

Effects of Individual Influence on Time Management of BSCS Freshmen at SNSU Main Campus

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Abstract: This study examined how individual influence affects the time management of BSCS freshmen at SNSU Main Campus. A descriptive quantitative method was used with 51 respondents who answered a validated 36-item Likert-scale questionnaire measuring planning, organization, and prioritization each with four sub-indicators: attributes, beliefs, skills, and traits. Results showed moderate to high self-rated time management scores across all dimensions, with planning at 2.92, organization at 2.94, and prioritization at 2.98. All distributions were negatively skewed, suggesting that students tended to rate themselves positively, possibly due to overconfidence, while positive kurtosis values indicated that perceptions were clustered around the midpoint. Among the four individual factors, beliefs had the strongest influence with a mean of 3.00. The study revealed that individual influencing factors significantly affected time management behaviors. The proponents recommended implementing time management orientation modules, growth mindset interventions, and individualized academic support mechanisms aligned with students' personality profiles.

Keywords: Time Management, Individual Influence, BSCS Freshmen, Descriptive Quantitative

I. INTRODUCTION

In recent years, the direct individual impact on time management had been heavily considered because it significantly contributed to students' success, retention, and fulfillment [1-2]. This concern was most prominent in university programs like Computer Science, where the academic workload forced students to remain constantly focused on problem-solving, coding, and productivity [3]. First-year students at Surigao del Norte State University (SNSU) were found to be in a dual situation: they were transitioning from secondary to tertiary level while being exposed to a highly demanding academic curriculum. Effective time management behaviors among students were related to academic achievement, academic satisfaction, and reduced academic distress [4-6]; otherwise, poor time management led to procrastination, academic stress, and lower engagement [7-9]. Since higher education was considered to have a strong student centered learning approach where students were expected to be independent in guiding their own learning and equipped with digital literacy [10], examining the individual impact on time management among first-year CS students of SNSU became significant. Time management was already known as one of the strongest predictors of academic achievement and retention within the self-regulated learning theory framework [11-12]. Time management has also been closely associated with how students adjust to university life and regulate their own learning [13-15]. However, most of these studies focused on general university students and mostly examined GPA instead of time management behaviors. Since first-year students underwent different adjustment phases, several variables like self-efficacy, self-discipline, and emotional management directly impacted their time management and led to academic fulfillment [12, 15, 32]. Therefore, a comprehensive descriptive quantitative study was constructed to examine the effects of individual influence on time management of first-year CS students at SNSU.



Objectives of the Study

This study aimed to:

- Examine the effect of individual influencing factors specifically attributes, beliefs, skills, and traits on the time management behaviors of first-year BSCS students at SNSU Main Campus.
- Determine the levels of time management among the respondents across the three dimensions of planning, organization, and prioritization.
- Identify which among the four individual factors attributes, beliefs, skills, and traits most strongly affects the students' ability to manage their time effectively during their transition from secondary to tertiary education.
- Recommend evidence-based interventions such as time management orientation modules, growth mindset training, and personality-aligned academic support mechanisms based on the findings of the study.

II. REVIEW OF RELATED LITERATURE

Time Management

Planning was defined as the allocation of time and tasks to successfully complete schoolwork. Brady et al. [16] observed that students created schedules, allocated time for activities, and adjusted their plans based on progress. Von Keyserlingk et al. [17] found that students who spaced out their studying over the course of the term performed better on assessments compared to students who crammed. HERDSA [18] reported that 92% of students planned to enhance their understanding of challenging concepts and that those who used multiple strategies, such as the Pomodoro Technique, performed better on assessments. Universitas Islam Indonesia [19] highlighted the value of the SMART framework in helping freshmen break large tasks into small, defined, and timed chunks.

Organization was defined as the arranging of tasks, materials, and time into an orderly fashion to complete work more efficiently. Dent and Koenka [20] discovered that students with well-organized learning materials were more efficient during study periods. The University of Edinburgh [21] indicated that taking lab sessions benefited CS students' programming learning. Prioritization was defined as knowing how important tasks were and how much attention each deserved. ECT Excellencia [22] found that students who prioritized tasks effectively completed more schoolwork and achieved better outcomes.

Individual Influence

Attributes and views about organizing tasks shaped how students approached school duties. When learners saw meaning in assignments, effort grew, and planning became deeper while study routines became longer, as noted by Wolters and Brady [23]. Thoughts about personal ability formed another layer. Those who believed skills could grow tended to aim high and keep going even after setbacks, according to Travers et al. [24]. Confidence in one's capability was closely linked to handling delays or obstacles. Strong belief in progress often meant better scheduling and stronger recovery from stress, as found by Muenks et al. [25].

Efficiency in handling time was often linked to certain mental skills. Those who tracked their learning progress and adjusted how they studied tended to manage their time better, according to Broadbent and Poon [1]. When it came to computer science tasks, dividing large assignments into smaller parts supported success in meeting deadlines, as noted by Peterson et al. [3,26]. Built-in personal qualities also shaped scheduling habits. A learner's natural disposition played a role in how time was used across academic work. Efficiency in managing time was often linked to personal habits, according to Bidjerano and Dai [27], who observed that learners characterized by orderliness and self-control tended to handle schedules better. When effort declined during long study periods, it often depended on inner drive. Von Keyserlingk et al. [17] found that students who remained disciplined continued working longer without giving up.

Synthesis

Time management among students was deeply connected with individual characteristics, even if this connection was rarely highlighted [23, 25, 1, 27]. Linked to personality factors, elements such as outlook, core beliefs, reasoning skills, and repeated actions influenced strategic effectiveness. When internal resources supported efforts, activities such as



organizing, prioritizing, and sequencing duties became more manageable. Instead of operating in isolation, motivation and planning routines constantly affected one another within learning environments. Structured methods often emerged when assurance and adaptable thinking were present. What mattered most shifted away from method and rested instead on the person behind the actions. From this came a clear conclusion managing time effectively worked only when personal preparedness was combined with actual execution.

III. CONCEPTUAL FRAMEWORK

This study examined the relationship between individual influence and time management, specifically how BSCS freshmen at SNSU Main Campus managed their academic tasks based on their personal attributes, beliefs, skills, and traits. The independent variable of this study was Individual Influence which contained four components. First was Attributes which referred to the students' inherent qualities or characteristics that affected how they approached their schoolwork. Second was Beliefs which referred to the students' personal convictions about their ability to succeed and the value of managing their time well. Third was Skills which referred to the mental and practical abilities students used to plan, organize, and prioritize their tasks. And lastly, Traits which referred to the stable personality characteristics such as self-control and orderliness that influenced their time management habits. The dependent variable of this study was Time Management which contained three dimensions. First was Planning which referred to how students allocated time and tasks to complete their school requirements. Second was Organization which referred to how students arranged their tasks, materials, and schedules in an orderly manner. Lastly was Prioritization which referred to how students determined which tasks were important and urgent.

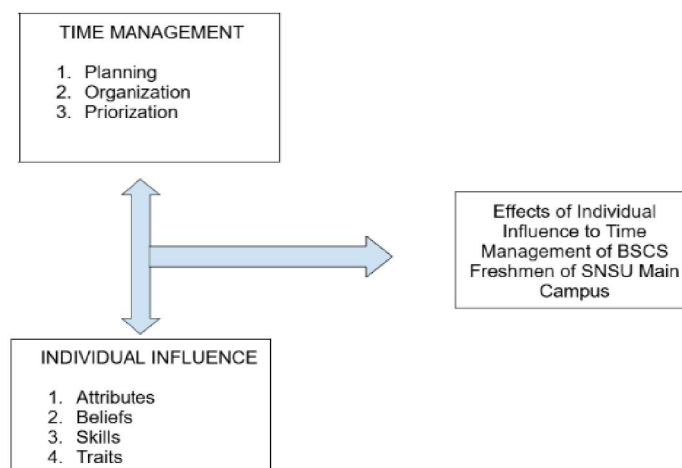


Figure 1: Conceptual Framework of the Study

Figure 1 shows the relationship between individual influence and time management of BSCS freshmen at SNSU Main Campus. The upper left box shows the independent variable of this study, Individual Influence (Attributes, Beliefs, Skills, and Traits). The lower left box shows the dependent variable of this study, Time Management (Planning, Organization, and Prioritization). The arrow shows the connection between the independent and dependent variables that leads to the right box which shows the title or the result of the study. It illustrated that BSCS freshmen who possessed positive attributes, strong beliefs in their capabilities, developed time management skills, and had disciplined traits were able to manage their time more effectively.

IV. RESEARCH METHODOLOGY

Research Design

This study used a descriptive quantitative research design to examine the effect of individual influence on the time management of BSCS freshmen at SNSU Main Campus. A structured survey questionnaire was employed to collect data from the respondents, ensuring that the proponents remained objective and did not manipulate any variables



throughout the process. The descriptive aspect allowed the proponents to describe the levels of time management across the three dimensions: planning, organization, and prioritization as influenced by the students' individual attributes, beliefs, skills, and traits. The design enabled the proponents to gather numerical data that were statistically analyzed using measures such as mean, standard deviation, skewness, and kurtosis. This approach was chosen because it aligned with the study's objective of obtaining a generalizable view of the freshmen students' self-reported time management skills without interfering with their natural academic routines.

Participants/Respondents

Table I shows, there were 93 first-year BSCS enrollees at SNSU Main Campus who qualified as potential participants in this study about the effect of individual influence on time management. Respondents were selected using purposive sampling. Looking at Table I, most participants (58.82%) were female and 41.18% were male. The majority (68.63%) were 18 or 19 years old. Participants came from two sections: 47.06% from Section 1A and 52.94% from Section 1B. In total of 51 students completed the questionnaire which represents 54.8% of the eligible participants.

Table I. Respondents' Demographic Profile (n=51)

AGE	N	
18 Years Old	14	27.45%
19 Years Old	21	41.18%
20 Years Old	11	21.57%
21 Years Old	5	9.80%
GENDER	N	
Male	21	41.18%
Female	30	58.82%
SECTION	N	
1A	24	47.06%
1B	27	52.94%
Total	51	100%

Instrument and Procedure

In this study, a 36-item questionnaire was created by the proponents through Google Forms using a four-point Likert scale ranging from 1 "Strongly Disagree" to 4 "Strongly Agree". The instrument measured three dimensions of time management: planning, organization, and prioritization, each consisting of 12 items. Furthermore, each dimension was divided into four sub-indicators of individual influence: attributes (3 items), beliefs (3 items), skills (3 items), and traits (3 items). The answers of the respondents were collected via Google Forms link distributed in Messenger. The respondents are made aware of the study's aim, and that responses are confidential and solely for academic purposes.

Data Analysis

The data were collected and processed using JAMOVI and Microsoft Excel. The data were analyzed using frequency count and percentage to describe the demographic profile of respondents. Weighted mean was used to determine the level of time management skills across the three dimensions: planning, organization, and prioritization. The scores were examined in terms of standard deviation, skewness, and kurtosis to see how they were distributed. The results were interpreted using the four-point Likert scale where scores between 3.26 and 4.00 meant "Strongly Agree," scores between 2.51 and 3.25 meant "Agree," scores between 1.76 and 2.50 meant "Disagree," and scores between 1.00 and 1.75 meant "Strongly Disagree," as seen in research about deviation, skewness, and kurtosis [28].



V. RESULTS AND DISCUSSION

A. Descriptives of Time Management

Table II: Time Management Descriptives

Descriptives	Planning	Organization	Prioritization
N	51	51	51
Mean	2.92	2.94	2.98
Std. error mean	0.0856	0.0855	0.0864
Median	3.00	3.00	3.00
Mode	3.00	3.00	3.00
Standard deviation	0.611	0.610	0.617
Variance	0.373	0.373	0.381
Range	2.70	2.80	2.80
Minimum	1.30	1.20	1.20
Maximum	4.00	4.00	4.00
Skewness	-0.490	-0.743	-0.736
Std. error skewness	0.333	0.333	0.333
Kurtosis	0.722	1.22	1.48
Std. error kurtosis	0.656	0.656	0.656

Table II shows the study examined planning, organization, and prioritization. The average score for planning was 2.92, with a standard deviation of 0.611, which means the students were moderately good at planning. The mean and mode were both 3.00, and most students gave answers that were close to this value. The scores for planning range from 1.30 to 4.00 showing that some students struggled with planning while others felt more confident. Even with this range, most had fairly consistent self-ratings. For organization, the average was slightly higher at 2.94, showing a very similar but marginally stronger viewpoint among the group. The scores did not vary much from the mean, with a standard deviation of 0.610. Half of the students gave themselves a rating of 3.00 or higher because the median and the mode were both 3.00. The organization scores range from 1.20, to 4.00. Lee [29] supported the role of structured routines in aiding academic outcomes. Although prioritization was considered, it had the average score of 2.98 with a standard deviation of 0.617. This suggested understanding among learners about prioritization. Some students reached the score of 4.00 for prioritization while others dropped to 1.20 as seen in the minimum value for prioritization. Awareness of task importance appeared present. It was not universal for prioritization.

Each distribution was negatively skewed: planning at -0.490, organization at -0.743 and prioritization at -0.736. Around 3.00 the averages for planning, organization, and prioritization grouped close together. The mean, median and mode were all alike for planning, organization and prioritization. Positive kurtosis values ranged from 0.722 to 1.48, which proposed a heavy peak around the mean, defining that students consistently answered 3 rather than spreading their responses across the scale.



B. Mean Scores on Planning

Table III: Mean Scores on Planning Items

Planning	Mean	Interpretation
When I feel overwhelmed by the heavy academic workload, I can...		
1. demonstrate my natural tendency to set academic goals for myself.	2.86	Agree
2. apply my personal discipline when creating and following a study plan.	2.98	Agree
3. show responsibility by planning ahead for all my academic requirements.	3.00	Agree
4. believe that careful planning is essential to my academic success.	2.98	Agree
5. trust in my ability to handle coursework through effective time planning.	3.02	Agree
6. recognize that effort in planning leads to better grades and less stress.	3.00	Agree
7. break down my long-term goals into smaller steps in my weekly plans.	2.90	Agree
8. estimate accurately how much time I need for different academic tasks.	2.88	Agree
9. create balanced weekly schedules that include both study and personal time.	2.84	Agree
10. develop detailed and specific plans for my assignments and projects.	2.98	Agree
11. remain calm and methodical when planning for busy academic weeks.	2.71	Agree
12. initiate plans for my tasks well in advance of their deadlines.	2.92	Agree
Overall Mean	2.92	Agree

Table III looks how students map out their strategies when academic workloads start piling up. With an overall mean score of 2.92, it's clear that most students lean toward "Agree" that they have a solid handle on goal setting and time management. Respondents feel most confident on Item 5 scored the highest ($M = 3.02$), proving that students genuinely trust their own ability to navigate a heavy course load as long as they have a plan in place. However, putting that plan into practice during high stress moments is a different story. Item 11 brought in the lowest mean ($M = 2.71$), which tells us that while students are great at organizing their time on paper, keeping a steady, methodical head when weeks get chaotic is where they found to be challenged.



C. Mean Scores on Organization

Table IV: Mean Scores on Organization Items

Organization	Mean	Interpretation
When I struggle to keep my materials organized due to the volume of resources, I can...		
13. arrange my physical and digital study materials in an orderly manner.	2.86	Agree
14. maintain a consistent routine for organizing my notes and files.	2.82	Agree
15. keep my academic work well-structured and easy to locate.	3.04	Agree
16. recognize that organization improves my efficiency as a student.	2.96	Agree
17. trust in my ability to handle coursework through effective time organization.	2.98	Agree
18. value the effort I put into staying organized to save time and frustration.	3.00	Agree
19. categorize and label my files and notes for quick retrieval.	2.92	Agree
20. utilize digital tools to organize my coursework effectively.	2.90	Agree
21. structure my tasks and materials in a logical order for easier studying.	3.00	Agree
22. ensure that no file, note, or resource is ever misplaced.	2.88	Agree
23. stay calm enough to keep my study space organized during stressful times.	2.90	Agree
24. organize my materials immediately rather than letting them pile up.	2.96	Agree
Overall Mean	2.94	Agree

Table IV focused on how well students kept track of their learning materials when flooded with resources. The overall mean of 2.94 indicated a moderate level of agreement, which showed that the students made a conscious effort to keep their learning spaces structured, though they had not fully reached a clear "Agree" response. In Item 15, which hit the highest mark with a mean of 3.04. This highlighted that students excelled at keeping their actual academic work orderly and easy to find when they needed it. The real struggle, however, came down to habit. Item 14 lagged behind with the lowest score with a mean of 2.82, which pointed out that while students knew how to organize, maintaining a strict, daily routine to keep those files and notes tidy was the hardest part for them.



D. Mean Scores on Prioritization

Table V: Mean Scores on Prioritization Items

Prioritization	Mean	Interpretation
When I feel stressed by overlapping academic deadlines, I can...		
25. focus naturally on the most critical tasks before anything else.	2.92	Agree
26. avoid getting sidetracked by less important tasks when deadlines approach.	2.88	Agree
27. prioritize academic responsibilities over leisure activities.	3.02	Agree
28. believe that focusing on high-impact tasks helps me achieve my goals.	3.06	Agree
29. trust my judgment in identifying which tasks are urgent and important.	3.00	Agree
30. recognize that prioritizing well helps me keep up with coursework.	3.04	Agree
31. assess a long list of tasks and rank them by importance and deadline.	2.98	Agree
32. distinguish between tasks that are urgent and those that are important.	2.92	Agree
33. decide what to work on first, even when everything seems like a priority.	2.94	Agree
34. identify which parts of a large project need to be prioritized for success.	3.02	Agree
35. remain calm under pressure to logically prioritize tasks during hectic weeks.	3.06	Agree
36. tackle high-priority tasks immediately rather than delaying them.	2.90	Agree
Overall Mean	2.98	Agree

Table V highlighted students' management in regards to overlapping schedules. The highest overall average is at 2.98, within the "Agree" range, prioritization stood out as the students' strongest self-regulation skill. Both Item 28 and Item 35 hit peak scores of 3.06. This revealed that students deeply understood that focusing on big-picture, high-impact tasks paid off, and they prided themselves on staying calm under pressure to sort out what needed to be done first during hectic weeks. Respondents were seen slightly tempted to wander off task. Item 26 scored the lowest with a mean of 2.88, which indicated that the main hurdle was tuning out minor distractions.

E. Mean Scores on Individual Factors

Table VI: Mean Scores on Individual Factors

Individual Factors	Mean Score	Interpretation
Attributes	2.93	Agree



Beliefs	3.00	Agree
Skills	2.92	Agree
Traits	2.92	Agree

Table VI shows the mean scores for each individual factor. Beliefs obtained the highest mean 3.00, followed by Attributes 2.93, while Skills and Traits both scored 2.92. This means that students' personal convictions, like believing they can manage their time or that planning is useful, had the strongest effect on their actual time management. Natural qualities (Attributes) and personality traits (Traits) had slightly lower effects, but still fell within the "Agree" range.

F. Distribution of Responses: Density Plots

To further illustrate the patterns reported in Table 2, density plots were gathered for each dimensions: planning, organization, and prioritization. These figures provided visual representations of responses across the four-point Likert scale.

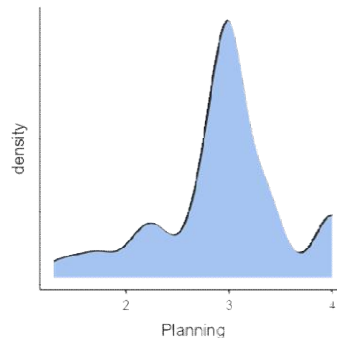


Figure 2: Density Plot for Planning

Figure 2 showed that the planning density plot peaked at 3, where most students rated themselves at "Agree," while very few picked "Strongly Agree" or "Strongly Disagree." The curve tapered toward both 2 and 4, showing low density at those values, with no visible density at score 1. The density at 4 was approximately the same height as the density at 2. This meant that the freshmen felt reasonably confident about their planning skills, but they were not ready to say they had mastered them entirely. The way the responses were spread out also showed that almost no one gave low scores. This finding was interesting because adjusting study plans when the workload became heavy was typically difficult for first-year students. One reason for this could have been that the students overestimated their planning abilities because they wanted to present themselves favorably[30, 31].

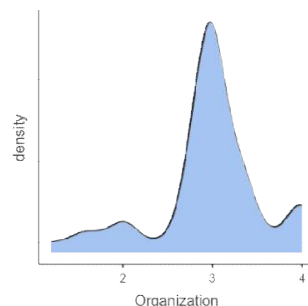


Figure 3: Density Plot for Organization

Figure 3 showed that the organization density plot also peaked sharply at 3, where responses clustered heavily at "Agree" with very short bars at 2 and 4. No curve appeared at score 1 on the graph. The peak was even taller than in planning, which matched the higher kurtosis value 1.22 reported in Table II. The shape confirmed the negative skew -



0.743 and the tight clustering around the midpoint. Most students rated themselves at "Agree," but very few selected "Strongly Agree" or "Disagree." The left side of the distribution showed almost no low scores, which was surprising because organizing digital files and maintaining consistent study routines was a common struggle among freshmen [20, 27]. One explanation was that the participants came from two sections where teachers emphasized structured file management, so even students with weak habits still rated themselves moderately rather than poorly. The absence of a curve at 1 did not mean no one scored below 2 the minimum value in Table 2 was 1.20 but those few low responses were too sparse to appear as a visible bar in this histogram.

Figure 4: Density Plot for Prioritization

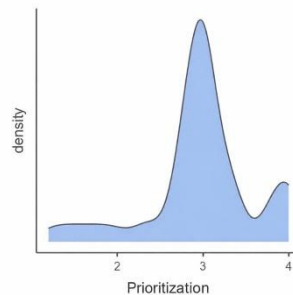


Figure 4 showed that the prioritization density plot found that most students clustered at 3, "Agree," with very short curves at 2 and 4. No curve appeared at 1. The curve at 4 was approximately the same height as the curve at 2. This meant that while prioritization obtained the highest average score 2.98, most students still placed themselves right in the middle. A tiny group of students rated themselves at 4. Those were probably the highly disciplined ones who were genuinely good at sorting urgent tasks. The lack of low scores was noticeable because overlapping deadlines were a known source of stress for computing students [7, 33].

VI. CONCLUSION

This study revealed the effects of individual influence on time management among BSCS freshmen at SNSU Main Campus. Among the four individual factors attributes, beliefs, skills, and traits, beliefs had the strongest influence on time management with a mean of 3.00. This indicates that students' personal convictions about their ability to succeed and the value of time management matter more than their natural traits or learned skills. Based on the results obtained from 51 first-year BSCS students who participated in this study, all three dimensions of time management were rated moderate to high level, with planning at 2.92, organization at 2.94, and prioritization at 2.98. The descriptive statistics revealed that the distributions were negatively skewed and had positive kurtosis values, which indicated that students tended to rate themselves positively and clustered their responses around the midpoint of 3. Therefore, it can be concluded that individual influencing factors such as attributes, beliefs, skills, and traits had a significant effect on the time management behaviors of BSCS freshmen at SNSU. This suggests that students who possess positive personal attributes, strong beliefs in their capabilities, developed time management skills, and disciplined traits were more likely to plan, organize, and prioritize their academic tasks effectively. However, the scarcity of low scores and the presence of overconfidence bias suggested that some students may have overestimated their actual time management abilities, which meant that respondents who had negative insights in regards to time management meant that they did have hard time in their own planning, organization, and prioritization skills application.

VII. RECOMMENDATIONS

For students, it was recommended that they honestly reflected on what they were good at and what they struggled with when it came to time management, and that they became more aware of how they actually studied as a first step toward real improvement. They were encouraged to try simple daily planning strategies like making a schedule, breaking down large tasks into smaller pieces, and using the Pomodoro Technique where they worked for 25 minutes and then rested for 5, so that they could avoid cramming and submitting assignments at the last minute. For the institution, it was recommended that the College of Computing and Information Sciences added a structured time management orientation



module during the first semester of the curriculum, and that SNSU created academic support systems that fit the personality and thinking skills of individual students by using short personality assessments during freshmen orientation. The school was also encouraged to run academic programs and offer guidance counseling services for students who were having a hard time and falling behind.

For instructors, it was recommended that they help students develop a growth mindset and feel more confident through activities done inside the classroom, and that they talk openly about how effort and not giving up are important especially when dealing with hard computer science problems. Instructors were also advised to give students clear and structured time management methods, including the Pomodoro Technique, to make learning less stressful and more effective. Since beliefs were found to be the strongest influencing factor with a mean of 3.00, instructors should focus on building students confidence. Sharing success stories, giving positive feedback, and showing students that effort leads to improvement can strengthen their ability to manage time.

For future researchers, it was recommended that they repeated this study with a larger and randomly chosen group of students from different CCIS programs in various universities across Mindanao or the Philippines, and that they followed those students over a longer period of time. Future researchers were also encouraged to add real behavioral measures alongside self-report surveys, such as asking students to keep structured academic diaries, having classmates give feedback, or tracking when assignments were actually submitted, so that problems like overconfidence and students answering in socially desirable ways could be avoided.

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