

WELL-BEING AND PERFORMANCE OF THE 21ST CENTURY SECONDARY EDUCATION LEARNERS

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ABSTRACT: Prioritizing well-being is one way to nurture the cognitive development of learners. The study aimed to evaluate the well-being of secondary learners in terms of cognitive, psychological, physical, social, and material dimensions. Also, this study determines the academic performance of learners in their subject grades/GPA and National Achievement Test. Using descriptive-correlational and causal research design, this study was participated by 1,609 learners from selected schools of the City Divisions of Bukidnon, Philippines. A modified PISA well-being questionnaire (2016) was used and undergoes content and face validity through Delphi and pilot testing with Cronbach Alpha of .792. The study results revealed that all dimensions are positively professed as vital in students' well-being; however, the social dimension is less likely to be addressed among the five factors. Also, only four well-being dimensions, namely; cognitive, psychological, social, and material dimensions, are significantly highly correlated to learners' academic performance with R-values of 0.240, 0.230, 0.082, and 0.184, respectively. One of the ultimate goals of this study is to develop an intervention program for well-being and performance of learners through causal modelling.

KEY WORDS: Well-being, Academic Performance, National Achievement Test

1. INTRODUCTION

The Philippine educational system is placed under the spotlight with the recent local and international student assessments. The National Achievement Test (NAT) in 2017 showed that Filipino learners have low proficiency in Science, Math, and English. This result is further aggravated by the latest findings from the Program for International Student Assessment (PISA), observing that Filipino students placed last among 79 participating counties (Hernando-Malipot, 2019). The data strongly suggest a comprehensive assessment of performance down to the grassroots level in secondary education.

Sources from the Department of Education (DepEd) showed specific secondary grade levels struggling in the National Achievement Test (NAT). It was observed that the performance of Grade 6 students in the NAT had been steadily declining in the last three years, placing them at the "low mastery" descriptive level of DepEd. Also, the 2018 NAT results showed that for the third straight year, the national average mean percentage score (MPS) of the Grade 6 continued its downward trajectory at 37.44. This data marks the weakest performance in the Philippines' standardized examination (Almerino, Ocampo, Abellana, Almerino, Mamites, Pinili, Tenerife, Sitoy, Abelgas, & Peteros, 2020). Although the Grade 10 MPS improved by 0.51 over scores in 2017, their NAT results still fall under the "low mastery" level. Assessment must be narrowed down to Grades 6 and 10 to comprehensively evaluate factors and competencies affecting the students' NAT results.

In detail, there are five (5) areas and competencies evaluated in the NAT; these are embedded in the subjects Science, Mathematics, English, Filipino, and AralingPanlipunan. Under the Restructured Basic Education Curriculum, the five subjects facilitated secondary students' lifelong learning skills (UNESCO, 2011). The DepEd Secretary further emphasized that expectations for learning outcomes are no longer confined to reading, writing, and counting. Aside from lifelong learning skills, the 21st-century skills in the K to 12 curricula are not only about mastery of concepts and subject matter; it is about digital literacy and acquisition of problem-solving and critical thinking skills (DepEd, 2019). These skills are assessed in the National Achievement Test, providing observational information on the academic achievement level of secondary learners and their strengths and weaknesses in major subjects.

In light of this reality, DepEd acknowledged the learners' challenges and the secondary education system as a whole. DepEd saw a silver lining in this scenario, as this will serve as a wake-up call to all education stakeholders to work together towards achieving quality education for all (Manila Bulletin, 2019). Therefore, the State Universities and Colleges (SUCs) are encouraged to participate in the evaluation of basic education learners to assess their skills and needs holistically. The evaluation is grounded on the reality that Higher Education Institutions (HEIs) are recipients of secondary students, who are expected to demonstrate basic education competencies.

Holistic evaluation of learners' performance looks at various factors. One factor is the learners' well-being. Well-being is defined as "a dynamic state characterized by students experiencing the ability and opportunity to fulfill their personal and social goals (OECD, 2016). It encompasses multiple dimensions of students' lives that include cognitive, psychological, physical, social, and material which can be measured through subjective and objective indicators such as competencies, perceptions, expectations, and living

conditions. This definition emphasizes the multidimensionality of students' well-being, which encompasses both students' states and outcomes, as well as the developmental processes that may act as risk or protective factors shaping well-being in students' life. However, as context-dependency comes into play, students' responses on their level of well-being are closely tied with the specific circumstances experienced at home and at school at the time of the Program for International Student Assessment (PISA) test.

The OECD (2016) further observed that learners' academic performance is only one aspect of assessing student achievements and well-being at school. The PISA was conducted to holistically evaluate students' well-being in positive and fulfilling life experiences (OECD, 2016; Polland and Lee, 2003). Salami (2010) further emphasized that emotional intelligence, self-efficacy, and psychological well-being are essential resources for enhancing students' learning, success, and quality education. Nonetheless, OECD (2016) strongly highlighted the educational system's role in promoting students' overall development and quality of life. At present, there are no existing studies on well-being and academic achievement, particularly among Filipino students. Hence, the researcher sees the need to conduct such a study.

In application, this study was conducted to evaluate the students' well-being and academic performance of secondary learners in Basic Education in Bukidnon in terms of cognitive, psychological, physical, social, and material dimensions. It also aimed to determine the academic performance of secondary learners in their subject grades/GPA and NAT results. The relationship between academic performance and well-being dimensions of secondary learners was assessed, and identify which dimensions affect the academic performance of learners. As an output of the study, an intervention program to enhance the performance of secondary learners in the new normal setting was developed.

Theoretical Framework

The study was anchored on Maslow's (1954) Hierarchy of Needs. In his theory, higher needs in the hierarchy emerge when people feel they have sufficiently satisfied the previous needs. It is further stated that people are motivated to achieve certain needs and take precedence over others. The needs are categorized into physiological or basic needs, psychological, and fulfillment needs.

Physiological needs are the biological requirements for human survival, such as food, air, water, shelter, clothing, and sleep. It also includes safety and security. It is believed that without these basic needs, the human body cannot function fully. It is the most important as all the other needs become secondary until these needs are met. The psychological needs include love and belongingness, and esteem needs. These can be fulfilled by family and society, friends and work. It also includes having interpersonal relationships that motivate one's behavior. More so, individuals desire mastery, achievement, and independence. Maslow indicated that the need for respect or reputation is most important for children and adolescents and precedes real self-esteem or dignity. Finally, self-fulfillment needs refer to self-actualization. It realizes a person's potential, self-fulfillment, seeking personal growth, and peak experiences. Individuals at this level have the desire to accomplish everything that they can, to become the most that they can be. These needs may also be considered internal and external factors.

Maslow's theory illustrated satisfaction of needs to achieve positive well-being. In the case of well-being among learners is captured in the study conducted by OECD in 2016. PISA (OECD, 2016) has provided one of comprehensive portraits of students' well-being by looking into the students' experiences, their struggles, future expectations, how they relate to their peers, parents, and teachers, and their satisfaction with their life as a whole. However, their study is concentrated on the well-being of 15-year-old students, who are in their key transition phase of physical and emotional development. The OECD (2016) added that the key competencies of an individual are to lead a meaningful life, feel well, develop decision-making skills, and have psychological coping mechanisms, self-awareness, and relationship building. These concepts are embedded in the framework for the Analysis of Student Well-being (ASW) in the PISA 2015 study.

The multidimensional definition of students' well-being used by PISA 2015 stresses the role of both objective aspects – material conditions that ensure students' basic human needs and rights -and subjective aspects like how students evaluate their life, their feelings, and emotions (Alatartseva and Barysheva, 2015). This multidimensional approach to students' well-being is well aligned with the one used in the OECD's Better Life Initiative (OECD, 2015) by bringing together students' academic performance with what they think about the quality of their lives both in and outside school.

There are five dimensions of students' well-being captured in PISA 2015, namely Cognitive, Psychological, Physical, Social, and Material. Each of the well-being dimensions was defined and adopted in this study. Specifically, cognitive well-being refers to the skills and foundations students have to participate effectively in today's society as lifelong learners, effective workers, and engaged citizens. It comprises students' proficiency in academic subjects, their ability to collaborate with others to solve problems, and their sense of mastery in school subjects. It also incorporates actions and behaviors that may promote the acquisition of knowledge, skills, or information that may aid them when they are faced with new, complex ideas and problems

(Pollard and Lee, 2003). Psychological well-being, on the other hand, looks into the students' evaluations and views about life, their engagement with school, goals, and ambitions they have for their future.

In addition, physical well-being refers to students' health status, engagement in physical exercise, and the adoption of healthy eating habits (Statham and Chase, 2010). On the other hand, social well-being determines the quality of students' social lives (Rath & Halter, 2010), including their relationship with their family, peers, and teachers (positive or negative), and how they perceive their social school life, either positive or negative (Pollard and Lee, 2003). While, material well-being observes the material resources available, making it possible for families to better provide for their children's needs and for schools to support students' learning and healthy development.

In application, the study posits that students' performance in the enhanced education curriculum and National Achievement Test (NAT) results from the interplay of well-being such as physical, material, social, psychological, and cognitive, as shown in Figure 1.

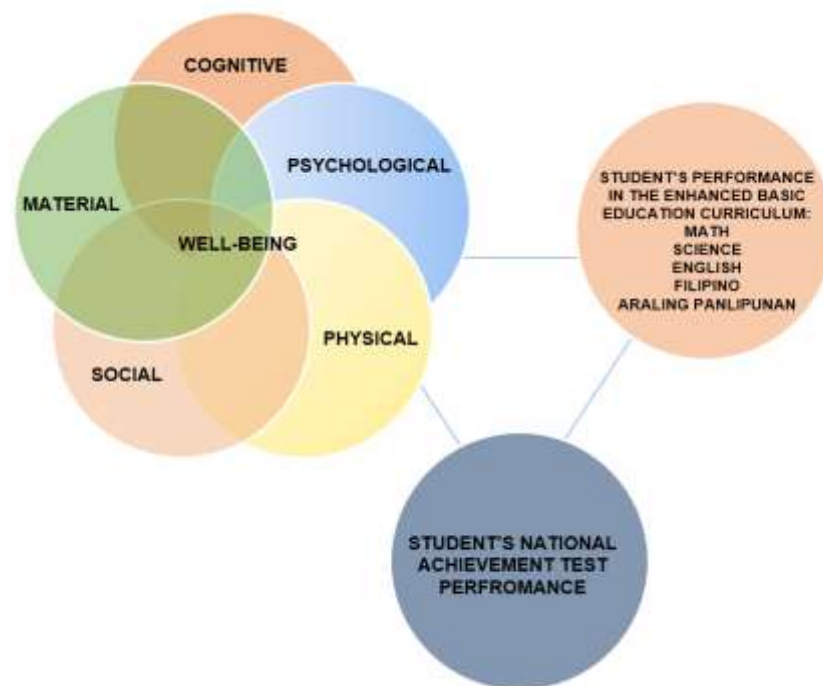


Figure 1: Interplay of variables in the study

2. METHODOLOGY

The study is quantitative, utilizing descriptive-correlational and causal research design. A descriptive method describes the students' well-being and academic performance among the five (5) subjects: Science, Mathematics, English, Filipino, and AralingPanlipunan. A correlational design was used to assess the relationship between academic performance and well-being dimensions of secondary students. At the same time, the causal research design was also utilized to determine the nature of the relationship between variables and the effect predicted in the study.

Data Gathering Procedure

The study was conducted in the Department of Education, Bukidnon division. Purposive sampling with 20-25% of the student population per identified division was utilized. In terms of school size, the study looked into whether schools fall under the small, medium, or large categories. Table 1 shows the number of schools and total number of respondents per division.

Table 1 No of Respondents per School and Division

Division	Number of Schools	Total Number of Respondents
Division M	5	897
Division V	4	712

Total	1609
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The inclusion criteria involved Grade 10 and Grade 12 learners who have signed the assent form. For the exclusion criteria, respondents from the Grade 10 and Grade 12 who did not sign the assent form were not included in the study. Moreover, the respondents were asked to read the Bisayan-translated assent form. Specific items include voluntary participation, and the participants were asked to withdraw anytime if they felt uncomfortable during the survey.

A modified PISA well-being questionnaire (2016) was used for the study. The content and face validity were conducted through Delphi and pilot testing. There were three (3) experts in the Delphi procedure. One is a guidance counselor from DepEd; another is a licensed psychologist, and one expert is a researcher and a psychometrician. The experts were given an e-copy of the questionnaire and were asked to evaluate and suggest appropriate indicators to assess students' well-being in secondary education. The experts' views were done independently, without others influencing their evaluations. A statistician was also consulted to evaluate the questionnaire and process in the conduct of the study.

The pilot testing was done in a State University Secondary Laboratory. The participants were randomly selected from grades 8 and 12. A total of fifty respondents were selected and took part in the study. It started with gaining consent from the school administrators and students through email, Facebook, or cellphone calls. The purpose of the communication was to seek consent/assent for the study's pilot testing, after which the questionnaire was given through a Google link. Retrieval of responses was done online and was subjected to the reliability test. The pilot testing yielded a Cronbach Alpha of .792, which means that the tool is reliable for the study.

3. ANALYSIS OF DATA

The data were analyzed using mean and standard deviation for objectives 1 and 2, while correlational analysis was utilized for objective 3. Regression analysis was used for objective four, and finally, causal modelling was employed for objective five. The study also utilized the following qualitative statement and scoring for the well-being questionnaire:

Range	Descriptive Rating	Qualitative Interpretation
3.51-4.00	Strongly agree	Highly Positive
2.51-3.50	Agree	Positive
1.51-2.50	Disagree	Negative
1.00-1.50	Strongly disagree	Highly Negative

For the respondents' academic performance, it was generally described as very satisfactory based on the DepEd Order #8, series 2015:

Range	Qualitative Description
90-100	Outstanding
85-89	Very satisfactory
80-84	Satisfactory
75-79	Fairly satisfactory
<75	Did not meet expectations

Ethical Considerations

The study adhered to the ethical requirement of the university. Since human participation was involved in the study, all ethical guidelines were followed, and issues were addressed appropriately. The study sought approval from NEDA, DepEd Regional and Division offices, and identified principals. After approval, virtual orientation was conducted with identified Basic Education school principals.

The researchers explained essential details such as the study's objectives and methodology to identified principals during the orientation. The conduct of orientation begins once the participants verbalized understanding and signed the consent/assent form. Since the participants belonged to the vulnerable group, assent forms were utilized. Specifically, the assent forms required not only students' signatures but also parents' consent. The documents were distributed per schools by division. The form was given to identified Grade 10 and Grade 12 learners, together with the distribution of modules by respective advisers. It took the researchers

two weeks to retrieve assent forms, as schools had their retrieval schedule. Only those students who signed the assent forms were included in the study. These students were then given a Well-being questionnaire.

Moreover, the participants' names, school divisions, and school names were not revealed to provide anonymity and confidentiality. No personal data was also divulged in the study. The participants were informed that they could withdraw from the study during data gathering. The principals were likewise requested to notify the grade adviser to conduct the survey and gather the data needed for the study. Overall, informed consent and assent were utilized to ensure the participants' privacy, confidentiality, anonymity, and safety.

The researchers found the issue of confidentiality among respondents as part of the risk in the paper. The risk was addressed using an assent form before the conduct of the survey. The benefits of this study include identifying factors that may have contributed to the performance of secondary learners. Also, the school received an intervention program that enhances secondary learners' performance in the new normal setting. In terms of incentive or compensation, no remuneration was given to the respondents.

4. RESULTS AND DISCUSSION

The wellbeing of Secondary Learners

The Organization for Economic Cooperation and Development's (OECD) Programme for International Student Assessment (PISA) identified five dimensions of wellbeing: cognitive, psychological, physical, social, and material. Each dimension is different but closely related and plays a significant part in determining the students' wellbeing and can either be an outcome and an enabling condition concerning other dimensions. Ultimately, they have students' overall evaluations of the quality of their lives.

Cognitive Dimension

Table 1 revealed that the students' cognitive wellbeing is positive, with an overall mean of 3.07. These results suggest that the students have the skills and foundations to participate effectively in today's society as lifelong learners, effective workers, and engaged citizens. The result showed that the statement "I enjoy finding solutions to problem tasks." has the highest mean of 3.52, indicating a highly positive response among other indicators. The findings suggest that the students put high regard in activities that challenge their ability to think and find solutions to problems assigned to them. These may include major activities in school, various tasks and assignments, and other academic-related responsibilities.

Similarly, Stipek (2002) observed that when a teacher provides intellectually challenging tasks, it presses students for deeper understanding. The given tasks support or enhance students' autonomy, resulting in higher engagement and more positive emotions. The researchers also found that students were more likely to disengage and apprehensive about making mistakes when teachers focused only on academic content. In a classroom setting, it is observed that students are more likely to enjoy challenging roles that can bring out their ability to express ideas, opinions and think of solutions through classroom activities such as debate, buzz sessions, and the like. This observation is affirmed by Guthie&Wigfield (2000) that cognitive engagement is enhanced when students actively discuss ideas, debate points of view, and critique each other's work.

Further, the result also showed that the statement "making an effort in my subject(s) is worth it because this will help me in work I want to do later" has the lowest mean of 2.76. This suggests that the students do not believe in putting effort into their subjects. The lack of idea on the kind of work they will have in the future may have contributed to the student's attitude towards their subjects.

Table 1 Cognitive Wellbeing of secondary learners

COGNITIVE DIMENSION	MEAN	DESCRIPTIVE RATING	QUALITATIVE INTERPRETATION
I enjoy finding solutions to problem tasks.	3.52	Strongly Agree	Highly Positive
I like reading	3.31	Agree	Positive
I can easily understand how ideas are connected.	3.30	Agree	Positive
I can perform the subject tasks easily.	3.22	Agree	Positive
I enjoy acquiring new knowledge.	3.20	Agree	Positive
My subjects prepare me for my chosen career.	3.07	Agree	Positive
I enjoy learning new topics.	2.91	Agree	Positive

I am always interested in all subjects.	2.89	Agree	Positive
Many things I learn in my subject(s) will help me to get a job.	2.80	Agree	Positive
I am happy working on the assigned task.	2.77	Agree	Positive
Making an effort in my subject(s) is worth it because this will help me in the work I want to do later on.	2.76	Agree	Positive

OVERALL MEAN	3.07	Agree	Positive
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LEGEND: 3.51- 4.00 - Strongly agree; 2.51-3.50- Agree; 1.51-2.50 – Disagree; 1.00-1.50 - Strongly disagree

Psychological Dimension

Table 2 presents the overall mean of psychological dimension is 3.30, interpreted as positive psychological well-being of students' evaluations and views about life, their engagement with school, and the goals and ambitions. This data implies that students' well-being's psychological dimension promotes students' evaluations and views about life, school engagement, and the goals and ambitions for the future (Borgonovi and Pál, 2016). Based on the result, the psychological dimension of students' well-being, one statement is perceived as highly positive: "I see myself as a person with purpose/goals" with a mean of 3.56. This means that the students find themselves having purpose or goals in life. Having a purpose in life will help them achieve their ambitions and whatever they want to become in the future.

As observed, young people value the opportunity to discuss the future. Schools can provide such opportunities to facilitate their making sense and meaning of their world and lives (Australian Youth Forum, 2008). Similarly, Stegger (2012) sees life as a "web of connections, understandings, and interpretations" that may help students comprehend their experiences and formulate plans to realize their desired futures. Thus, the higher the learners' psychological dimension, the more aware they are of their views in life, engagement with schools, and aspirations.

In terms of curriculum, Fielding & Bragg (2003) observed that most current curriculum initiatives focus more on the importance of an authentic curriculum to ensure relevance, meaning, or "connectedness" to students' lives. The importance of students' voices in giving a sense of meaning and connectedness to the curriculum is continuously emphasized (Johnson & O'Brien, 2002). The same study has recognized the significance of providing student "voice." It has made learners more engaged in learning and committed to building more positive relationships with their teachers. A strong theme that emerged from the National Safe Schools Best Practices Grants Program was that project effectiveness and satisfaction was high in schools where students had significant ownership of the projects (McGrath, 2007).

In addition, Black (2007) spotted that one of the features of high-performing schools is their initiatives that allow engagement, participation, and students' active voice in the classroom. This finding suggests the establishment of participation initiatives in school and community projects. One example is the establishment of Student Action Teams that creates genuine and meaningful contexts. Students have investigated real concern issues and have taken action to bring about change both in their school and in the community (Holdsworth, 2002). In such initiatives, students worked in a team to identify and tackle a school or community issue, research it, make plans and proposals about issues confronting them.

Table 2. Psychological well-being of secondary learners

PSYCHOLOGICAL DIMENSION	MEAN	DESCRIPTIVE RATING	QUALITATIVE INTERPRETATION
I see myself as a person with purpose/goals.	3.56	Strongly agree	Highly Positive
I want to be the best in whatever I do.	3.44	Agree	Positive
I want to be able to select from among the best opportunities available when I graduate	3.38	Agree	Positive
I want to give my best effort in all my subjects.	3.16	Agree	Positive
I want to be one of the best students in my class	3.16	Agree	Positive
I can easily accept failures.	3.10	Agree	Positive

OVERALL MEAN	3.30	Agree	Positive
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LEGEND: 3.51- 4.00 - Strongly agree; 2.51-3.50- Agree; 1.51-2.50 – Disagree; 1.00-1.50 - Strongly disagree

Physical Dimension

The students' physical dimension, as reflected in Table 3 with an overall mean of 2.86, is considered positive. It suggests that students have considered health status, engagement in physical exercise, and healthy eating habits as an essential aspects of their lives. As shown in the table, all of the indicators were perceived as positive by the respondents. The tabular value further revealed that exercising before and after school has the highest mean among the indicators which is 3.08.

The data shows that majority of the respondents recognized the importance of exercise in their academic life. Physical activities such as various exercises and the like are introduced in school, particularly in Mathematics, Arts, Physical Education, and Health (MAPEH) subjects, which may have led the students to give importance to their physical health. The OECD (2016) sees physical fitness as a prerequisite for academic achievement and social and emotional stability. In addition, students' health and fitness levels depend on their socio-economic background and schooling just as much as students' academic achievement does. Also, schools' facilities and communities' local activities play a vital role in students' physical well-being. Thus, schools must create initiatives to ensure the physical well-being of students is addressed.

According to OECD (2016), effective physical education programs require schools to have infrastructures like gyms or partnerships with local facilities. The program allows students to choose from various activities and sports and use different parts of the body and brain in a team or individual sports that focus more on endurance, tactic, and body strength. On the other hand, Bailey (2006) believes that education policymakers, practitioners, students, and their families need to recognize that physical education is not in competition with academic classes but are complementary. In some countries, parents, students, and teachers worry that physical education in school takes away students' time and energy, resulting in lower academic performance (Bailey, 2006). However, a comprehensive review by Bailey (2006) shows that physical education and individual and collective sports are associated with better physical, emotional, social, cognitive, and healthy development overall.

Also, based on the result, the statement “I do vigorous physical activities per day that made me sweat and breathe hard” has the lowest mean of 2.61. This implies that although the students value exercise, their physical activities may not have been done every day, in the case of their physical education subject, which is recited as scheduled.

Table 3. Physical Dimension of students' wellbeing.

PHYSICAL DIMENSION	MEAN	DESCRIPTIVE RATING	QUALITATIVE INTERPRETATION
I exercise or practice sport before going to school	3.08	Agree	Positive
I exercise or practice sport after leaving school	3.06	Agree	Positive
I eat healthy breakfast before going to school	2.85	Agree	Positive
I eat healthy dinner.	2.83	Agree	Positive
I engage in moderate physical activities for a total of at least 60 minutes per day	2.71	Agree	Positive
I do vigorous physical activities per day that made me sweat and breathe hard	2.61	Agree	Positive
OVERALL MEAN	2.86	Agree	Positive

LEGEND: 3.51- 4.00 - Strongly agree; 2.51-3.50- Agree; 1.51-2.50 – Disagree; 1.00-1.50 - Strongly disagree

Social Dimension

Table 4 reveals the five components of social dimensions summarized based on their pooled means: Cooperative learning spirit (mean=3.25; Positive), Parental support and communication (mean=3.17; Positive), Students' perception of their teachers' attitudes (mean=3.13; Positive), sense of belonging at school (mean=2.91; Positive) and Bullying from the victim perspective (mean=1.86; Negative). Interestingly, among the five

components, only parental support, and communication were perceived to be highly positive. Specifically, the indicator, "My parents support me when I am facing difficulties at school," is perceived by the respondents as highly positive in their well-being. This finding shows that students highly consider how parents provide support and assistance, especially during their difficult times in school.

According to Gale, Deary, and Stanfford (2013), students' well-being is not just about feeling happy and achieving good grades in school but also about being engaged with life and other people. Further, Helliwell and Putnam (2004) see social connections as students' social relationships with teachers, other students, interactions, and the school climate. These factors foster a sense of belonging to school – the feeling of being accepted, respected, included, and socially supported in the school environment (Goodenow, 1993) – or a sense of discrimination and loneliness. The sense of belonging at school correlates with life satisfaction measures and experienced emotional well-being (Gilman and Anderman, 2006; Millings, Buck, Montgomery, Spears & Stallard, 2012). Moreover, prior research has also found that student-teacher relationships and classmate support are significant predictors of student adjustment and adolescent life satisfaction (Reddy, Rhodes and Mulhall, 2003; Suldo, Shaffer, & Riley 2008).

In addition, students who perceive their school as supportive more frequently report positive health behaviors, health, and well-being outcomes (Ravens- Sieberer, Kökönyei, and Thomas, 2004; Due et al., 2003; Freeman, Anderman, & Jensen, 2009; Vieno, Perkins, Smith & Santinello, 2007). Similarly, students who indicate that they like school are less likely to be victims of bullying (Harel-Fisch et al., 2011), take fewer sexual risks (Dias, Matos and Gonçalves, 2005), and less frequently report drug use (Fletcher, Bonell, and Hargreaves, 2008). In contrast, disliking school is related to an increased risk of dropping out (Archambault et al., 2009) and a higher prevalence of health problems (Shochet et al., 2006).

Specifically, victims of physical or mental bullying are more likely to exhibit poor school performance or to drop out of the education system (Currie et al., 2012; Glew, Fan, Katon, Rivara & Kernic 2005); to experience depression, anxiety, loneliness and a range of psychosomatic symptoms (Nansel et al., 2001; Due et al., 2005); and to abuse drugs and alcohol (Molcho, Harel and Dina, 2004). Also, adolescents who have recently been bullied tend to report subjective well-being levels substantially below the population average. This research suggests that the effects of bullying on well-being are far stronger than the impact of many other contextual factors (The Children's Society, 2015).

School-based bullying prevention programs are very often successful (Currie et al., 2012). Results from major well-being and health studies further suggest that reducing and preventing bullying could be strongly linked to improving students' well-being in adolescence and adulthood (Ttofi et al., 2011). A study conducted by) revealed that positive peer relationships are more likely when students are directly taught the skills for empathic responding and pro-social behavior and when students have opportunities to practice them in authentic and naturally-occurring settings over time rather than simply being urged to use them. In addition, the conduct of prevention programs that focus on teaching social skills and social perspective has shown considerable promise in promoting student well-being and reducing anti-social and bullying behaviors (Nansel, Overpeck, & Pilla, 2001). At the same time, systematic programs for teaching social skills and empathy can help to reduce aggression and contribute to higher levels of achievement and resilience (Catalano, Mazzab, Harachia, Abbott, Haggerty, & Fleminga, 2003; Hawkins et al., 2001; Wentzel, 2003; Wentzel & Watkins, 2002).

Several research studies have also provided evidence for positive associations between socio-emotional skills and both social and academic success. A study conducted by Lechner, Anger, and Rammstedt (2019), using the Big Five personality dimensions as a guidepost, showed that socio-emotional skills contribute to educational outcomes such as academic success and educational transitions. Márquez, Martín & Brackett (2006) also used a self-report instrument to assess the socio-emotional skills of high school students and found that the results predicted students' final academic results. A student's level of social competence and their friendship networks has also been predictive of their later academic achievement (Caprara et al. 2000, Wentzel & Caldwell 1997). Elias, Zins, Graczyk & Weissberg (2003) also argued that SEL curriculum programs are a high priority for education. Elias & Weissberg (2000) explain it thus:

“Social and emotional development are the fundamentals of human learning, work, and accomplishment. Until this is given proper emphasis, we cannot expect to see progress in making schools safer, drug-free, with fewer students who don't care and want to drop out, or with better tolerance of people who are different”.

Table 4. Social dimension of students' wellbeing

SOCIAL: SCHOOL	A. SENSE OF BELONGING AT SCHOOL	MEAN	DESCRIPTIVE RATING	QUALITATIVE INTERPRETATION
	Other students seem to like me.	3.09	Agree	Positive
	When I am in school I feel I belong.	3.08	Agree	Positive
	I make friends easily at school	2.86	Agree	Positive

I feel lonely at school.*	2.19	Disagree	Negative
When I am at school I feel left out.*	2.10	Disagree	Negative
SUB-MEAN	2.66	Agree	Positive
SOCIAL: B. COOPERATIVE LEARNING SPIRIT	MEAN	DESCRIPTIVE RATING	QUALITATIVE INTERPRETATION
I take into account what others are interested in.	3.40	Agree	Positive
I prefer group tasks over individual tasks.	3.39	Agree	Positive
I am a good listener.	3.25	Agree	Positive
I find that teams make better decisions than individuals.	3.18	Agree	Positive
I enjoy seeing my classmates achieve tasks.	3.10	Agree	Positive
Teamwork raises my own efficiency	3.01	Agree	Positive
I am open to different perspectives.	2.96	Agree	Positive
SUB-MEAN	3.18	Agree	Positive
SOCIAL: C. STUDENTS' PERCEPTION OF THEIR TEACHERS' ATTITUDES	MEAN	DESCRIPTIVE RATING	QUALITATIVE INTERPRETATION
Teachers motivates me to do well in class.	3.35	Agree	Positive
Teachers give fair treatment to all learners.	3.13	Agree	Positive
Teachers gave me the impression that I am less smart than I really am.*	2.17	Disagree	Negative
Teachers ridiculed me in front of others.*	1.86	Disagree	Negative
SUB-MEAN	2.63	Agree	Positive
SOCIAL: D. BULLYING FROM THE VICTIM PERSPECTIVE	MEAN	DESCRIPTIVE RATING	QUALITATIVE INTERPRETATION
For the past 12 months I got picked on by other students.*	2.08	Disagree	Negative
Other students purposely make me feel left out. *	2.07	Disagree	Negative
For the past 12 months other students left me out of things on purpose. *	2.06	Disagree	Negative
For the past 12 months I got called names by other students. *	2.02	Disagree	Negative
Other students spread nasty rumors about me. *	1.95	Disagree	Negative
I got hit or pushed around by other students. *	1.89	Disagree	Negative
My belongings were taken away or destroyed by other students. *	1.88	Disagree	Negative
I was threatened by other students. *	1.86	Disagree	Negative
SUB-MEAN	1.98	Disagree	Negative
SOCIAL: E. PARENTAL SUPPORT AND COMMUNICATION	MEAN	DESCRIPTIVE RATING	QUALITATIVE INTERPRETATION
My parents support me when I am facing difficulties at school.	3.51	Strongly agree	Highly Positive
My parents encourage me to be confident.	3.31	Agree	Positive
My parents are interested in my school activities.	3.31	Agree	Positive
My parents support my educational efforts and achievements.	3.18	Agree	Highly Positive
My parents know all of my friends at school.	3.06	Agree	Positive
I talk to my parents before going to school	2.99	Agree	Positive
I talk to my parents after leaving school	2.98	Agree	Positive
SUB-MEAN	3.19	Agree	Positive
OVERALL MEAN	2.73	Agree	Positive

* - Negatively stated items, reversed scoring upon getting the overall mean

LEGEND: 3.51- 4.00 - Strongly agree; 2.51-3.50- Agree; 1.51-2.50 – Disagree; 1.00-1.50 - Strongly disagree

Table 5 below shows the material dimensions of students' well-being. The overall mean response is 3.09, which is positively perceived by the participants. The statement with the highest mean of 3.24 is "I have access to the Internet." This data illustrates students' perceived need in the new normal, where internet connectivity is highly essential. Moreover, the result adheres that material resources make it possible for families to better provide for their needs and for schools to support students' learning and healthy development (Borgonovi and Pál, 2016). However, reality also tells us that households who live in poverty find it difficult to ensure that their

children have access to the educational and cultural resources they need to thrive in school and to realize their potential (OECD, 2013).

According to SES Panel (2012), students' material living conditions are measured by their family's socioeconomic status, which constitutes an essential determinant of overall well-being (Rees, Pople, and Goswami, 2011). Children from highly affluent families also tend to report better health (Torsheim et al., 2004; Richter, Gilber & McEwan, 2009), and students' basic needs and desires are more likely to be met when they live in rich nations wealthy (Diener et al., 2010). Moreover, the literature indicates that poverty is perceived as a crucial limiting factor for students' well-being (Goswami, 2014).

Research indicates that child-reported material deprivation explained a larger proportion of the variation in children's subjective well-being than overall family socioeconomic status (The Children's Society, 2015). These findings point to the importance of subjective socioeconomic status (Diemer et al., 2012); Quon and McGrath, 2014), which has not received as much attention as its objective counterpart.

Table 5. Material Dimension of students' wellbeing

MATERIAL	MEAN	DESCRIPTIVE RATING	QUALITATIVE INTERPRETATION
I have access to the Internet.	3.24	Agree	Positive
I have functional radio or television to enhance/facilitate my learning.	3.14	Agree	Positive
I have electronic gadgets (computer, smart phone and the like) to complete my school work.	3.12	Agree	Positive
I have educational materials such as books, a dictionary and other technical references	3.07	Agree	Positive
I work to get paid before going to school.	3.04	Agree	Positive
I have a desk and a quiet place to study to help me stay focus.	3.02	Agree	Positive
I do household chores or take care of other family members before and after leaving school.	2.99	Agree	Positive
OVERALL MEAN	3.09	Agree	Positive

LEGEND: 3.51- 4.00 - Strongly agree; 2.51-3.50- Agree; 1.51-2.50 – Disagree; 1.00-1.50 - Strongly disagree

Table 6, on the other hand, presents a summary of the different dimensions of students' well-being. The psychological dimension has the highest mean of 3.30, and the social aspect has a mean score of 2.73. Although all dimensions are positively professed as vital in the students' wellbeing, the social dimension is perceived to be less likely addressed among the five factors. According to the OECD (2016), the teenage years represent a period of intense social exploration, where discovering one's identity, acceptance, and validation from peers/community is highly regarded. Thus, social interactions among teenagers are critical indicators of their well-being (Lippman, Moore, & McIntosh, 2011).

The schools are generally considered one of the social centers. Hence, schools must not only focus on student's academic achievement but also provide a milieu for students' social engagement. OECD (2016) recommended building students' capacity to develop positive relationships with peers and teachers. It is believed that social skills allow students to participate actively and engage in any group work or learning activity that involves cooperation with their peers.

Table 6. Summary of Students' wellbeing

WELLBEING DIMENSIONS	MEAN	DESCRIPTIVE RATING	QUALITATIVE INTERPRETATION
PSYCHOLOGICAL DIMENSION	3.30	Agree	Positive
MATERIAL DIMENSION	3.09	Agree	Positive

COGNITIVE DIMENSION	3.07	Agree	Positive
PHYSICAL DIMENSION	2.86	Agree	Positive
SOCIAL DIMENSION	2.73	Agree	Positive
OVERALL MEAN	3.01	Agree	Positive

Academic Performance of Secondary Learners

For students' academic performance, five subjects were considered since these were the baseline subjects as part of the National Achievement Test (NAT). As shown in Table 7, the English subject has the highest mean (89.10) among students compared to Mathematics with the least average of 86.58; however, all subjects were performed very satisfactorily. This data means that the respondents' academic performance is generally described as very satisfactory based on the DepEd Order #8, series 2015.

Although the findings showed that students have a very satisfactory ratings, it also illustrates that they find difficulty in Mathematics and Science compared to other subjects. The data somehow explains why learners in the Trends in International Mathematics and Science Study (TIMSS, 2019) are the lowest in mathematics and science. The report of TIMSS shows that only one percent of Filipino students reached the high benchmark in Mathematics. Also, around six percent earned the intermediate benchmark, and about 19 percent of them finished in the low benchmark, which shows they possess only some basic mathematical knowledge (CNN, 2020). Meanwhile, in Science, 13 percent of Filipino students were in the low benchmark. About one percent of Filipino students are in the high standard, and five percent are in the intermediate level (GMA News, 2020).

Similarly, in the 2018 PISA by the Organization for Economic Co-operation and Development, Filipino students had been ranked the lowest in reading comprehension and second-lowest in Science and Mathematics among 79 countries.

Table 7. Academic performance of students in the five subjects

SUBJECTS	MEAN	SD	Qualitative Description
ENGLISH	89.19	5.25	Very satisfactory
FILIPINO	89.00	5.56	Very satisfactory
ARALIN PANLIPUNAN	88.41	4.83	Very satisfactory
SCIENCE	87.83	6.01	Very satisfactory
MATH	86.58	5.10	Very satisfactory
OVERALL MEAN	88.20	5.35	Very satisfactory

Academic Performance and Well-being Dimensions of Secondary Learners

Academic Performance: Grades

Table 8 displays the relationship between academic performance and well-being dimensions of secondary learners. Four well-being dimensions, namely; cognitive, psychological, social, and material dimensions, are significantly highly correlated to academic performance with R-values of 0.240, 0.230, 0.082, and 0.184, respectively. It implies that students with higher cognitive, psychological, social, and material well-being perform better in academics.

In the social dimension, four sub-dimensions were found to be significant, namely: Sense of belonging at school ($r=0.073$); Cooperative learning spirit ($r= 0.229$); Bullying from the victim perspective ($r=-0.102$), and Parental support and communication ($r=0.92$). This finding means that when students feel accepted, willing to work and listen to others, have not experienced bullying, and have strong parental support and communication; their academic performance will more likely increase. For this study, only the physical dimension is shown to have no significant relationship with students' performance in the classroom.

Table 8. Correlation analysis of students' performance and well-being

DIMENSIONS	CORRELATION COEFFICIENT	Significance
Cognitive Dimension	0.240	0.000**
Psychological Dimension	0.230	0.000**
Physical Dimension	-0.016	0.620 ns
Social	0.082	0.009**

Sense of belonging at school	0.073	0.019*
Cooperative learning spirit	0.229	0.000**
Students' perception of their teachers' attitudes	0.022	0.486 ns
Bullying from the victim perspective	- 0.102	0.001**
Parental support and communication	0.92	0.003*
Material	0.184	0.000**

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

*. Correlation is significant at the 0.05 level (2-tailed).

ns – not significant

National Achievement Test Performance

Table 9 shows the NAT performance of the students. It can be revealed that among the subjects in problem-solving, Filipino has the highest mean score of 73, while Science has the lowest average of 34.03 among the 5 NAT subjects. In terms of information literacy, the highest is still Filipino with 55.19 mean score, and the lowest is Mathematics with 34.50 average ratings. For critical thinking, English has the highest mean score of 47.40, while Science has the lowest average of 30.18. It can be observed that the scores are highly disperse in all subjects.

It is interesting to note that only 26.7% (4/15 mean scores) fall under the nearly proficient category, and most of the mean scores belong to the low proficient level. Hence, the data shows that the learners did not meet the basic education national passing rate of 75%.

Table 9. Mean and Standard Deviation of Students NAT Results Across Subjects

Area	Filipino		Mathematics		English		Science		AP		Average	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Problem Solving	73.00	17.57	40.08	23.83	54.63	21.38	34.03	19.83	47.63	22.09	49.87	13.97
Information Literacy	55.19	21.42	34.50	17.42	53.30	24.09	39.87	21.28	43.75	23.30	45.32	15.09
Critical Thinking	43.34	22.14	43.05	21.35	47.40	21.67	30.18	26.47	38.11	22.34	40.42	14.93

Academic Performance and Well-being Dimensions of Secondary Learners

Moreover, regression analysis illustrates that four variables interplay and affect the students' academic performance. Well-being dimensions that significantly affect the academic performance of learners are shown in Table 10. Out of the five dimensions, only four dimensions such as cognitive, psychological, physical, and material, were found to predict student's performance with a beta weight of 0.171, 0.129, -0.133, and 0.108, respectively.

About 9.3% of the variation on performance is attributed to the combination of cognitive, psychological, physical, and material well-being dimensions of students. Thus 91.7% of the variation is attributed to other factors not captured in the study. According to Lipa, Llave, Nartea, Serrano, Gutierrez, Baccay&Tigas (2017), the demographic profile of students affects their academic performance. In addition, socioeconomic status (SES) and parents' education have a significant effect on student's overall academic achievement as well as achievement in the subjects of Mathematics and English (Farooq, Chaudhry, Shafiq & Berhanu, 2011).

The regression equation of the study is shown by the equation below:

$$Y = 74.981 + 2.604 X_1 + 1.578 X_2 - 1.654X_3 + 1.284X_4$$

Where:

74.981 – constant

X₁ – Cognitive dimension

X₂ – Psychological Dimension

X₃ – Physical Dimension

X₄ – Material Dimension
 Y - Performance of students

Table 10. Variables that best predict students' performance

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
(Constant)	74.981	1.658		45.229	.000
COGNITIVE	2.604	.551	.171	4.721	.000
PSYCHOLOGICAL	1.578	.452	.129	3.495	.000
PHYSICAL	-1.654	.399	-.133	-4.150	.000
MATERIAL	1.284	.406	.108	3.162	.002
R = 0.304	R ² = 0.093	F = 25.987	Sig. = 0.000		

National Achievement Test

Table 11 shows the tabular value of the five well-being dimensions. It can be observed that only Cognitive, Psychological, Material, and Social (cooperative learning, bullying, and parental), affect the students' NAT performance. However, it is interesting to note that well-being is negatively correlated to the students' NAT results. Various factors may be attributed to the students' low performance. This would include the time difference in the administration of NAT and the well-being questionnaire. It must be noted that NAT was taken last 2017, while well-being was assessed last 2020. The time interval may have affected the correlational result of the variables, where the students' NAT results are low and their well-being is high. Probably when the students took the NAT in 2017, their well-being was low, which is no longer reflected in their 2020 well-being results. This explains why there is a negative correlation among variables.

Another factor is that at that time of NAT examination, students in 2017 were already in grade 7, but the competency assessed by NAT is for Grade 6. In this case, the takers might not have seen the significance of taking the test when they have already moved to the next grade level. Further, the student's lack of preparation to take the test physically, mentally, and emotionally may also have influenced their NAT performance.

Table 11. Relationship Between Students' Wellbeing and Performance Across Core Subjects

Variables	Problem Solving		Information Literacy		Critical Thinking	
	Person r	p-value	Person r	p-value	Person r	p-value
Cognitive	-.201**	.000	-.200**	.000	-.236**	.000
Psychological	-.169**	.001	-.149**	.003	-.157**	.002
Physical	-.032	.538	-.023	.648	-.036	.487
Social__Sense	-.016	.748	-.025	.624	.001	.987
Social_Coop	-.194**	.000	-.184**	.000	-.197**	.000
Social_Teach	-.014	.783	.011	.834	-.019	.706
Social_Bull	-.208**	.000	-.200**	.000	-.196**	.000
Social_Parental	-.137**	.007	-.130*	.011	-.129*	.011
Material	-.120*	.019	-.070	.169	-.095	.064

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

* . Correlation is significant at the 0.05 level (2-tailed).

Intervention program for secondary learners

One of the ultimate goals of this study is to develop an intervention program of well-being and performance of the students. Thus, causal modeling is employed. Figure 1 illustrates one of the best fitting models generated in this study. The main endogenous variable is the performance (PERFORM) with five independent variables, namely social well-being (SOCIAL_WB), psychological well-being (PSYCH_WB), material well-being (MATER_WB), cognitive well-being (COGNI_WB), and physical well-being (PHYSIC_WB). Also, in the figure, social and psychological well-beings act as mediators of other well-being to performance.

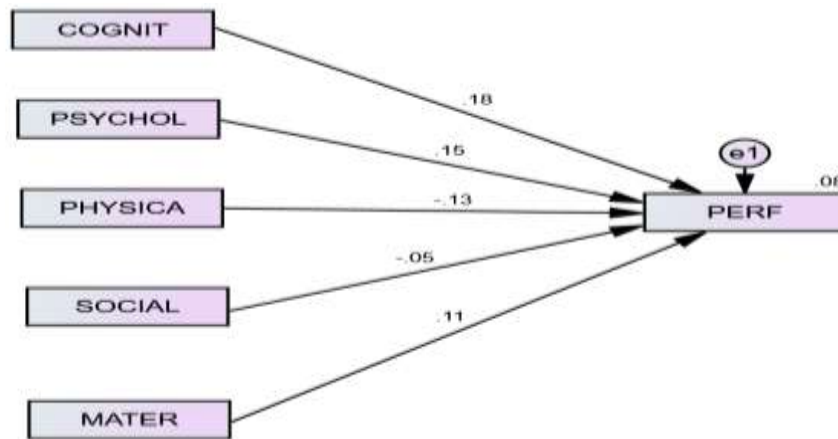


Figure 1: Default Model

Table. 12 Standardized direct, indirect, and total effects on students' performance in causal model 1

VARIABLES	DIRECT EFFECT	INDIRECT EFFECT	TOTAL EFFECT
COGNI_WB	0.178	0	0.178
PSYCH_WB	0.147	0	0.147
PHYSIC_WB	-0.127	0	-0.127
SOCIAL_WB	-0.050	0	-0.050
MATER_WB	0.112	0	0.112

LEGEND: COGNI_WB - COGNITIVE DIMENSION
 PSYCH_WB - PSYCHOLOGICAL DIMENSION
 PHYSIC_WB - PHYSICAL DIMENSION
 SOCIAL_WB - SOCIAL DIMENSION
 MATER_WB - MATERIAL DIMENSION
 PERFORM - PERFORMANCE

Table 12 Goodness-of-fit indices on performance in causal model 1

FIT INDICES	STANDARD VALUE	CAUSAL MODEL 1
CMIN/DF	<2.00	104.158
P-VALUE	>0.05	0.000
GFI	>0.95	0.686
CFI	>0.95	0.085
NFI	>0.95	0.089
TLI	>0.95	-.372
RMSEA	<0.05	0.318

LEGEND:
 CMIN/DF – Chi-square Minimum/Degrees of Freedom
 GFI – Goodness of Fit Index
 NFI – Normed Fit Index
 TLI – Tucker-Lewis Index
 CFI – Comparative Fit Index
 RMSEA – Root Mean Square Error of Approximation

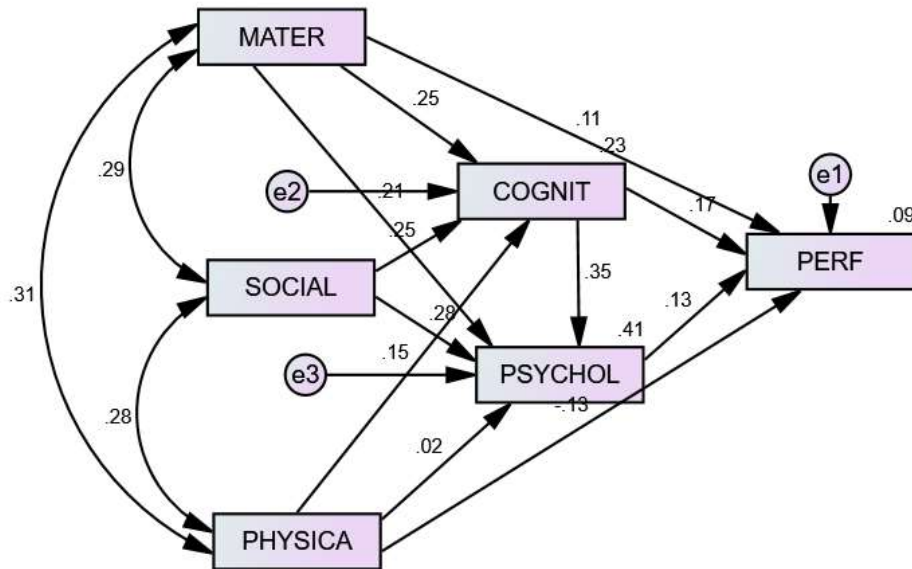


Figure 2. Best fitting causal model on students' performance.

Standardized direct, indirect, and total effects of the best causal model are presented in Table 13. Although social well-being is not directly linked to performance, it displayed the highest indirect effect. Thus, cognitive and psychological well-being mediate social well-being towards the performance of students. Cognitive well-being possesses the highest combined direct and indirect effect on performance. The research was conducted in three schools in Vienna assessing the well-being and cognitive functioning of the students that focused on study breaks in green spaces. Results showed improved cognitive performance and wellbeing of adolescents. It should also be noted that the physical dimension has an inverse effect on students' performance.

Table 13 Standardized direct, indirect, and total effects on students' performance in the causal model.

VARIABLES	DIRECT EFFECT	INDIRECT EFFECT	TOTAL EFFECT
COGNI_WB	0.171	0.045	0.216
PSYCH_WB	0.129	0.000	0.129
PHYSIC_WB	-0.133	0.035	-0.098
SOCIAL_WB	0.00	0.091	0.091
MATER_WB	0.108	0.080	0.187

In testing or identifying if the causal model best fit, Table 14 presents the standard fit model indices, the criterion values, and the corresponding value of the identified causal model. The values of the following indices are to be satisfied to determine if the model meets parsimony or best fit; CMIN/DF, P-VALUE, GFI, CFI, NFI, TLI, and RMSEA (Arbuckle 2005, Hair et al. 2010, Awang 2015). Based on the table, the causal model value satisfies all the standard values. Hence, it is one of the best fitting causal models. The chi-square value for the model, which is also called CMIN, is 1.503. Based on the criteria, the value indicates a significant result.

Ideally, the fittest seeks to find a non-significant result; thus, if chi-square is significant, the model is regarded as unacceptable. However, if the sample size exceeds 200 and other indices indicate the model is acceptable. Based on the result, the CFI value of 1.000 shows a good fit. Comparative Fit Index (CFI) is an incremental fit index, which assesses the overall improvement of a proposed model over an independent model where the observed variables are uncorrelated (Byrne, 2006). CFI values range from 0-1, with a larger value indicating better model fit. Acceptable model fit is indicated by a CFI value of 0.90 or greater (Hu & Bentler, 1999). The Normed Fit Index (NFI) of 0.998 is an acceptable fit. Also, a good model fit is typically indicated by an RMSEA value of 0.06 or less (Hu & Bentler, 1999), but a value of 0.08 or less is considered acceptable (Browne & Cudeck, 1993). Therefore, in the study, the RMSEA value of .032 indicates a good fit.

Table 14 Goodness-of-fit indices of performance in causal model 2

FIT INDICES	STANDARD VALUE	CAUSAL MODEL VALUE
CMIN/DF	<2.00	1.503
P-VALUE	>0.05	0.152
GFI	>0.95	0.999
CFI	>0.95	1.000
NFI	>0.95	0.998
TLI	>0.95	0.986
RMSEA	<0.05	0.032

LEGEND:

- CMIN/DF – Chi-square Minimum/Degrees of Freedom
- GFI – Goodness of Fit Index
- NFI – Normed Fit Index
- TLI – Tucker-Lewis Index
- CFI – Comparative Fit Index
- RMSEA – Root Mean Square Error of Approximation

As an output of the study, a school intervention program was developed. The program consists of initiatives and

Dimension	Initiative	Activities
Cognitive	Cognitive orientation	-Strengthen re-orientation and information drive to students on required achievements tests.
	Cognitive engagement	-Strengthen the administration of challenging activities that address 21st-century skills.
Psychological	Authentic curriculum	-Strengthen the implementation of authentic curriculum to ensure relevance, meaning, or "connectedness" to students' lives. The importance of students' voices in giving a sense of meaning and connectedness to the curriculum is continuously emphasized (Johnson & O'Brien, 2002).
Physical	Reevaluation of Physical/health-related program (feeding, exercises, etc.)	-Reevaluate effectiveness of Physical/ health-related programs (feeding, exercises, etc.), as physical dimension has a negative correlation to academic performance
Material	Standardized Interactive learning materials	-Standardization and intensive quality evaluation of learning resources such as books, modules, and the like is highly encouraged to prevent errors and students' confusion
Social	Differentiated Instruction	-Strengthen the incorporation of differentiated instruction to cater to students' social needs, especially during the new normal.
	Integrate coping skills	-Strengthen the development of students' coping skills for stress, anxiety, anger, and other unpleasant emotions to set up positive regulation of emotion
	Start a gratitude practice.	Integrate in the curriculum gratitude practice as gratitude can positively impact the brain and well-being.

corresponding activities about a specific dimension as follows:

Facilitate safe In the new normal, integrate activities where students can socialization. safely socialize.

5. CONCLUSION

As the well-being of learners becomes increasingly assessed in the new normal, it is essential to understand how cognitive, psychological, physical, and material dimensions affect the academic performance of secondary 21st-century learners. This study established that well-being dimensions significantly affect the academic performance (Grades) and NAT results of learners. Learners with higher cognitive, psychological, social, and material well-being perform better academically in terms of grades. While, participants with higher cognitive, psychological, material, and social: cooperative learning, bullying, and parental were more likely to experience high NAT performance. Results further provide that cognitive well-being greatly affects learners' performance over other dimensions. However, combining cognitive and psychological well-being will mediate social well-being towards students' performance.

6. POLICY RECOMMENDATIONS:

1. State Universities and Colleges may offer scholarship programs for teachers and other professionals interested in pursuing a Guidance and Counselling degree program to comply with RA 9258, RA10533, RA 11036, and RA11206 to improve the Guidance Services provided in DepEd schools.
2. The State Universities and Colleges may have extension programs related to enrichment classes and remediation classes to enhance learners' 21st-century skills.
3. The Department of Education, through its school administrators and teachers, may utilize the National Achievement Test Results for the development and implementation of intervention programs.
4. Strengthen the integration of the 21st-century skills, including well-being in the teaching-learning processes, especially in Critical Thinking, Problem Solving, and Information Literacy Skills. The use of a practical work approach, inquiry methods, discovery learning, lesson-study, and other experiential, problem-solving-based approaches is highly encouraged.
5. Schools in partnership with SUCS and other helping institutions may implement a contextualized Guidance, and Values Formation Program incorporating the wellbeing attributes to enhance learners' positive attitudes, values, and academic performance during the pandemic and post-pandemic periods. The Division Offices of Region X may consider venturing the result of the causal model in developing an intervention program aligning and identifying the gaps between curricular activities and learners' performance in the new normal scheme.

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