profile of students' readiness at a single point in time (Chua, 2014; Creswell & Creswell, 2018). The respondents were 50 Form Five and pre-university students aged 17 to 19 from selected schools in Melaka, namely SMK Munshi Abdullah, SMK Tun Tuah, SMK Tun Haji Abdul Malek, SMK Tun Tijah and Kolej Tingkatan Enam (KTE) Tun Fatimah.

Data were collected using a structured questionnaire rated on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) (Fraenkel et al., 2019). To support the reliability of measurement, the items were grouped into four domains, namely knowledge, skills, attitude and aspiration, with five items in each domain. In addition, short interviews were conducted with ten participants selected through purposive sampling to gain a closer view of their experience of the programme.

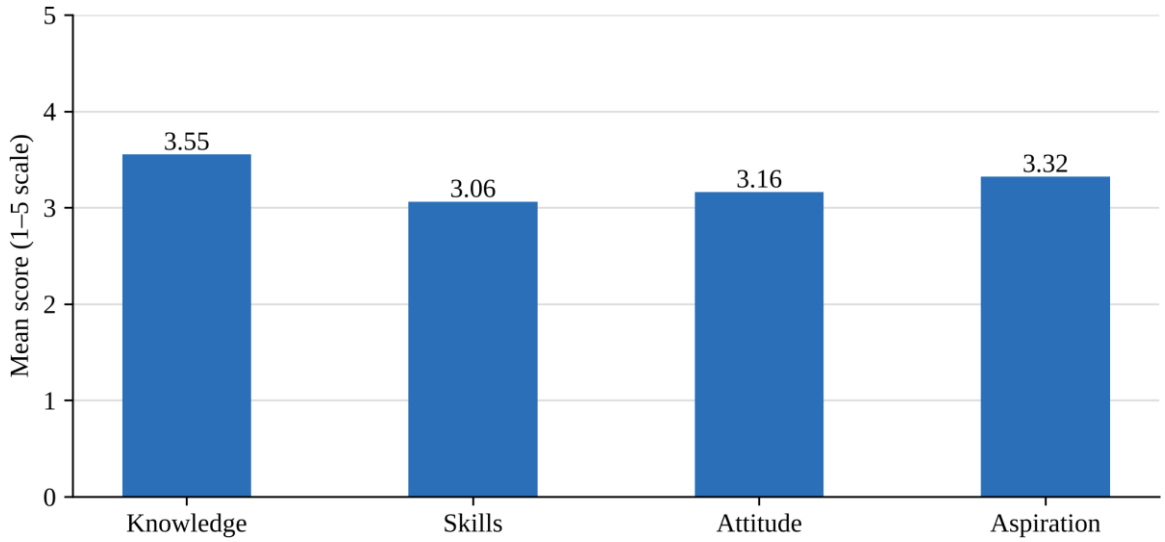
The questionnaire data were analysed descriptively using mean scores and the frequency and percentage of responses for each item. Mean scores were interpreted using the five-level scale described by Pimentel (2010), in which the range of the five-point scale is divided into equal intervals of 0.80: 1.00–1.80 (very low), 1.81–2.60 (low), 2.61–3.40 (moderate), 3.41–4.20 (high) and 4.21–5.00 (very high). For the distribution of responses, points 1 and 2 on the scale are treated as disagreement, point 3 as neutral, and points 4 and 5 as agreement. The interview responses were coded and grouped into themes according to the four dimensions.

RESULTS AND ANALYSIS

Questionnaire findings by dimension

The questionnaire results are summarised in Figure 1 and Table 1 according to the four dimensions of knowledge, skills, attitude and aspiration (KSAA).

Figure 1: Mean scores by readiness dimension



The overall mean score was 3.27 out of 5.00, which falls at a moderate level (2.61–3.40). This suggests that students in general already had a reasonable base of readiness, but with clear room for improvement, especially in the practical skills of managing time and applying study techniques. Knowledge was the only dimension to reach a high level (3.55), showing that students understood the concepts in theory. Skills recorded the lowest mean (3.06), although it remained at a moderate level, which points to a gap between knowing what to do and being able to do it. Individual scores ranged from 2.20 to 4.90, indicating considerable variation in readiness among students.

Table 1: Mean score, level and rank by dimension

Dimension	**Mean score**	**Level**	**Rank**
Knowledge	3.55	High	1
Aspiration	3.32	Moderate	2
Attitude	3.16	Moderate	3
Skills	3.06	Moderate	4
Overall	3.27	Moderate	–

Note: Level based on Pimentel (2010).

Table 1 shows the following pattern across the KSAA dimensions:

- Knowledge (3.55) was at a high level and ranked first. Most students understood, at least conceptually, why time management and revision strategies matter.
- Skills (3.06) was at a moderate level but ranked last. Many students were unsure of practical skills such as planning a study timetable and handling stress.
- Attitude (3.16) was at a moderate level. Confidence in facing the SPM and self-discipline still need to be strengthened.

- Aspiration (3.32) was at a moderate level and ranked second. Most students showed a reasonable level of determination, although their goals were not always clear.

Taken together, the four dimensions fall within a fairly narrow band of 3.06 to 3.55. Only knowledge reached the high band, while the other three dimensions and the overall mean sat in the moderate band, and none fell to a low level. In other words, the students were neither unprepared nor fully ready. The ranking in Table 1 therefore shows the relative position of the dimensions; a lower rank does not mean a low level of readiness. The order of the scores is also telling. Students rated themselves higher on what they know and what they hope to achieve than on what they actually do from day to day. This pattern is examined more closely at item level below.

Item-level analysis

Tables 2 to 5 present the mean score, its level and the distribution of responses, that is, the number of students choosing each point on the scale from 1 (strongly disagree) to 5 (strongly agree), for all 20 items arranged by dimension.

Table 2: Knowledge items

Item	Statement	Mean	Level	1	2	3	4	5
1.1	Understand the importance of time management	3.92	High	0	3	14	17	16
1.2	Know effective revision techniques	3.34	Moderate	0	9	18	20	3
1.3	Know activities that help me focus when studying	3.24	Moderate	0	13	16	17	4
1.4	Know which subjects to prioritise during revision	3.78	High	1	8	8	17	16
1.5	Understand strategies to improve my performance	3.46	High	1	8	15	19	7

As shown in Table 2, knowledge was the strongest dimension, with 54.4% of all responses in agreement and only 17.2% in disagreement. Item 1.1, on the importance of time management, recorded the highest mean in the whole questionnaire (3.92, high), with 33 of the 50 students (66%) agreeing or strongly agreeing. Item 1.4, on knowing which subjects to prioritise, was close behind (3.78; 66% agreement).

These results suggest that most students already accept the value of planning and are aware of where their weaknesses lie. The picture is less positive for items 1.2 and 1.3. Fewer than half of the students said they knew effective revision techniques (46%) or activities that help them focus (42%), and 13 students disagreed with item 1.3. Even so, all five knowledge items were at a moderate or high level. Knowing that revision matters, however, is not the same as knowing how to revise well.

Table 3: Skills items

Item	Statement	Mean	Level	1	2	3	4	5
2.1	Able to plan a revision timetable	3.06	Moderate	1	15	19	10	5
2.2	Able to manage my study time	3.02	Moderate	0	14	24	9	3
2.3	Skilled in using effective study techniques	3.12	Moderate	1	10	23	14	2
2.4	Able to improve my weak subjects	2.88	Moderate	5	10	24	8	3
2.5	Able to manage study-related stress	3.20	Moderate	2	6	27	10	5

Table 3 shows that skills ranked last among the four dimensions, although all five items remained at a moderate level (2.88–3.20). Only 27.6% of responses were in agreement, while 46.8% were neutral, the highest neutral share of any dimension. Item 2.4, on improving weak subjects, recorded the lowest mean in this dimension (2.88), with 15 students (30%) disagreeing and only 11 (22%) agreeing. Item 2.2, on managing study time, was only slightly higher (3.02), with just 24% agreement. Item 2.5, on handling study-related stress, had a slightly higher mean (3.20), but more than half of the students (54%) chose the neutral option. The large neutral share suggests that many students were unsure of their own ability rather than clearly lacking it. Set against Table 2, the contrast is clear: 66% of students recognised the importance of time management, but only 24% felt able to manage their own study time.

Table 4: Attitude items

Item	Statement	Mean	Level	1	2	3	4	5
3.1	Confident in facing the SPM	2.94	Moderate	3	15	18	10	4
3.2	Highly motivated to excel	3.06	Moderate	0	14	23	9	4
3.3	Disciplined in managing my time	2.78	Moderate	1	18	23	7	1
3.4	Make an effort to spend more time on useful activities	3.50	High	1	6	13	27	3
3.5	Committed to improving my performance	3.54	High	1	4	22	13	10

The attitude items in Table 4 show a split pattern. Items 3.4 (3.50) and 3.5 (3.54) were at a high level, with 60% of students saying they try to spend more time on useful activities and 46% saying they are committed to improving their performance. In contrast, item 3.3, on time discipline, recorded the lowest mean of all 20 items (2.78), placing it at the lower end of the moderate band. Only 8 students (16%) agreed with this statement, while 19 (38%) disagreed. Confidence in facing the SPM (item 3.1, 2.94) was also at the lower end of the moderate band, with 36% disagreeing, and motivation to excel (item 3.2, 3.06) drew mostly neutral

responses (46%). These results suggest that students are willing to improve, but that this willingness has not yet translated into consistent daily discipline or confidence about the examination.

Table 5: Aspiration items

Item	Statement	Mean	Level	1	2	3	4	5
4.1	Have clear goals for my SPM results	2.96	Moderate	1	17	17	13	2
4.2	Aspire to continue my studies	3.48	High	2	5	18	17	8
4.3	Clear about my educational or career direction	3.04	Moderate	3	13	17	13	4
4.4	Determined to achieve academic success	3.68	High	0	3	21	15	11
4.5	Believe that effort will lead me to my ambitions	3.46	High	2	7	16	16	9

Table 5 shows that aspiration was the second-strongest dimension, with 43.2% of responses in agreement. Students were most positive about their determination to succeed academically (item 4.4, 3.68, high), with 52% agreeing and only 3 students (6%) disagreeing. Items 4.2 (3.48) and 4.5 (3.46) were also at a high level: half of the students aspired to continue their studies and believed that effort would lead them to their ambitions (item 4.5). However, aspiration did not always come with a clear plan. Item 4.1, on having clear goals for SPM results, recorded a comparatively low, though still moderate, mean of 2.96, with 18 students (36%) disagreeing, and item 4.3, on clarity of educational or career direction, scored 3.04. In short, students had the will to succeed, but many had yet to turn this into specific targets.

Interview findings

Short interviews with ten purposively selected students also showed that most participants responded positively, although the extent of change differed from one participant to another. Table 6 shows how many participants raised each dimension.

Table 6: Frequency of interview responses by dimension

Dimension	Participants reporting the sub-themes	Frequency
Knowledge	8 of 10	80%
Skills	7 of 10	70%
Attitude	9 of 10	90%
Aspiration	8 of 10	80%

Table 6 shows that each dimension was raised by at least seven of the ten participants interviewed. Attitude was mentioned most often (90%), followed by knowledge and aspiration (80% each), while skills was mentioned least often (70%). The lower frequency for skills is in line with the questionnaire, where skills also

ranked last, and suggests that practical skills take longer to develop than awareness or motivation. It is worth noting that attitude, which scored only moderately in the questionnaire, was the dimension participants spoke about most. One possible reason is that changes in motivation are easier for students to notice and put into words than changes in study technique.

The main points raised by participants were as follows:

- Knowledge: Most participants said they now had a better understanding of how to study and manage their time.
- Skills: Many participants had started using the study timetables and revision techniques introduced in the programme.
- Attitude: Participants were more enthusiastic and more aware of the need to pay attention to their studies.
- Aspiration: Some participants began to talk about their target SPM results and their study options after leaving school.

Selected excerpts from the interview transcripts are presented in Table 7. The interviews were conducted in Malay, and the excerpts have been translated into English.

Table 7: Selected interview excerpts and initial codes

Participant	Dimension	Excerpt	Initial code
P1	Knowledge	"Before this I didn't really know how to organise my study time. After the programme, I tried making my own timetable."	Time management
P2	Knowledge	"Only now do I understand that studying isn't just about reading. You need a method and a target."	Study techniques
P3	Knowledge	"I have a better idea of what I need to focus on to prepare for the SPM."	Examination focus
P4	Skills	"Now I try to plan my revision timetable around the subjects I'm weak in."	Study planning
P5	Skills	"I use the technique the facilitator taught us when I revise. It makes things a bit easier to remember."	Learning techniques
P6	Skills	"I used to keep putting off my schoolwork. Now I try to get it done on time."	Task management
P7	Attitude	"I feel more motivated to study, because before this I used to give up easily."	Motivation
P8	Attitude	"The programme made me realise that if I want good results, I have to start working hard now."	Self-awareness
P9	Aspiration	"Before, I wasn't sure what I wanted to study. Now I've started thinking about courses I'm interested in."	Educational direction
P10	Aspiration	"I want to try to get better results so that I can continue my studies after the SPM."	Academic goals

The excerpts in Table 7 give a closer view of how participants described their experience. Under knowledge, participants spoke of realising that studying needs a method and a target (P2) and of knowing what to focus

on for the SPM (P3). Under skills, the responses were about concrete actions, such as planning revision around weak subjects (P4), using a technique taught by a facilitator (P5) and completing schoolwork on time (P6). The attitude excerpts (P7 and P8) point to stronger motivation and greater self-awareness, while the aspiration excerpts (P9 and P10) show students beginning to think about courses and further study. Many of these statements are phrased as attempts ("I try to…"), which suggests that participants had started to apply what they learned but had not yet made it a settled habit.

Thematic analysis

Several theme categories emerged from these responses, as summarised in Table 8.

Table 8: Emerging themes by KSAA dimension

Dimension	Emerging theme	Participants	Interpretation
Knowledge	Understanding of study techniques and time management	8/10	Most participants have a better grasp of how to study in a planned way.
Skills	Time management, study timetables and revision techniques	7/10	Participants have begun to apply the skills introduced in the programme.
Attitude	Motivation, discipline and awareness of learning	9/10	Change in attitude was among the most noticeable findings.
Aspiration	SPM goals and educational direction	8/10	Participants now have a clearer picture of their future.

The interview findings indicate that participants viewed the programme positively in terms of knowledge, skills, attitude and aspiration. On knowledge, eight of the ten participants said they had a better understanding of study techniques and time management.

On skills, seven participants said they had begun to apply techniques such as preparing a revision timetable and managing their assignments. Attitude drew the strongest response, with nine participants reporting greater motivation and awareness of the importance of learning. Meanwhile, eight participants said they now had clearer academic goals and a better sense of their educational direction.

DISCUSSION

The analysis reveals a clear gap between students' aspirations and their practical study skills. Most students on the verge of a public examination have a strong desire and determination to succeed, yet many also face psychological pressure, time constraints and emotional strain that call for focused external guidance (Chua, 2014). Half of the respondents (50%) aspired to continue their studies, and 52% were determined to achieve academic success.

Yet only 27.6% of responses in the skills dimension were in agreement, and nearly half (46.8%) were neutral, particularly on managing study time, improving weak subjects and handling stress. This suggests that students

are carrying a considerable emotional and cognitive load. They recognise what is at stake for their future, but lack practical guidance on how to revise in a systematic and effective way.

In practical terms, these findings show that stress management and mental readiness play a decisive role for candidates sitting public examinations. Students who cannot manage pressure or organise their study strategies risk reaching a state of cognitive fatigue before they even enter the examination hall. The SPM Booster Program organised by UiTM Cawangan Melaka is therefore timely, as it serves as a platform for closing the gap between students' good intentions and their ability to act on them (UiTM Cawangan Melaka, 2023). A readiness module built on mental resilience and hands-on skills can help shift students' negative perceptions of examination difficulty towards more purposeful preparation.

The interview data support this reading. Participants spoke readily about feeling more motivated and more aware of their goals, but their descriptions of new study habits were often tentative. This is consistent with the questionnaire, in which skills ranked last even though knowledge and aspiration were relatively strong.

The finding on self-discipline points in the same direction. Item 3.3 recorded the lowest mean in the questionnaire (2.78, moderate), with only 16% of students describing themselves as disciplined in managing their time and 46% choosing the neutral option. This suggests that the learning environment, together with guidance from higher education institutions working alongside schools, is an important catalyst for success.

Discipline in self-directed learning needs consistent external reinforcement through sustained training modules that are planned and evaluated systematically (Fraenkel et al., 2019). The module delivered under this programme therefore offers more than short-term exposure. It can serve as a longer-term stepping stone towards a culture of lifelong learning and mature self-management among young people before they move on to the more demanding environment of higher education.

CONCLUSION AND RECOMMENDATIONS

This survey concludes that an examination readiness module is an urgent need in supporting upper secondary and pre-university students. While students' knowledge and aspiration were at a reasonable level, weaknesses in practical study skills and in time management discipline call for continued external support and guidance.

Based on these findings, the following recommendations are put forward for future runs of the programme:

- Focus on practical modules: Organisers should include more hands-on workshop sessions that train students to build realistic and systematic personal study timetables.

- Stress management and psychological support: More in-depth psychological guidance should be included to help students manage anxiety as the examination season approaches, in line with their need for mental resilience.

- Ongoing mentoring: A structured mentor–mentee arrangement should be put in place so that students maintain their daily discipline between workshop sessions.

Proposed four-module programme structure

The findings also suggest that a single workshop, however well delivered, is unlikely to close the gap between knowing and doing. Skills and self-discipline develop through repeated practice and follow-up, not through one-off exposure.

For this reason, future runs of the SPM Booster Program are proposed as a series of four modules that begins in Form Four and continues until the month before the actual SPM examination. The structure is summarised in Table 9 and described below.

Table 9: Proposed four-module structure of the SPM Booster Programme

Module	Timing	Focus and activities	Related finding
Module 1	Form Four	Introduction to "Building the Dream of SPM Excellence"; setting goals for the SPM and for further study at public universities	Less clear SPM goals (item 4.1) and educational direction (item 4.3)
Module 2	After Module 1, for about four months	Small-group mentoring led by one lecturer and two undergraduates with excellent SPM results	Lowest-ranked item, time discipline (item 3.3) and practical skills (Table 3)
Module 3	After four months of mentoring, before the SPM trial examination	"Energise Synergy" session to renew effort; recognition announced for students who obtain at least 6As in the trial examination	Moderate motivation to excel (item 3.2)
Module 4	One month before the actual SPM	Final preparation for confidence, mental focus and physical readiness; attractive rewards promised for 6As and above	Lower confidence in facing the SPM (item 3.1) and stress management (item 2.5)

Module 1 targets Form Four students and serves as an introduction under the theme "Building the Dream of SPM Excellence". Its purpose is to help students set clear goals for the SPM at an early stage and to link these goals to further study at public universities (IPTA). This responds directly to the survey, in which students showed strong determination but had less clear goals for their SPM results (item 4.1, 2.96) and their educational or career direction (item 4.3, 3.04). Starting in Form Four gives students time to turn their aspirations into specific targets before the pressure of the examination year.

Module 2 begins after Module 1, when participants are divided into small groups. Each group is mentored by one lecturer and two university students who achieved excellent SPM results. The lecturer provides academic guidance and monitoring, while the undergraduate mentors act as near-peer role models who have recently gone through the same examination. Mentoring continues for about four months. This module is intended to address the lowest-ranked areas in this study, namely time discipline (item 3.3, 2.78) and practical study skills such as planning revision and improving weak subjects (Table 3). Regular follow-up from mentors provides the external reinforcement that students appear to need in order to turn knowledge into consistent habits.

Module 3 is held after the four-month mentoring period and before the SPM trial examination. Under the theme "Energise Synergy", it aims to renew students' energy and encourage greater effort at a stage when motivation tends to drop. As part of this module, a reward is publicly announced for students who obtain at least 6As in the SPM trial examination. Announcing the reward early gives students a concrete short-term target, which may help raise the moderate level of motivation to excel found in this study (item 3.2, 3.06).

Module 4 is carried out one month before the actual SPM examination. It prepares students to enter the examination hall with greater confidence and sharper mental and physical focus. This module responds to the comparatively low confidence in facing the SPM (item 3.1, 2.94) and the large share of neutral responses on managing study-related stress (item 2.5, 54%). In Module 4, students are also promised attractive rewards for obtaining 6As and above in the actual SPM. Rewards of this kind can give students a clear final push. However, they should be presented as recognition of effort and used alongside the mentoring and skill-building elements of the earlier modules, so that students' motivation does not depend on rewards alone.

Taken together, the four modules move students from setting goals, to building habits under guidance, to renewing effort before the trial examination, and finally to preparing mentally and physically for the actual SPM. Evaluating each module, for example by comparing students' readiness scores across the series and against their trial and actual SPM results, would also give future studies a stronger basis for measuring the programme's impact.

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Declaration on the Use of Generative AI

Generative artificial intelligence (AI) tools were used to assist with part of the translation process. All language editing and structural revisions were carried out by the authors. The ideas, data, analysis and the paper as a whole are the authors' original work.

REFERENCES

1. Chua, Y. P. (2014). Kaedah penyelidikan: Buku 1 [Research methods: Book 1] (2nd ed.). McGraw-Hill Education.
2. Creswell, J. W., & Creswell, J. D. (2018). Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.). SAGE Publications.
3. Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2019). How to design and evaluate research in education (10th ed.). McGraw-Hill Education.
4. Pimentel, J. L. (2010). A note on the usage of Likert scaling for research data analysis. USM R&D Journal, 18(2), 109–112.
5. UiTM Cawangan Melaka. (2023). Laporan Program SPM Booster: Modul kesiapsediaan akademik dan sahsiah pelajar [SPM Booster Programme report: Academic and personal readiness module]. Universiti Teknologi MARA Cawangan Melaka.