International Journal of Scientific Multidisciplinary Research (IJSMR)
Vol.3, No.10, 2025: 1299-1314

# Elucidating Non-Cognitive Skills of Disengaged Students: Pathway for Targeted Intervention to an Extension Project

Lourdes S. Santos[1], Job D. Paguio[2], Ryan R. Pecson[3]*
Bataan Peninsula State University
**Corresponding Author:** Ryan R. Pecson rrpecson@bpsu.edu.ph

A R T I C L E I N F O

*Keywords:* Non-Cognitive Skills, Disengaged Students, Secondary School, Targeted Intervention

*Received : 04, September*
*Revised : 20, September*
*Accepted: 25, October*



A B S T R A C T

Both cognitive and non-cognitive skills play a key role in student success, yet more attention is given on the cognitive skills. This leads to students losing interest and engagement in learning. The study employed a descriptive-survey design in quantitative research to examine the non-cognitive skills of disengaged students in the public secondary school in the Philippines. The data were gathered from 134 students who were purposively selected to respond to a survey questionnaire, where the results were analyzed using descriptive statistics. The findings show that although disengaged students often demonstrate the necessary non-cognitive skills, many still require further development and sustained growth in higher levels of non-cognitive skills, leading to the suggestions for the targeted intervention informing an extension project.

DOI: https://doi.org/10.55927/ijsmr.v3i10.673
E-ISSN: 2986-5042
https://mryformosapublisher.org/index.php/ijsmr/issue/view/49

## INTRODUCTION

The development of both cognitive and non-cognitive skills is crucial for student success, yet schools and teachers often prioritize cognitive skills. This emphasis can result in students becoming disengaged, highlighting the need for a more balanced approach. Non-cognitive skills are often referred to as "soft skills" or "affective behaviors." They are essential human attributes used throughout life (O'Neill, 2019). People develop these interpersonal skills over time and through experience (Indeed Editorial Team, 2021). These skills are critical for success both in and out of the classroom (Kattan, 2017). They are also important for career engagement (Aryani et al., 2021). Examples of non-cognitive skills include conscientiousness, self-control, grit, and growth mindset (West et al., 2016). Other sub-skills are locus of control, planning, empathy, and self-confidence (Gheith & Aljaberi, 2017). Perseverance and teamwork are also part of these skills (Kattan, 2017). Motivation, integrity, interpersonal skills, interaction, personality, temperament, and values are also included (ACT Inc., 2014), along with character, tolerance, effort, and conscientiousness (DeAngelis, 2021).

At school, students may develop many cognitive and non-cognitive skills. Teachers and schools often measure cognitive skills through test scores. They also influence students' non-cognitive skills (DeAngelis, 2021). Non-cognitive factors, such as academic behavior, time management, and integration, help predict performance (Anderson et al., 2020). To support skill development, teachers need to consider how students view their learning environment (Khine et al., 2020). Non-cognitive skills link to better attendance, behavior, and test scores (West et al., 2016). Moreover, they help students complete tasks accurately and with confidence (Yamada & Otchia, 2022).

## THEORETICAL REVIEW

In reality, there is concern that researchers and policymakers focus too much on measuring cognitive outcomes in school subjects. They tend to overlook important non-cognitive outcomes (Egalite et al., 2016). When both types of skills are not developed together, students may be left unprepared (Anderson et al., 2020). Teachers also differ in their perceptions of their roles, relationships with students, and whether to assess non-cognitive skills (Schuelka et al., 2019). García (2014) argued that non-cognitive skills play central roles in education and life. Yet, educational analysis and policy often overlook their importance. After a long period of neglect, non-cognitive skills are again being discussed in education. This requires attention from researchers, policymakers, and practitioners.

In today's technologically-advanced and fast-pacing educational landscapes, many students are increasingly disengaged in school. This is a significant issue, as a lack of engagement can negatively impact academic achievement (Cevikbas & Kaiser, 2022). Disengaged students face barriers such as boredom with repetitive activities (Nam et al., 2018), unrelated behaviors (Saripah & Widiastuti, 2019), poor self-concept (Schnitzler et al., 2021), and inadequate values, motivation, study behaviors, academic interactions, and coping with competing demands (Brint & Cantwell, 2014). Family, personal, and school-related factors also play a role (Victoria State University, 2021).

Disengaged students are more likely to misbehave and drop out (Holquist et al., 2020), which is why it is referred to as the "silent epidemic." These students are academically unprepared and face pressure to complete remedial courses before advancing (Anderson et al., 2020).

Indeed, there is an urgent need to reduce student disengagement by building non-cognitive skills. Focusing on these skills also helps develop cognitive skills and allows for targeted support. The present study examined the non-cognitive skills of disengaged students in a public secondary school in DepEd-SDO City of Balanga, Bataan, Philippines. It aimed to provide a starting point for targeted intervention. The research covered 10 areas of non-cognitive skills: academic motivation, collaboration, conscientiousness, curiosity, emotional competence, help-seeking, optimism, perseverance, self-efficacy, and self-regulation. It also identified the number of students who needed extra support based on their non-cognitive skills. The findings informed an extension project by the College of Education (COEd) at Bataan Peninsula State University-Balanga Campus (BPSU-BC) called "*Addressing Disengaged Behavior in Online/Offline Learning Through Peer Group Mentoring and Tutoring (ADBOL Through PGMT)*."

Figure 1. Meeting of the Extension Team with the Teachers for the Conduct of the Survey

## METHODOLOGY

### *Research Design*

The study employed a descriptive-survey design in quantitative research to detail and analyze the non-cognitive skills of disengaged students in a public secondary school and the total number of students requiring targeted intervention based on the assessment results. As noted by McCombes (2019), the descriptive-survey design systematically and accurately describes a specific population, situation, and phenomenon by identifying key characteristics, trends, frequencies, and categories. With that, the study described and compared the manifestations of non-cognitive skills among disengaged secondary students, using a survey questionnaire as the data-gathering tool and descriptive statistics as the analytical tool.

***Respondents***

The study purposively selected disengaged secondary students in a public secondary school as the respondents for data gathering. As reiterated by Nikolopoulou (2022), purposive sampling is a non-probability sampling method that identifies a specific unit on purpose because it possesses characteristics relevant to the study's sample. Using such a sampling technique, from the total population of students in a public secondary school in DepEd-SDO City of Balanga, 134 secondary students were purposively selected since they were identified by their teachers and advisers as the ones needing targeted intervention based on their manifestations of disengaged behaviors and poor academic performance, based on their achievement test results.

***Instrument***

Regarding the instrument used for data gathering, the study employed a researcher-designed survey questionnaire. As mentioned by Ranganathan and Caduff (2023), a questionnaire is used to collect information from people, consisting of a series of items or questions that disclose their opinions, knowledge, beliefs, attitudes, and behavior. As used in the study, the researcher-developed survey questionnaire was created considering the existing literature on the non-cognitive skills of learners integral to academic, career, and life success. Special attention was given to pieces of literature that categorized non-cognitive skills and provided descriptions for these skills. The survey questionnaire developed by the researchers to assess the non-cognitive skills of students contained 10 domains and 52 items, covering academic motivation, collaboration, conscientiousness, curiosity, emotional competence, help-seeking behavior, optimism, perseverance, self-efficacy, and self-regulation. The said instrument was validated by 9 experts, comprising 3 content experts, 3 English language experts, and 3 Filipino language experts. After the validation requirements were met, pilot testing was conducted on 40 secondary students, and the results were analyzed using Cronbach's Alpha. The alpha value of 0.8571 indicated that the developed survey questionnaire was reliable, suggesting that the instrument can now be used with confidence for the target respondents.

***Data Gathering Procedure***

The data needed were gathered using a survey questionnaire that was validated and tested for reliability. Moreover, a permission letter was submitted to the Superintendent of DepEd-SDO City of Balanga for the conduct of the survey as part of the extension project and in partnership with the COEd of BPSU-BC. Additionally, consent forms were provided to the parents, while assent forms were obtained from the student respondents. Upon receiving the approvals, endorsements, consents, and assent confirmations, the final data gathering commenced with the assistance of the principal and teachers from the pilot school identified within the school division.

***Ethical Considerations***

Stringent ethical considerations were considered in the conduct of the study – from securing consent forms from the parents and assent forms from the

students, the anonymity of the respondents' identity, the confidentiality of the data gathered from the respondents, and prioritizing the safety, security, and interests of the respondents, aligning the conduct of research to established institutional conduct based on ethics, data privacy, and security.

***Statistical Treatment***

To analyze the data, descriptive statistics such as frequency, percentage, mean, and standard deviation were employed. The mean and standard deviation were used in treating the non-cognitive skills of disengaged students in terms of academic motivation, collaboration, conscientiousness, curiosity, emotional competence, help-seeking behavior, optimism, perseverance, self-efficacy, and self-regulation. More so, the following were the norms of interpretation used in describing and discussing the non-cognitive skills of the students:

| Scale | Range of Means | Descriptive Equivalent | Interpretation |
|---|---|---|---|
| 4 | 3.26-4.00 | Strongly Agree | Highly Skilled |
| 3 | 2.26-3.25 | Agree | Skilled |
| 2 | 1.76-2.25 | Disagree | Less Skilled |
| 1 | 1.00-1.75 | Strongly Disagree | Not Skilled |

Meanwhile, the frequency and percentage were used to treat the number of disengaged students requiring targeted intervention based on the assessment of their non-cognitive skills.

## RESULTS

*Non-Cognitive Skills of Disengaged Students*

**Table 1. Non-Cognitive Skills of Disengaged Students in Terms of Academic Motivation**

| A. Academic Motivation | Mean | SD | DE | I |
|---|---|---|---|---|
| 1. I have an active personal commitment to learning. | 3.49 | 0.65 | Strongly Agree | Highly Skilled |
| 2. I have a sense of interest and enthusiasm for learning. | 3.31 | 0.76 | Strongly Agree | Highly Skilled |
| 3. I am persistent and dedicated to learning various activities/tasks. | 3.15 | 0.71 | Agree | Skilled |
| 4. I have the competence toward challenges in various learning activities/tasks. | 3.17 | 0.74 | Agree | Skilled |
| **Composite** | **3.28** | **0.73** | **Strongly Agree** | **Highly Skilled** |

***Legend/Norms of Interpretation:*** SD (Standard Deviation), DE (Descriptive Equivalent), I (Interpretation); 1.00-1.75 (Strongly Disagree | Not Skilled); 1.76-2.25 (Disagree | Less Skilled); 2.26-3.25 (Agree | Skilled); 3.26-4.00 (Strongly Agree | Highly Skilled)

Table 1 presents the non-cognitive skills of disengaged students regarding academic motivation. Students demonstrated a strong personal commitment to learning (Mean=3.49; SD=0.65) and enthusiasm for learning (Mean=3.31; SD=0.76), both rated as "Strongly Agree" and "Highly Skilled." While persistence and dedication (Mean=3.15; SD=0.71) and competence in facing learning challenges (Mean=3.17; SD=0.74) were slightly lower, they still fell within the "Agree" and "Skilled" range. Overall, the composite score (Mean=3.28; SD=0.73)

reflects a "Strongly Agree" and "Highly Skilled" level of academic motivation among the students. This suggests that while disengaged students exhibit high motivation, targeted interventions could further enhance their persistence and confidence in overcoming academic challenges.

**Table 2. Non-Cognitive Skills of Disengaged Students in Terms of Collaboration**

| B. Collaboration | Mean | SD | DE | I |
|---|---|---|---|---|
| 1. I am actively engaged in teamwork or collaborative activities/tasks. | 3.37 | 0.67 | Strongly Agree | Highly Skilled |
| 2. I cooperate when working in a group, either small or big groups. | 3.41 | 0.74 | Strongly Agree | Highly Skilled |
| 3. I possess interpersonal skills (communicating and interacting with others) toward working with co-learners. | 3.25 | 0.75 | Agree | Skilled |
| 4. I show empathy (understanding) with co-learners when working in groups. | 3.28 | 0.66 | Strongly Agree | Highly Skilled |
| 5. I develop trust in others in doing various activities/tasks. | 3.20 | 0.82 | Agree | Skilled |
| 6. I have a service-orientated mindset when working with co-learners. | 3.20 | 0.77 | Agree | Skilled |
| 7. I am open to negotiation when working with co-learners. | 3.11 | 0.87 | Agree | Skilled |
| 8. I am willing to resolve conflict that arises when working in groups. | 2.95 | 0.84 | Agree | Skilled |
| **Composite** | **3.22** | **0.78** | **Agree** | **Skilled** |

***Legend/Norms of Interpretation:*** SD (Standard Deviation), DE (Descriptive Equivalent), I (Interpretation); 1.00-1.75 (Strongly Disagree | Not Skilled); 1.76-2.25 (Disagree | Less Skilled); 2.26-3.25 (Agree | Skilled); 3.26-4.00 (Strongly Agree | Highly Skilled)

Table 2 illustrates the non-cognitive collaboration skills of disengaged students. Students show strong cooperation in group settings (Mean=3.41; SD=0.74), high engagement in teamwork (Mean=3.37; SD=0.67), and high empathy (Mean=3.28; SD=0.66), all rated as "Strongly Agree" and "Highly Skilled." Interpersonal skills (Mean=3.25; SD=0.75), trust (Mean=3.20; SD=0.82), and a service-oriented mindset (Mean=3.20; SD=0.77) are rated as "Agree" and "Skilled." However, openness to negotiation (Mean=3.11; SD=0.87) and willingness to resolve conflict (Mean=2.95; SD=0.84), though rated as “Strongly Agree" and "Highly Skilled," are the lowest, indicating potential areas for improvement. The composite score (Mean=3.22; SD=0.78) reflects an overall "Agree" and "Skilled" level of collaboration, suggesting that while students are generally collaborative, targeted interventions could further enhance their conflict resolution and negotiation skills.

**Table 3. Non-Cognitive Skills of Disengaged Students in Terms of Conscientiousness**

| C. Conscientiousness | Mean | SD | DE | I |
|---|---|---|---|---|
| 1. I have a work ethic in doing or accomplishing activities/tasks. | 2.95 | 1.03 | Agree | Skilled |
| 2. I have the initiative in doing or accomplishing activities/tasks. | 3.03 | 0.95 | Agree | Skilled |
| 3. I have self-direction in doing or accomplishing activities/tasks. | 2.74 | 0.98 | Agree | Skilled |
| 4. I have a career-oriented mindset. | 2.94 | 1.09 | Agree | Skilled |
| 5. I show a sense of responsibility in doing or accomplishing activities/tasks. | 3.05 | 1.02 | Agree | Skilled |
| 6. I show perseverance in doing or accomplishing activities/tasks. | 2.89 | 1.10 | Agree | Skilled |
| 7. I am productive in doing or accomplishing activities/tasks. | 2.79 | 1.06 | Agree | Skilled |
| 8. I have the grit (strength of character) in doing or accomplishing activities/tasks. | 2.64 | 1.16 | Agree | Skilled |
| 9. I have self-regulation in doing or accomplishing activities/tasks. | 2.60 | 1.15 | Agree | Skilled |
| 10. I act in class in ways that reflect my ethics. | 2.51 | 1.14 | Agree | Skilled |
| 11. I show integrity in what I say and do in class. | 2.32 | 1.16 | Agree | Skilled |
| 12. I show what a responsible citizen is in action, whether in school or in the community. | 2.80 | 1.19 | Agree | Skilled |
| **Composite** | **2.77** | **1.11** | **Agree** | **Skilled** |

***Legend/Norms of Interpretation:*** SD (Standard Deviation), DE (Descriptive Equivalent), I (Interpretation); 1.00-1.75 (Strongly Disagree | Not Skilled); 1.76-2.25 (Disagree | Less Skilled); 2.26-3.25 (Agree | Skilled); 3.26-4.00 (Strongly Agree | Highly Skilled)

Table 3 reveals that disengaged students exhibit a range of conscientiousness skills, all rated as "Agree" and "Skilled," with notable strengths in initiative (Mean=3.03; SD=0.95), sense of responsibility (Mean=3.05; SD=1.02), work ethic (Mean=2.95; SD=1.03), career-oriented mindset (Mean=2.94; SD=1.09), and perseverance (Mean=2.89; SD=1.10), reflecting their commitment to tasks and accountability. However, areas such as self-direction (Mean=2.74; SD=0.98), productivity (Mean=2.79; SD=1.06), grit (Mean=2.64; SD=1.16), self-regulation (Mean=2.60; SD=1.15), ethical behavior (Mean=2.51; SD=1.14), and integrity (Mean=2.32; SD=1.16)—as well as responsible citizenship (Mean=2.80; SD=1.19), though rated as "Strongly Agree" and "Highly Skilled"—highlight opportunities for growth, particularly in maintaining consistency, honesty, and personal discipline. The composite score (Mean=2.77; SD=1.11) underscores an overall "Agree" and "Skilled" level of conscientiousness, suggesting that while students possess foundational strengths, targeted interventions to bolster integrity, self-regulation, and ethical decision-making could further enhance their conscientiousness and resilience.

**Table 4. Non-Cognitive Skills of Disengaged Students in Terms of Curiosity**

| D. Curiosity | Mean | SD | DE | I |
|---|---|---|---|---|
| 1. I am interested to learn something different or unique. | 2.75 | 1.27 | Agree | Skilled |
| 2. I seek/explore new ideas/activities. | 2.52 | 1.22 | Agree | Skilled |
| 3. I am open to new experiences/situations even though I am not familiar with. | 2.72 | 1.17 | Agree | Skilled |
| **Composite** | **2.66** | **1.22** | **Agree** | **Skilled** |

***Legend/Norms of Interpretation:*** SD (Standard Deviation), DE (Descriptive Equivalent), I (Interpretation); 1.00-1.75 (Strongly Disagree | Not Skilled); 1.76-2.25 (Disagree | Less Skilled); 2.26-3.25 (Agree | Skilled); 3.26-4.00 (Strongly Agree | Highly Skilled)

Table 4 assesses the curiosity skills of disengaged students, with all items rated as "Agree" and "Skilled." Students show the highest level of interest in learning something different or unique (Mean=2.75; SD=1.27), followed by openness to new experiences or situations (Mean=2.72; SD=1.17), indicating a willingness to engage with novelty. However, their tendency to actively seek or explore new ideas and activities is lower (Mean=2.52; SD=1.22), suggesting a more passive approach to curiosity. The composite score (Mean=2.66; SD=1.22) reflects an overall "Agree" and "Skilled" level of curiosity, highlighting that while students are receptive to new experiences, there is potential to further nurture their proactive exploration and inquisitiveness through targeted interventions.

**Table 5. Non-Cognitive Skills of Disengaged Students in Terms of Emotional Competence**

| E. Emotional Competence | Mean | SD | DE | I |
|---|---|---|---|---|
| 1. I have empathy (understanding) of others' emotions or feelings. | 2.65 | 1.20 | Agree | Skilled |
| 2. I can manage my emotions or feelings. | 2.67 | 1.19 | Agree | Skilled |
| 3. I am aware of my emotions or feelings and where they are coming from. | 2.67 | 1.11 | Agree | Skilled |
| 4. I have a social awareness of people's emotions or feelings. | 2.75 | 1.18 | Agree | Skilled |
| **Composite** | **2.69** | **1.17** | **Agree** | **Skilled** |

***Legend/Norms of Interpretation:*** SD (Standard Deviation), DE (Descriptive Equivalent), I (Interpretation); 1.00-1.75 (Strongly Disagree | Not Skilled); 1.76-2.25 (Disagree | Less Skilled); 2.26-3.25 (Agree | Skilled); 3.26-4.00 (Strongly Agree | Highly Skilled)

Table 5 shows the emotional competence of disengaged students. All items were rated as 'Agree' and 'Skilled.' Students scored highest in social awareness of others' emotions (Mean=2.75, SD=1.18). Their ability to manage their own emotions (Mean=2.67; SD=1.19) and recognize the source of their emotions (Mean=2.67; SD=1.11) was slightly lower. Empathy for others was also somewhat lower, but still relatively high (Mean=2.65; SD=1.20). The overall score (Mean=2.69; SD=1.17) suggests that students possess basic emotional skills. There is still room to improve their empathy, self-awareness, and emotional regulation with targeted support.

**Table 6. Non-Cognitive Skills of Disengaged Students in Terms of Help-Seeking Behavior**

| F. Help-Seeking Behavior | Mean | SD | DE | I |
|---|---|---|---|---|
| 1. I am aware of a problem and why it existed. | 2.07 | 1.04 | Disagree | Less Skilled |
| 2. I can express that a problem exists by analyzing the situation. | 2.67 | 1.15 | Agree | Skilled |
| 3. I can express when there is a need for help or assistance. | 2.58 | 1.16 | Agree | Skilled |
| 4. I can identify some sources of help or assistance. | 2.55 | 1.11 | Agree | Skilled |
| 5. I am willing to seek help or assistance from others. | 2.66 | 1.12 | Agree | Skilled |
| **Composite** | **2.50** | **1.14** | **Agree** | **Skilled** |

***Legend/Norms of Interpretation:*** SD (Standard Deviation), DE (Descriptive Equivalent), I (Interpretation); 1.00-1.75 (Strongly Disagree | Not Skilled); 1.76-2.25 (Disagree | Less Skilled); 2.26-3.25 (Agree | Skilled); 3.26-4.00 (Strongly Agree | Highly Skilled)

Table 6 shows that disengaged students often know when they need help and are willing to seek it, but they have trouble recognizing when a problem exists or understanding its root causes. They rate themselves as less skilled in identifying problems (Mean=2.07; SD=1.04), but feel more confident in analyzing situations (Mean=2.67; SD=1.15), knowing when to ask for help (Mean=2.58; SD=1.16), recognizing where to get assistance (Mean=2.55; SD=1.11), and being willing to seek support (Mean=2.66; SD=1.12). The overall score (Mean=2.50; SD=1.14) suggests they generally feel skilled in help-seeking, but their difficulty in recognizing problems points to a need for interventions that focus on building problem-recognition skills.

**Table 7. Non-Cognitive Skills of Disengaged Students in Terms of Optimism**

| G. Optimism | Mean | SD | DE | I |
|---|---|---|---|---|
| 1. I look forward to what lies ahead of me. | 2.67 | 1.25 | Agree | Skilled |
| 2. I expect positive results from my actions or decisions. | 2.54 | 1.11 | Agree | Skilled |
| 3. I act as if things will work out or will have favorable gains. | 2.64 | 1.17 | Agree | Skilled |
| **Composite** | **2.62** | **1.18** | **Agree** | **Skilled** |

***Legend/Norms of Interpretation:*** SD (Standard Deviation), DE (Descriptive Equivalent), I (Interpretation); 1.00-1.75 (Strongly Disagree | Not Skilled); 1.76-2.25 (Disagree | Less Skilled); 2.26-3.25 (Agree | Skilled); 3.26-4.00 (Strongly Agree | Highly Skilled)

Table 7 shows that disengaged students maintain a steady, moderate level of optimism. They gave 'Agree' and 'Skilled' ratings for all items, including forward-looking mindset (Mean=2.67; SD=1.25), hopeful expectations (Mean=2.64; SD=1.17), and expecting positive results (Mean=2.54; SD=1.11). The lower score for expecting positive results suggests some uncertainty about making changes. The overall mean of 2.62 (SD=1.18) indicates general optimism. Setting goals, imagining success, and celebrating small wins may boost students' confidence, resilience, and proactivity.

**Table 8. Non-Cognitive Skills of Disengaged Students in Terms of Perseverance**

| H. Perseverance | Mean | SD | DE | I |
|---|---|---|---|---|
| 1. I show grit (strength of character) in doing or accomplishing activities/tasks. | 2.83 | 1.19 | Agree | Skilled |
| 2. I have the tenacity (determination) to do and accomplish activities/tasks. | 2.83 | 1.09 | Agree | Skilled |
| 3. I can delay gratification to my work and just be focused on doing or accomplishing it first. | 2.77 | 1.07 | Agree | Skilled |
| 4. I have self-discipline in doing or accomplishing activities/tasks. | 3.02 | 1.07 | Agree | Skilled |
| 5. I have self-control in doing or accomplishing activities/tasks. | 2.79 | 1.08 | Agree | Skilled |
| 6. I have a passion for long-term goals/visions. | 3.04 | 0.99 | Agree | Skilled |
| **Composite** | **2.88** | **1.08** | **Agree** | **Skilled** |

***Legend/Norms of Interpretation:*** SD (Standard Deviation), DE (Descriptive Equivalent), I (Interpretation); 1.00-1.75 (Strongly Disagree | Not Skilled); 1.76-2.25 (Disagree | Less Skilled); 2.26-3.25 (Agree | Skilled); 3.26-4.00 (Strongly Agree | Highly Skilled)

Table 8 shows that disengaged students have a strong base in perseverance, with all items marked as "Agree" and "Skilled." They score highest in passion for long-term goals (Mean=3.04, SD=0.99) and self-discipline (Mean=3.02, SD=1.07), which suggests that they can stay focused and committed. Their grit, tenacity (Mean=2.83; SD=1.19 and 1.09), ability to delay gratification (Mean=2.77; SD=1.07), and self-control (Mean=2.79; SD=1.08) are also strong, though a bit lower. The overall score (Mean=2.88; SD=1.08) indicates a "Agree" and "Skilled" level of perseverance. This means students are resilient, but could benefit from developing stronger goal-setting skills, improved emotional regulation, and greater intrinsic motivation to help them persevere when faced with challenges.

**Table 9. Non-Cognitive Skills of Disengaged Students in Terms of Self-Efficacy**

| I. Self-Efficacy | Mean | SD | DE | I |
|---|---|---|---|---|
| 1. I have self-confidence in doing or accomplishing activities/tasks. | 2.96 | 1.01 | Agree | Skilled |
| 2. I have a sense of perceived control (ability to enact actions) in doing or accomplishing activities/tasks. | 2.31 | 1.29 | Agree | Skilled |
| 3. I have high expectations of the outcomes of my actions or decisions. | 2.94 | 0.93 | Agree | Skilled |
| **Composite** | **2.73** | **1.13** | **Agree** | **Skilled** |

***Legend/Norms of Interpretation:*** SD (Standard Deviation), DE (Descriptive Equivalent), I (Interpretation); 1.00-1.75 (Strongly Disagree | Not Skilled); 1.76-2.25 (Disagree | Less Skilled); 2.26-3.25 (Agree | Skilled); 3.26-4.00 (Strongly Agree | Highly Skilled)

Table 9 shows that disengaged students exhibit a moderate level of self-efficacy, with all items rated as "Agree" and "Skilled." The students have high self-efficacy for completing tasks (Mean=2.96; SD=1.01) and generally expect that their actions will lead to successful outcomes (Mean=2.94; SD=0.93), which is also indicative of their belief in their capabilities and the likelihood of success. However, students scored much lower on perceived control—belief about taking effective actions to impact outcomes (Mean=2.31; SD=1.29)—suggesting they

need to build confidence in their ability to act towards achieving their success. Analyzing the results (Mean=2.73; SD=1.13) reveals that the students rated their self-efficacy level as an overall "Agree" and "Skilled" level. This means that although students were fairly confident, strategically adding interventions, such as skill-building instructional materials, mentorship, and opportunities for incremental successes, can support the student in gaining a stronger sense of control and taking risks toward reaching their goals.

**Table 10. Non-Cognitive Skills of Disengaged Students in Terms of Self-Regulation**

| J. Self-Regulation | Mean | SD | DE | I |
|---|---|---|---|---|
| 1. I have self-control in accomplishing activities/tasks. | 2.95 | 0.99 | Agree | Skilled |
| 2. I can self-direct myself to achieve my set goals/visions. | 3.01 | 0.88 | Agree | Skilled |
| 3. I can evaluate the quality of my work/output/performance. | 2.40 | 1.12 | Agree | Skilled |
| 4. I have self-confidence in doing or accomplishing activities/tasks. | 2.99 | 1.02 | Agree | Skilled |
| **Composite** | **2.84** | **1.04** | **Agree** | **Skilled** |

***Legend/Norms of Interpretation:*** SD (Standard Deviation), DE (Descriptive Equivalent), I (Interpretation); 1.00-1.75 (Strongly Disagree | Not Skilled); 1.76-2.25 (Disagree | Less Skilled); 2.26-3.25 (Agree | Skilled); 3.26-4.00 (Strongly Agree | Highly Skilled)

Table 10 indicates that disengaged students have a strong foundation in self-regulation, as all items were ranked as "Agree" and "Skilled." The students have experienced significant amounts of self-direction in achieving their goals (Mean=3.01; SD=0.88), self-assurance in performing or completing tasks (Mean= 2.99; SD=1.02), and self-control (Mean=2.95; SD=0.99), indicating that they are capable of sustaining concentration and motivation. However, in contrast, the tendency to evaluate the quality of their work or performance is much lower (Mean=2.40; SD=1.12), indicating they may have a competency gap when it comes to self-evaluation or critical reflection. The overall mean (Mean=2.84; SD=1.04) indicated that students identified themselves as "Agree" and "Skilled" in self-regulation. However, a focus of intervention could be on self-evaluation strategies, such as feedback frameworks, rubrics, assessments, or reflective journaling, to encourage students to evaluate their progress and ultimately improve their outcomes.

**Table 11. Summary Results of the Non-Cognitive Skills of Disengaged Students**

| Domains | Mean | SD | DE | I |
|---|---|---|---|---|
| Academic Motivation | 3.28 | 0.73 | Strongly Agree | Highly Skilled |
| Collaboration | 3.22 | 0.78 | Agree | Skilled |
| Conscientiousness | 2.77 | 1.11 | Agree | Skilled |
| Curiosity | 2.66 | 1.22 | Agree | Skilled |
| Emotional Competence | 2.69 | 1.17 | Agree | Skilled |
| Help-Seeking Behavior | 2.50 | 1.14 | Agree | Skilled |
| Optimism | 2.62 | 1.18 | Agree | Skilled |
| Perseverance | 2.88 | 1.08 | Agree | Skilled |

| | | | | |
|---|---|---|---|---|
| Self-Efficacy | 2.73 | 1.13 | Agree | Skilled |
| Self-Regulation | 2.84 | 1.04 | Agree | Skilled |
| **Composite** | **2.85** | **1.08** | **Agree** | **Skilled** |

***Legend/Norms of Interpretation:*** SD (Standard Deviation), DE (Descriptive Equivalent), I (Interpretation); 1.00-1.75 (Strongly Disagree | Not Skilled); 1.76-2.25 (Disagree | Less Skilled); 2.26-3.25 (Agree | Skilled); 3.26-4.00 (Strongly Agree | Highly Skilled)

Table 11 shows that disengaged students score highest in academic motivation (Mean=3.28; SD=0.73) and collaboration (Mean=3.22; SD=0.78), which are their strongest non-cognitive skills. Their help-seeking behavior is much lower (Mean=2.50; SD=1.14), indicating they often struggle to ask for help. Other skills, such as conscientiousness, curiosity, emotional competence, optimism, perseverance, self-efficacy, and self-regulation, fall in the "Agree" and "Skilled" range, with means between 2.62 and 2.88 and standard deviations above 1.0. This points to moderate but uneven abilities in these areas. Overall, disengaged students are strong in motivation and collaboration, but would benefit from support to improve help-seeking and emotional competence. The high standard deviations suggest that skill levels vary widely, so personalized support could help address these differences.

*Number of Disengaged Students Needing Targeted Intervention Based on the Assessment of Their Non-Cognitive Skills*

**Table 12. Number of Disengaged Students Needing Targeted Intervention Based on the Assessment of Their Non-Cognitive Skills**

| Skill Level / Grade Level | Frequency | | | | | Percentage |
|---|---|---|---|---|---|---|
| | Grade 7 | Grade 8 | Grade 9 | Grade 10 | Combined | |
| ***Highly Skilled*** *(3.26-4.00)* | 17 | 18 | 8 | 11 | 54 | 40.30 |
| ***Skilled*** *(2.26-3.25)* | 17 | 17 | 20 | 21 | 75 | 55.97 |
| ***Less Skilled*** *(1.76-2.25)* | 1 | 0 | 2 | 2 | 5 | 3.73 |
| ***Not Skilled*** *(1.00-1.75)* | 0 | 0 | 0 | 0 | 0 | 0.00 |
| **Total** | **35** | **35** | **30** | **34** | **134** | **100.00** |

The assessment of disengaged students' non-cognitive skills in Table 12 shows that the majority (55.97%) are rated as Skilled (2.26–3.25), with a combined total of 75 students across all grade levels, indicating a moderate level of proficiency but room for improvement. Highly Skilled students (3.26–4.00) make up 40.30% (54 students), with Grade 7 and 8 having the highest frequencies (17 and 18, respectively). Only a small fraction (3.73%, 5 students) falls into the Less Skilled category (1.76–2.25), and no students are classified as Not Skilled. Insight: Target interventions to move more "Skilled" students to "Highly Skilled," especially in grades with lower proportions in this category, to maximize the impact and engagement of support programs. From the said list, 80 students identified as less skilled to skilled in their non-cognitive skills were purposively

identified to participate in the targeted intervention aimed at improving and sustaining higher levels of non-cognitive skills among disengaged students.

## DISCUSSION

### *Non-Cognitive Skills of Disengaged Students*

Disengaged students excel in academic motivation and collaboration—their strongest non-cognitive skills—indicating a solid foundation of internal drive and teamwork, yet their help-seeking behavior emerges as a critical weakness, revealing a reluctance to seek support when needed. While other essential skills like conscientiousness, curiosity, emotional competence, optimism, perseverance, self-efficacy, and self-regulation are present at moderate levels, the wide variability across these domains underscores the need for personalized interventions. To maximize engagement and resilience, targeted strategies should focus on strengthening help-seeking behaviors and emotional competence, building on students' existing motivation and collaborative abilities, and addressing individual skill gaps with tailored support.

The findings are consistent with the existing literature, which emphasizes the importance of non-cognitive skills in student success, notably for disengaged learners. Disengaged students displayed significant strengths in academic motivation and collaboration, both of which are associated with social skills and teamwork (Kattan, 2017), yet the significantly lower help-seeking behavior is noted as part of the students' barriers to success, such as poor self-concept or lacking coping mechanisms (Schnitzler, 2021; Brint & Cantwell, 2014). There were moderate and also glaring differences in the non-cognitive skills of perseverance, self-efficacy, and emotional competence, signaling the differences in the non-cognitive development of the poorly engaged student. García (2014) and West et al. (2016) argue that non-cognitive skills are often overlooked in discussions about educational policy. Having high standard deviations also suggests that disengaged students, who are at an increased risk of misbehaving and/or dropping out (Holquist et al., 2020), would be best served by targeted interventions that are contextualized and personalized within the classroom (Khine et al., 2020).

### *Number of Disengaged Students Needing Targeted Intervention Based on the Assessment of Their Non-Cognitive Skills*

An examination of the distribution of disengaged learners across non-cognitive skill levels reveals a discernible pattern. There are no students in the "not skilled" group, and most of our students are in the "skilled" category. In this context, "skilled" indicates that the student demonstrates basic capabilities, but there is still room for growth. We see that many younger students are "highly skilled" at this time, likely due to either early supports or being naturally capable. There are a few students who are rated "less skilled" and may need support. At the school level, schools may wish to focus on advancing "skilled" students to "highly skilled," especially as they progress through higher grade levels. Rather than focusing solely on non-cognitive skills, it is essential to strike a balance by incorporating skill development that emphasizes help-seeking and emotional skills to keep students engaged.

The findings indicate that most disengaged students possess a Skilled level of non-cognitive skills, and some even reach a Highly Skilled level, particularly in lower grades. Only a few disengaged students have less proficient skills. These results are consistent with previous research, which highlights the importance of developmental and experiential factors (O'Neill, 2019; Kattan, 2017). Consequently, focusing on the movement of more students from Skilled to Highly Skilled with explicit, intensive interventions may help balance uneven development in non-cognitive skills and reduce the number of students being disengaged from school. More specifically, such interventions can provide targeted support and opportunities for skill development, which may foster resilience and motivation among disengaged students. Additionally, this may lead to improved academic and behavioral outcomes in schools (Holquist et al., 2020; West et al., 2016).

## CONCLUSIONS AND RECOMMENDATIONS

The results show that disengaged students are usually motivated in their studies and work well with classmates. Still, they could gain a lot from learning how to ask for help. Although some non-cognitive skills are getting better, progress varies from student to student. Because of this, it is important to offer more personalized support that focuses on engagement and resilience. Most disengaged students have basic non-cognitive skills. Many are considered skilled, and some in lower grades are even highly skilled. While only a few students need intensive support, it is important to give Skilled students targeted help so they can become Highly Skilled as they move forward. This will help keep students engaged and increase the program's benefits.

To address these needs, the college's extension project should set up a peer program for disengaged students that builds on their motivation and teamwork skills. All students should take part in workshops about asking for help and managing emotions, and mentoring should be a priority for those with the most uneven non-cognitive skills. Advanced lessons should be created for Skilled students in higher grades. Support should be focused on those who need it most. This approach aims to boost engagement and resilience in a thoughtful way.

## FURTHER STUDY

Further investigations into the non-cognitive skills of students using other parameters and methodologies may be conducted to validate the results and improve the body of knowledge by combining quantitative and qualitative measures for a wider learner population.

## ACKNOWLEDGMENT

The researchers would like to thank the administration of BPSU for supporting the faculty in their research and extension projects, especially in funding the extension project from which this research endeavor originated. Moreover, deepest gratitude is extended to the superintendent of DepEd-SDO City of Balanga, the school principal, teachers, and students of the piloted school for their cooperation and support in conducting the survey, from which the results presented in this research were derived.

**REFERENCES**

ACT Inc. (2014). *Cognitive and noncognitive skills.* https://www.act.org/content/dam/act/unsecured/documents/WK-Brief-KeyFacts-CognitiveandNoncognitiveSkills.pdf

Anderson, D., Martens, H., Baldwin, A., Bruick, T., & Simon, J. (2020). Additive predictive power of non-cognitive factors on the academic performance of special admission students. *Journal of The First-Year Experience & Students in Transition, 32*(1), 59-77, March.

Aryani, F., Wirawan, H., Saman, A., Samad, S., & Jufri, M. (2021). From high school to workplace: investigating the effects of soft skills on career engagement through the role of psychological capital in different age groups. *Education & Training, 63*(9), 1326-1345. https://doi.org/10.1108/ET-03-2021-0087

Brint, S. & Cantwell, A. M. (2014). Conceptualizing, measuring, and analyzing the characteristics of academically disengaged students: Results from UCUES 2010. *Journal of College Student Development, 55*(8), 808-823, November. http://doi.org/10.1353/csd.2014.0080

Cevikbas, M. & Kaiser, G. (2022). Student engagement in a flipped secondary mathematics classroom. *International Journal of Science and Mathematics Education, 20*(7), 1455-1480, October. https://doi.org/10.1007/s10763-021-10213-x

DeAngelis, C. A. (2021). Divergences between effects on test scores and effects on non-cognitive skills. *Educational Review, 73*(4), 503-514.

Egalite, A. J., Mills, J. N., & Greene, J. P. (2016). The softer side of learning: Measuring students' non-cognitive skills. *Improving Schools, 19*(1), 27-40, March. https://doi.org/10.1177/1365480215616313

García, E. (2014, December 2). The need to address noncognitive skills in the education policy agenda. *Economic Policy Institute.* https://www.epi.org/publication/the-need-to-address-noncognitive-skills-in-the-education-policy-agenda/

Gheith, E. & Aljaberi, N. M. (2017). The effectiveness of an interactive training program in developing a set of non-cognitive skills in students at University of Petra. *International Education Studies, 10*(6), 60-71. https://doi.org/10.5539/ies.v10n6p60

Holquist, S. E., Cetz, J., O'Neil, S. D., Smiley, D., Taylor, L. M., & Crowder, M. K. (2020). The "silent epidemic" finds its voice: Demystifying how students view engagement in their learning. research report. *McREL International.* https://eric.ed.gov/?q=disengaged+behavior+of+students&pg=2&id=ED609966

Indeed Editorial Team. (2021, January 5). *Non-cognitive skills: What they are and why they're important.* https://www.indeed.com/career-advice/resumes-cover-letters/non-cognitive-skills

Kattan, R. B. (2017). *Non-cognitive skills: What are they and why should we care?* https://blogs.worldbank.org/education/non-cognitive-skills-what-are-they-and-why-should-we-care#:~:text=Non%2Dcognitive%20skills%20cover%20a,cognitive%20and%20job%2Dspecific%20skills.

Khine, M. S., Fraser, B. J., & Afari, E. (2020). Structural relationships between learning environments and students' non-cognitive outcomes: Secondary analysis of PISA data. *Learning Environments Research, 23*(3), 395-412, October. http://doi.org/10.1007/s10984-020-09313-2

McCombes, S. (2019, May 15). Descriptive research | Definition, types, methods & examples. Article revised on June 22, 2023. *Scribbr.* https://www.scribbr.com/methodology/descriptive-research/

Nam, S., Frishkoff, G., & Collins-Thompson, K. (2018). Predicting students' disengaged behaviors in an online meaning-generation task. *IEEE Transactions on Learning Technologies, 11*(3), 362-375, July-September. http://doi.org/10.1109/TLT.2017.2720738

Nikolopoulou, K. (2022, August 11). What is purposive sampling? | Definition & examples. Revised on June 22, 2023. *Scribbr.* https://www.scribbr.com/methodology/purposive-sampling/

O'Neill, T. (2019). An examination of the influence of theater arts education on the non-cognitive skills and abilities of community college students: A qualitative study of human development. *ProQuest LLC, Ed.D. Dissertation, National American University.* https://eric.ed.gov/?q=non-cognitive+skills+of+disengaged+students&pg=2&id=ED607897

Ranganathan, P. & Caduff, C. (2023). Designing and validating a research questionnaire - Part 1. *Perspectives in Clinical Research, 14*(3), 152-155, July-September. https://doi.org/10.4103/picr.picr_140_23

Saripah, I. & Widiastuti, H. T. (2019). Profile of off-task behavior in primary school students. *Elementary School Forum (Mimbar Sekolah Dasar), 6*(2), 174-184, August. https://doi.org/10.17509/mimbar-sd.v6i2.17571

Schnitzler, K., Holzberger, D., & Seidel, T. (2021). All better than being disengaged: Student engagement patterns and their relations to academic self-concept and achievement. *European Journal of Psychology of Education, 36*(3), 627-652, September. https://doi.org/10.1007/s10212-020-00500-6

Schuelka, M. J., Sherab, K., & Nidup, T. Y. (2019). Gross national happiness, British values, and non-cognitive skills: The role and perspective of teachers in Bhutan and England. *Educational Review, 71*(6), 748-766. https://doi.org/10.1080/00131911.2018.1474175

Victoria State University. (2021). *Identify students at risk of disengaging.* https://www.education.vic.gov.au/school/teachers/behaviour/engagement/Pages/identify-students.aspx

West, M. R., Kraft, M. A., Finn, A. S., Martin, R. E., Duckworth, A. L., Gabrieli, C. F. O., & Gabrieli, J. D. E. (2016). Promise and paradox: Measuring students' non-cognitive skills and the impact of schooling. *Educational Evaluation and Policy Analysis, 38*(1), 148-170, March. https://doi.org/10.3102/0162373715597298

Yamada, S. & Otchia, C. S. (2022). Differential effects of schooling and cognitive and non-cognitive skills on labour market outcomes: The case of the garment industry in Ethiopia. *International Journal of Training and Development, 26*(1), 145-162, March. https://doi.org/10.1111/ijtd.12252