

# **Student-Teacher Interaction, Self-Efficacy, and Academic Performance among Bachelor of Physical Education Students**

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## **ABSTRACT**

Good academic performance is a student's top priority and can be affected by several variables. This study determined the impact of the level of student-teacher interaction and self-efficacy on the academic performance of the 113 graduating Bachelor of Physical Education students from two colleges in Misamis Oriental. After scientific validation and reliability tests, modified questionnaires were used as data-gathering tools. Data for this descriptive-correlational research design were treated using descriptive statistics, Pearson  $r$ , and linear regression. Results revealed a high level of student-teacher interaction and self-efficacy, which means that teachers

could establish a desirable atmosphere and rapport with the students and that students can be regarded as those who believe in one's capacity to complete academic tasks. Moreover, the study found that self-efficacy is a potent factor influencing students' academic performance, suggesting that their belief in their capability to complete academic tasks increases their academic outcomes. It was recommended that school administrators encourage teachers to incorporate self-efficacy-building activities into their lessons and provide professional development activities that capacitate teachers in implementing self-efficacy strategies in the classroom.

### **KEYWORDS**

Student-teacher Interaction, Self-Efficacy, Self-Regulation, Academic Performance

### **INTRODUCTION**

Students must actively participate in their learning process and assume personal accountability. To reach their goals, they must set them and work toward them. Good academic performance is a student's top priority and can be affected by several variables. One of these factors can be their conviction that they can succeed in getting good academic standing and how the teachers engage with them in the classroom.

An individual's performance on a task may be influenced by their perception of their ability to do it successfully or reach their goal. This notion is referred to as self-efficacy by Bandura (1997). According to Köseolu (2015), self-efficacy is also described as confidence in one's capacity to affect task performance. Research indicates that self-efficacy has implications for implementation in various contexts, such as music performance, organizational performance outcomes, employee performance, sports, and academic performance (Erdner, 2015). Along with Erdner's study, this research focused on sports and physical education and how self-efficacy matters for college student's academic performance who are pursuing sports and physical education as their area of specialization.

Because no one can be an authority in everything, the efficacy concept system is a diverse set of self-beliefs linked to numerous realms of functioning (Bandura, 2006). Students in college can boost their self-efficacy in an

array of ways. Academic self-efficacy, which is frequent among university students, is the belief that one can achieve in one's academic activities. Academic self-efficacy is defined as confidence in one's ability to execute academic assignments at the needed level (Sharma & Nasa, 2014). Academic self-efficacy, as described by Ayiku (2005) and mentioned by Nasir and Iqbal (2019), was based on a student's cognitive ability and perceived self-efficacy.

However, students eagerly accept challenging activities in areas with high levels of self-efficacy. Students avoid tasks they do not believe they can complete successfully (Satici & Can, 2016). Therefore, this researcher emphasizes the significance of self-efficacy since it affects overall academic accomplishment and results, cognition, behavior, and motivation during the learning process (Garcia-Martin & Garca-Sánchez, 2018), and learning processes and success (Zhang & Ardasheva, 2019). As students advance through school and into higher education, low levels of self-efficacy might cause a lack of desire, distractible behaviors, and a greater chance of falling behind in their courses and programs (Drake et al., 2014).

The literature has discovered a variety of factors that have an impact on pupils' academic success. Among these are results from family, society, and culture (Usher & Pajares, 2008, referenced in Omari, 2020). Few studies, particularly in physical education, have focused on how interactions between teachers and students' sense of self-efficacy impact academic performance. However, according to Digamon and Cinches (2017), research has shown that good teacher-student relationships enhance learning. The instructor is, therefore, essential to students' learning (Digamon, 2022). Students' propensity to study and succeed is influenced by their relationships with their teachers, which may impact their performance (Digamon & Cinches, 2017).

With the researcher's further readings, few pieces of literature focus on these two (2) essential variables impacting academic learning outcomes, particularly in the tertiary students specializing in Sports and Physical Education. In international research, perceived teacher-student interaction quality and self-efficacy are highlighted as impact factors on students' well-being and learning. There is also theoretical support and empirical evidence for their interrelatedness with academic performance. However, this relationship has been explored only briefly, especially in the Bachelor of Physical Education major in Sports and Physical Education program at the tertiary level (Jederlund & Rosen, 2022). Self-efficacy and perception of

teacher interpersonal behaviors have been rarely studied concurrently in physical education, compared to research conducted in Mathematics and English (Wu et al., 2010, as cited in Larry, 2017).

Because he is not a practical instructor, the researcher sought to conduct his investigation entirely on the basis of his numerous pieces of literature. He is motivated to progress with research that will eventually serve as a basis for policy recommendations and making choices to improve the implementation of the BPE curriculum at the tertiary level. Thus, in light of the lack of literature that this study wants to fill, this paper aims to assess the interplay of academic self-efficacy, teacher-student relationships, and academic performance of BPE students. Furthermore, this paper will investigate the impact of the interaction between educators and students and academic self-efficacy on BPE students' academic achievement. The significance of this study is in analyzing the efficacy of teacher-student contact, which is predicted to boost academic self-efficacy; the findings will contribute to curricular policy-making techniques in administering the BPE-SPE program in Higher Education Institutions (HEIs).

## **FRAMEWORK**

This study's main theoretical underpinning heavily relies on the Social Learning Theory of Bandura (1977) and the Interpersonal Theory developed by Sullivan (1953), both of which are the basis for discussing the variables under investigation.

Bandura (1977) propounded the concept of self-efficacy, which emphasizes the active role people play in directing the course of their lives, where their choices, deeds, and experiences significantly impact whether they engage in complex tasks. According to Bandura (1977), self-efficacy is the belief that one can effectively act necessary to generate the desired results. Personal mastery, physiological responses, vicarious experiences, and persuasion techniques are the four primary sources of self-efficacy that Bandura identified. Any of these four sources could influence a student's perceived self-efficacy beliefs. According to Bandura, perceived self-efficacy is the belief in one's ability to plan and carry out the actions necessary to achieve specific goals.

Academic self-efficacy, or the conviction that a person can succeed in their academic endeavors, is the primary emphasis of this study (Bandura,



1997). It can also be characterized as a person's self-assurance in their capacity to function and flourish in a learning environment. Self-efficacy beliefs affect academic decisions since most students engage in activities they can perform. Many people avoid academic options in areas where they need more confidence or have previously performed poorly. This is particularly true in post-secondary education when students have more freedom to choose the courses they take, the majors they pursue, and their general academic career choices (Bassi et al., 2011).

Students must have confidence in their talents and in themselves to excel academically. The self-efficacy theory developed by Albert Bandura (1997) has significant consequences for motivation. According to Bandura, people are more willing to participate in activities if they believe they are skilled. This impacts education since it increases the likelihood that students will try, stick with, and complete tasks in which they feel competent. When students struggle, it could be because they cannot achieve or have the abilities but lack the confidence to use them effectively. Bandura described these beliefs as determinants of how people think, behave, and feel (Cherry et al., 2014). In other words, students will learn better if they believe they are good at productively managing their thinking strategies.

Different variables interact and impact human learning and behavior. Students observe their teachers behaving in various ways in the current academic setting. To add, this significantly supports how students perceive working with their classmates that are close in their proximity as well as with a model, their teacher. From this, identification involves taking on (or adopting) observed behaviors, values, beliefs, and attitudes of the person with whom students are identifying (in an educational setting, it is their teacher) and involves taking on (or adopting) observed behaviors, values, beliefs, and attitudes of the person with whom students are identifying. The social cognitive theory holds that self-regulation is context-specific, which indicates that learners do not consistently practice self-regulation across all domains (Cetin, 2015). Self-regulatory behavior includes self-monitoring, which entails monitoring one's actions and results. Self-generated ideas, attitudes, and behaviors that demonstrate a systematic propensity to achieve one's goals can be used to describe self-regulated learning. It is a proactive and self-reliant procedure (Cetin, 2015).

Self-regulation inspires and controls behavior, whereas self-regulation derives from social cognitive theory (Bandura, 1991). Further, according to

Bandura (1991), self-regulation is associated with self-efficacy, which is crucial for one's confidence in motivation, thinking, and behavior. Four guiding principles govern beliefs in one's ability to plan and carry out a successful course of action necessary for a particular scenario, according to Bandura's (1991) self-efficacy theory—first, previous performance accomplishment success. Seeing a role model through a virtual experience is the second—third, vocal support for someone reliable and skilled. Finally, a psychological and affective arousal state affects one's confidence in acting on one's self-efficacy ideas, which is essential for self-regulation (Dunnigan, 2018).

According to Bandura (1994) (as cited in Aljuaid, 2021), self-regulation is the human propensity to develop a sense of agency or the conviction that one has some degree of control over one's behavior and environment. One might have agency by controlling thoughts and actions (Usher & Schunk, 2018). Human behavior is not solely the result of environmental influences; people consciously pick an environment that helps them achieve their learning goals.

Self-efficacy can occasionally be confused with self-regulation because it is linked to self-control and the capacity to modify behavior to achieve goals. Although they are related, the ideas remain distinct. Self-efficacy is more directly associated with a person's perceived skills. In contrast, self-regulation refers to an individual's "self-generated thoughts, attitudes, and actions that are deliberately meant to affect one's learning" (Ackerman, 2018). In other words, self-efficacy is the conviction that one can succeed, but self-regulation is more of a technique for accomplishing one's goals, particularly regarding learning. The two can be created simultaneously, primarily through modeling, but they are still separate constructs (Ackerman, 2018).

Deliberate thought directs the process of self-regulation by considering emotional, motivating, and actual performance factors. Self-regulation requires focus to be successful (Zimmerman & Moylan, 2009, as cited in Aljuaid, 2021). Because cognitive regulation of motivation is built on an anticipatory, proactive system that involves effective self-monitoring, self-evaluation, self-incentives, and self-reactivity, Bandura (1991) emphasizes the importance of knowledge about one's performance.

Another essential theoretical framework for this study is the Interpersonal Theory (Sullivan, 1953). The interpersonal theory includes two essential interaction elements and serves as a framework for analyzing interpersonal

communication features in various contexts. First, the interpersonal theory states that agency and communion, two orthogonal features of interpersonal behavior, can be uniquely combined to characterize all interpersonal activity (Kiesler, 1996). The communion dimension manifests as a desire for a specific level of friendliness and connection, which is more benevolent, while the agency dimension appears as a demand for a specific level of authority and control, which is more authoritative (Horowitz & Strack, 2011; Gurtman, 2011). Second, individuals in interactions continually decide how agentic and communal they should be with one another (Kiesler, 1996). Such decisions are generally made instinctively and based on one's perceptions of the other's interpersonal conduct and dispositional inclinations (Fournier et al., 2011; Carson, 2019).

When interactions adhere to a particular pattern, which can be described using the idea of interpersonal complementarity, interactions solidify into healthy relationships (Kiesler, 1996; Sadler et al., 2009). On the other side, on the communion level, complementarity is defined as sameness or equality (i.e., friendliness begets friendliness, and unfriendliness begets unfriendliness). On the agency dimension, oppositeness is characterized as dominance generating submissiveness and vice versa (Kiesler, 1996; Sadler et al., 2009; Horowitz & Strack, 2011; Carson, 2019).

In various research, it was discovered that teachers with more favorable teacher-student interactions were better able to refrain from reacting violently to aggressive student behaviors (Thijs et al., 2011; Pennings et al., 2018) and to perform well in the classroom in terms of engagement, motivation, and performance (Digamon, 2022; Digamon & Cinches, 2017). In educational research, a teacher's overall interpersonal style is a crucial indicator of the quality of the teacher-student connection (Wubbels et al., 2015).

People interact with one another in a series of transactional events that develop over time. As interaction partners adjust to one another's interpersonal behaviors, their interactions develop over time and are associated with the quality of interactional outcomes like relationships and engagement (Pincus et al., 2014). The conceptual underpinning for comprehending behavior, encounters, relationships, and involvement is provided by interpersonal theory (Wubbels et al., 2015). Putting everything in perspective, the behavior exhibited by teachers as the driving force of the quality of interaction they receive and as perceived by their respective

students will also reveal how each student is engaged. Hence, this theory anchors the nature of this study majorly.

### **OBJECTIVES OF THE STUDY**

This study explored how the perceived student-teacher relationship impacts the academic self-efficacy of Bachelor of Physical Education students of two Higher Education Institutions (HEI) in Misamis Oriental.

### **METHODOLOGY**

This study was conducted at two higher education institutions in Misamis Oriental that offer Bachelor of Physical Education (BPE) programs. The nature of the present research necessitated using descriptive-correlational design using regression modeling to answer the research problems. The goal of descriptive research is to describe a phenomenon and its characteristics. This research concerns what rather than how or why something has happened. Therefore, observation and survey tools are often used to gather data (Nasajji, 2015). Descriptive-correlational research design is proper when the goal is to examine the relationships between two or more random variables within the same population or between the same variables in two populations (Curtis et al., 2016).

The respondents included in this study were the 113 graduating Bachelor of Physical Education students from two colleges in Misamis Oriental. This study employed total enumeration sampling to select the respondents. Total enumeration population sampling is a sort of purposive sampling in which the researchers decided to look at the entire population (i.e., the total population) with specific characteristics. It is a sampling that involves looking at the entire population that has

The study utilized survey-modified questionnaires as the primary research tool. Student-teacher interaction, the study's independent variable, is a modified- questionnaire from Abendaño (2022). To assess how the students perceived the quality of teacher-student interaction, the respondents answered a 25-item researcher-made questionnaire. Specifically, a 5-point Likert scale was formulated with five answer selections: 1 for strongly disagree; 2 for disagree; 3 for neither agree nor disagree; 4 for agree; and 5, which signifies strongly agree. The survey responses for self-efficacy in

the classroom and self-regulation, on the other hand, were adapted from Aljuaid’s (2021) research titled “Self-Efficacy and Self-Regulation as Predictors of Academic Motivation Among Undergraduate Students in the United States.” Academic self-efficacy has 12 statements, while self-regulation has 17. Both are 5-point Likert scales with 5-answer selections: 5=Very True, 4=Moderately True, 3=Somewhat True, 2=Slightly True, and 1=Not at All True. Lastly, students’ academic performance was measured using their GPA.

**RESULTS AND DISCUSSION**

Problem 1. What is the respondents’ level of perceived student-teacher interaction considering the following:

- 1.1. authority
- 1.2. helping/friendly
- 1.3. certainty
- 1.4. satisfaction, and
- 1.5. understanding?

Depicted in Table 2 is the level of quality of interaction of teachers as perceived by the students in terms of authority. The table features the five relevant items with their corresponding standard deviation, mean, and descriptive level.

The table clearly shows that the BPE teachers were perceived as non-authoritative by their students, given the overall mean of 4.019, interpreted as student-teacher interaction is often observed. The overall calculated standard deviation of .6819 suggests that the student’s responses are clustered near the calculated mean, which means their responses are similar.

**Table 2. Level of Student-Teacher Interaction (Authority)**

Indicators Our teachers are:	Mean	SD	Description	Interpretation
1. not severe in terms of discipline makes him/her amicable to everyone.	3.81	.972	Agree	Student-teacher interaction is oftentimes observed.
2. Exhibiting a lenient attitude, especially in activities or tasks that will be submitted/turned in late.	3.82	.978	Agree	Student-teacher interaction is oftentimes observed.
3. setting standards and expectations at an achievable level.	3.96	.995	Agree	Student-teacher interaction is oftentimes observed.
4. shows a developmentally appropriate level of difficulty in providing tasks, quizzes, exams, and other activities.	4.22	.765	Agree	Student-teacher interaction is oftentimes observed.
5. sociable, most of us are not afraid to ask questions if we are confused about what we should do in any of our science tasks	4.30	.766	Agree	Student-teacher interaction is oftentimes observed.
Overall Mean	4.019	.6819	Agree	Student-teacher interaction is oftentimes observed.

Looking at the table keenly, it can be seen that the item which gained the top spot under this indicator is, “Our teachers are sociable; most of us are not afraid to ask questions if we are confused about what we should do in any of our science tasks.” This item comes with a calculated standard deviation of 0.6819, indicating that the responses are not spread out at all to the given data set. Each observed value of responses from the education students majoring in BPE is closer to its calculated mean of 4.019, which bears student-teacher interaction is oftentimes observed as its descriptive level. The BPE teachers were put at ease with educating students majoring in BPE by being sociable with them.

This only proves that being sociable is essential for any teacher. Students should feel free to speak openly and honestly with their teachers, especially if they struggle with any activities. These results are consistent with the claim of Vallikat (2020) that in order to ensure that students obtain optimal

learning, teachers must possess good interpersonal skills, allowing them to connect with their students and solve their learning difficulties quickly.

On the other hand, “Our teachers are not severe in terms of discipline, which makes them amicable to everyone” is the lowest item under this indicator. This item comes with a calculated standard deviation of 0.972, indicating that the responses are not spread out at all to the given data set. Each observed value of responses from the education students majoring in science is closer to its calculated mean of 3.81, with student-teacher interaction oftentimes observed as its descriptive level.

This shows that BPE instructors may provide an excellent learning environment for their pupils while enforcing rigid classroom standards across all their classes. Teachers can simultaneously opt to be more tolerant in how lessons are conducted and impose rigorous guidelines and limitations. This backs up Escalante’s (2017) assertion that sympathetic teachers foster a new learning environment that is more accommodating for students. According to Selvaraju and Toor’s (2016) study, instructors should make their classrooms favorable to learning. The learning environment in the classroom should be healthy, safe, and supportive rather than rigid and demanding.

Depicted in Table 3 is the level of quality of interaction of teachers as perceived by the BPE students in terms of certainty. The table features the five relevant items with their corresponding standard deviation, mean, and descriptive level.

Table 3. Level of Student-Teacher Interaction (Certainty)

Indicators Our teachers are:	Mean	SD	Description	Interpretation
1. showing good command and certain knowledge in the learning area.	4.29	.831	Agree	Student-teacher interaction is oftentimes observed.
2. sure on what would be the preliminary crisis solution when confusion arises.	4.10	.640	Agree	Student-teacher interaction is oftentimes observed.
3. acting firmly that they know what to do.	4.33	.761	Agree	Student-teacher interaction is oftentimes observed.
4. not allowing most of us to take over authority, ensuring that it will not happen at all, hesitation in supervising is not evident.	3.69	.803	Agree	Student-teacher interaction is oftentimes observed.

Indicators Our teachers are:	Mean	SD	Description	Interpretation
5. sure of what to do, and when we spend the on-line class, most of the time is already outlined in terms of goals.	4.01	.861	Agree	Student-teacher interaction is oftentimes observed.
Overall Mean	4.083	.5469	Agree	Student-teacher interaction is oftentimes observed.

The table clearly shows that the BPE teachers were perceived to be specific when they delivered their instruction to the students, given the overall mean of 4.083, which is interpreted as student-teacher interaction oftentimes observed. The overall calculated standard deviation of .5469 suggests that the student's responses are clustered near the calculated mean, which means that their responses are similar to one another.

It can be noted that "Our science teachers act firmly that they know what to do" is the highest item under this indicator. This item comes with a calculated standard deviation of 0.761, indicating that the responses are not spread out at all to the given data set. Each observed value of responses from the education students majoring in science is closer to its calculated mean of 4.33 and entails student-teacher interaction is oftentimes observed descriptive level. These remarkable findings revealed that BPE teachers were perceived as effective because they could display good expertise in the subject matter and knew how to improve students' more profound comprehension of various topics.

This supports the assertion made by Kamamia et al. (2014) that subject-matter expertise is a critical talent for a teacher, particularly throughout the teaching and learning process, because it directly affects the students' overall academic performance. Because subject matter mastery indicates that teachers can grasp the crucial concepts and confidently convey them to their students, as well as correct any existing knowledge misconceptions, teachers are expected to understand the material they are teaching. The last and most crucial point is that teachers are the source of instructional competence (Mascio, 2015).

Contrarily, "Our teachers are not allowing most of us to take over authority, ensuring that it will not happen at all, hesitation in supervising is not evident," ranked the lowest. This item comes with a calculated standard deviation of 0.803, indicating that the responses are not spread



out at all to the given data set. Each observed value of responses from the education students majoring in BPE is closer to its calculated mean of 3.69, notwithstanding; the item entails a descriptive level of student-teacher interaction that is oftentimes observed. BPE instructors should keep an eye on classroom management while also remembering to maintain control over what occurs there. In their study, Coman et al. (2020) found that most college students thought their teacher could not maintain their attention and set clear expectations. However, this study found positive outcomes, so this was not the case.

Depicted in Table 4 is the level of quality of interaction of teachers as perceived by the students in terms of helping/friendly. The table highlights the five relevant items with their corresponding standard deviation, mean, and descriptive level.

Table 4. Level of Student-Teacher Interaction (Helping/Friendly)

Indicators Our teachers are:	Mean	SD	Description	Interpretation
1. willing to extend his/her time and effort for me to be successful with our academic tasks.	4.44	.626	Agree	Student-teacher interaction is oftentimes observed.
2. approachable to everyone, especially to me.	4.51	.642	Strongly Agree	Student-teacher interaction is always observed.
3. someone that I can depend on most, especially when my group mates and I are confused about doing our tasks.	4.10	.731	Agree	Student-teacher interaction is oftentimes observed.
4. showing a good sense of humor, which makes the class session not dull.	4.00	.824	Agree	Student-teacher interaction is oftentimes observed.
5. transparent and ready to provide social support.	4.21	.807	Agree	Student-teacher interaction is oftentimes observed.
Overall Mean	4.253	.5726	Agree	Student-teacher interaction is oftentimes observed.

The table clearly shows that the BPE teachers were perceived to be helpful and friendly with the students, given the overall mean of 4.253, which

is interpreted as student-teacher interaction oftentimes observed. The overall calculated standard deviation of .5726 suggests that the student's responses are clustered near the calculated mean, which means that their responses are similar.

The table also shows that the statement, "Our teachers are approachable to everyone, especially to me," obtained the highest placement among the four other included statements. A calculated standard deviation of 0.642 indicates that the responses are not spread out to the given data set. Each observed value of responses from the education students majoring in BPE is closer to its calculated mean of 4.51, which descriptively means teacher-student interaction is always observed. It implies that the BPE teachers are friendly and advocates of extended learning time, which entails increasing the amount of time available to students who are learning significantly to improve their academic performance.

The results directly support Lupascu et al.'s (2014) assertion that students respect various teacher qualities, including tranquility, a good sense of humor, and friendliness. As a result, interactions between students and teachers will improve, and a more encouraging learning environment will emerge. The outcome is entirely in line with Gupta's (2019) earlier assertion that teachers should be approachable to infuse concepts and knowledge into their students' heads quickly. Additionally, excellent teachers form close relationships with their students and are always available or prepared to help students who need it (GreatSchools Staff, 2012).

On the contrary, the item which obtained the lowest placement under helping/friendly is "Our teachers are showing a good sense of humor which makes the class session not dull," with a calculated standard deviation of 0.824, and this directly indicates that the responses are not spread out at all to the given set of data. Each observed value of responses from the education students majoring in BPE is closer to its calculated mean of 4.00. Albeit placed as last among the other statements, it is still interpreted descriptively as teacher-student interaction is often observed.

This finding has significant implications since it shows that a science teacher's humor and wit positively and permanently affect students. By allowing them to view things from a different perspective and making the class exciting, teachers who exhibit this behavior have assisted education students who major in BPE in managing the stress in their academics. Importantly, humor can be liberating for anxious students when used with an effective behavior management system. It can also help diffuse difficult

situations and show respect for the students, which can help them connect with the teacher.

Depicted in Table 5 is the level of quality of interaction of teachers as perceived by the BPE students in terms of satisfaction. The table features the five relevant items with their corresponding standard deviation, mean, and descriptive level.

Table 5. Level of Student-Teacher Interaction (Satisfaction)

Indicators Our teachers are:	Mean	SD	Description	Interpretation
1. thinking that when we are in academic tasks, we exude nothing but pure authenticity.	4.12	.810	Agree	Student-teacher interaction is often-times observed.
2. making sure that we have ample knowledge regarding the subject area as well as to our group tasks.	4.29	.703	Agree	Student-teacher interaction is often-times observed.
3. making sure that we can do things on our own and we have an option to not adhere based on his/her standards as long as it will uplift creativity.	4.19	.730	Agree	Student-teacher interaction is often-times observed.
4. expressing or showing satisfaction with what we have accomplished.	4.38	.748	Agree	Student-teacher interaction is often-times observed.
5. disposed to full trust in each and one of us hence, making me ready to take the opportunity to engage in any academic endeavor, most especially by the group.	4.21	.796	Agree	Student-teacher interaction is often-times observed.
Overall Mean	4.239	.6250	Agree	Student-teacher interaction is often-times observed.

The table clearly shows that the BPE teachers were perceived to satisfy their students with what they ought to accomplish and deliver in the classroom, given the overall mean of 4.239, which is interpreted as student-teacher interaction oftentimes observed. The overall calculated standard deviation of .6250 suggests that the student’s responses are clustered near the calculated mean, which means that their responses are similar to one another.

The respondents are in consensus on making the item “Our teachers are expressing or showing satisfaction of what we have accomplished” as the highest item under satisfaction level. This item comes with a calculated standard deviation of 0.748, which directly indicates that the responses are not spread out at all to the given data set. Each observed value of responses from the education students majoring in BPE is closer to its calculated mean of 4.239, with a descriptive interpretation of student-teacher interaction oftentimes observed. The findings revealed that the BPE teachers appreciate the students’ efforts to craft their outputs, projects, and outputs.

The findings also indicated that science teachers believe it is essential to acknowledge BPE majors who are active, engaged, and behave in a realistic way when learning physical education concepts. BPE instructors convinced their students that they were heading in the right direction. After all, encouragement encourages participation, and more participation is necessary for a well-run classroom (Gordon, 2020).

Depicted in Table 6 is the level of quality of interaction of teachers as perceived by the BPE students in terms of understanding. The table features the five relevant items with their corresponding standard deviation, mean, and descriptive level.

Table 6. Level of Student-Teacher Interaction (Understanding)

Indicators Our teachers are:		Mean	SD	Description	Interpretation
1.	considerate to every single one of us.	4.45	.641	Agree	Student-teacher interaction is oftentimes observed.
2.	willing to talk about any conflict in our tasks and willing to have it settled.	4.50	.696	Agree	Student-teacher interaction is oftentimes observed.
3.	willing to explain instructions and discussions clearly.	4.53	.642	Strongly Agree	Student-teacher interaction is always observed.
4.	willing to give his/her time if we have something to share and say as feedback on any academic tasks.	4.35	.654	Agree	Student-teacher interaction is oftentimes observed.

Indicators Our teachers are:	Mean	SD	Description	Interpretation
5. realizes that if there is confusion in the process of finishing the tasks, he/she gives his/her time to facilitate it again and will tell us that it is okay to be lost at some point.	4.14	.800	Agree	Student-teacher interaction is oftentimes observed.
Overall Mean	4.395	.5240	Agree	Student-teacher interaction is oftentimes observed.

The table clearly shows that the BPE teachers were perceived to be understanding with the students given the overall mean of 4.395, which is interpreted as student-teacher interaction is oftentimes observed. The overall calculated standard deviation of .5240 suggests that the student’s responses are clustered near the calculated mean, which means that their responses are similar to one another.

Looking at this data closely, it can be observed that the statement which ranked the highest with a descriptive level of student-teacher interaction is oftentimes observed as “Our teachers are willing to explain instructions and discussions clearly.” This item comes with a calculated standard deviation of 0.642, indicating that the responses are not spread to the given data set. Each observed value of responses from the education students majoring in BPE is closer to its calculated mean of 4.53.

This shows that a well-facilitated classroom with a clear and detailed way of explaining instructions and discussions is one of the most effective strategies for enhancing student learning. This finding is in line with Seyfer’s (2013) assertion that teachers should wait until all students have finished their current learning before moving on to new conversations or activities. Teaching until all students are prepared for a new topic and activity is a time well spent.

On the other hand, the item which ranked the last is, “Our teachers are capable of realizing that if there is confusion in the process of finishing the tasks, he/she gives his/her time to facilitate it again and will tell us that it is okay to be lost at some point.” This item comes with a calculated standard deviation of 0.800, indicating that the responses are not spread out at all to the given data set. Each observed value of responses from the

education students majoring in BPE is closer to its calculated mean of 4.14. Interestingly although this item ranked the lowest, it obtained a teacher-student interaction that is oftentimes observed descriptive level.

Although listening to lectures and reading relevant references is beneficial, more is needed to genuinely interest students and finish their tasks perfectly in one attempt. The good thing here is that BPE teachers appreciate learning by doing BPE courses, allowing their students to experience what they have studied in action and build a deeper knowledge of the subject. The findings also imply that teachers could successfully use unanticipated learning opportunities that emerged throughout the lesson implementation to ensure students' clarity during the teaching and learning process. Unresolved, ongoing confusion leads to discontent and boredom, which are detrimental to student learning, as noted by D'Mello and Graesser (2014). This is further confirmed by the Lee et al. (2011) study, which found that addressing ambiguity can enhance learning while leaving it unresolved has detrimental effects on student development. As a result, if no teacher is present and no immediate assistance, a student may give in to perplexity, feel upset, and finally stop participating in the learning process altogether (D'Mello & Graesser, 2014). One should not presume that a student's learning progress has already descended into chaos if there is a misunderstanding.

## **Problem 2. What is the respondents' level of self-efficacy in terms of:**

### **2.1. academic self-efficacy; and,**

### **2.2. self-regulation?**

Finding out the level of students' self-efficacy while taking academic self-efficacy and self-regulation into consideration is the second statement of the study's challenge. The level of academic self-efficacy among students enrolled in the Bachelor of Physical Education is shown in Table 7. The table lists the twelve relevant items along with their respective means, standard deviations, and levels of description.

Table 7. Level of Self-Efficacy (Academic Self-Efficacy)

Indicators	Mean	SD	Description	Interpretation
1. If I study and plan in appropriate ways, then I will be able to learn the everything I will encounter this semester.	4.63	.630	Very True	Very High
2. It is my own fault if I don't learn them in my practice teaching journey.	4.34	.786	Moderately True	High
3. If I try hard enough, then I will understand all tasks and activities this semester.	4.58	.610	Very True	Very High
4. If I don't understand how to do my practice teaching, it is because I didn't try hard enough.	4.33	.749	Moderately True	High
5. I believe I will receive an excellent grade this semester.	4.26	.765	Moderately True	High
6. I'm certain I can understand and do the most difficult part of my practice teaching tasks.	4.32	.723	Moderately True	High
7. I'm confident I can understand and do the basic concepts and activities this semester.	4.20	.657	Moderately True	High
8. I'm confident I can understand and do the most complex concepts and activities this semester.	4.12	.643	Moderately True	High
9. I'm confident I can do an excellent job on the assignments and tests this semester.	4.25	.688	Moderately True	High
10. I expect to do well this semester.	4.54	.613	Very True	Very High
11. I'm certain I can master the skills being taught by my cooperating teachers.	4.32	.735	Moderately True	High
12. Considering the difficulty of this semester, the teacher. and my skills; I think I will do well this semester.	4.43	.639	Moderately True	High
Overall Mean	4.36	.441	Moderately True	High

According to Sharma and Nasa (2014), academic self-efficacy is the conviction that one can accomplish academic tasks at the needed level. According to Ayiku (2005), quoted by Nasir and Iqbal (2019), academic self-efficacy bases a student's academic success on the growth of cognitive competence and perceived self-efficacy.

The table shows that the BPE students have high academic self-efficacy, given the overall mean of 4.36, which is interpreted as high. The overall calculated standard deviation of .441 suggests that the student's responses are clustered near the calculated mean, which means that their responses are similar to one another. It means that students believe in their ability to complete their academic tasks and achieve their academic goals.

It is evident from the data that the statement, "If I study and plan in appropriate ways, then I will be able to learn everything I will encounter this semester," gained the highest placement among the eleven other included statements. Since the calculated standard deviation for this item is 0.630 or low, this indicates the amount of variability coming from the responses of education students majoring in BPE that are present in the dataset are clustered closer to 4.63, which is the calculated mean that is also interpreted descriptively as very high.

The BPE students highly acknowledge the importance of systematic planning and studying to understand everything they need to know during the semester. The results support that the ability to learn or master new knowledge and skills, organize them, and put them into practice to achieve predetermined academic performance levels indicates high academic self-efficacy (Ormrod et al., 2017). With high academic self-efficacy, students can regulate their ideas, feelings, and behaviors in the context of their studies. This notion is called self-confidence, self-reliance, and trust in oneself.

On the other side, associated with high as its descriptive interpretation, "I'm confident I can understand and do the most complex concepts and activities this semester," got the lowest placement. Since the calculated standard deviation for this item is 0.643 or low, this indicates that the amount of variability from the responses of undergraduate education students primary in BPE present in the dataset is clustered closer to 4.12, the calculated mean. The item had a high rating, indicating that the students have faith in their capacity to finish their academic work and are not likely to be intimidated or overcome by other challenging assignments.

This bolsters the argument made in the research that students' evaluations of their abilities to execute academic tasks and the situations they are put in determine their academic self-efficacy (Blanco et al., 2011). The cognitive patterns and emotional states that drive predicted academic tasks are influenced by perceptions of academic self-efficacy (Ormrod et al., 2017).



The self-efficacy of students enrolled in the Bachelor of Physical Education program with regard to academic self-regulation is shown in Table 8. The seventeen relevant items are listed in the table together with their respective means, standard deviations, and descriptive levels.

Self-regulation, according to Bandura (1994) (as described in Aljuaid, 2021), is the tendency for people to believe that they have some degree of control over their surroundings and behavior. Controlling thoughts and activities may make people feel they have agency (Usher & Schunk, 2018). Deliberate thought directs the process of self-regulation by considering emotional, motivating, and actual performance factors. Self-regulation requires focus to be successful (Zimmerman & Moylan, 2009), as cited in Aljuaid, 2021). Since cognitive regulation of motivation is built on an anticipatory, proactive system that involves effective self-monitoring, self-evaluation, self-incentives, and self-reactivity.

Table 8. Level of Self-Efficacy (Self-Regulation)

Indicators	Mean	SD	Description	Interpretation
1. I often miss important concepts during our orientations and meeting because I'm thinking of other things.	3.38	1.152	Somewhat True	Fair
2. When prompted with difficulties, I make up questions to help clarify things.	4.12	.757	Moderately True	High
3. When I become confused about something I'm into this semester, I go back and try to figure it out.	4.10	.896	Moderately True	High
4. If concepts and activities or tasks are difficult to understand, I change the way I handle them.	4.13	.871	Moderately True	High
5. When studying, I try to determine which concepts I don't understand well.	4.43	.680	Moderately True	High
6. When I do my tasks, I set goals for myself to direct my activities.	4.57	.666	Very True	Very High
7. If I get confused, I make sure I sort it out afterward.	4.26	.638	Moderately True	High
8. I usually study in a place where I can concentrate on my coursework.	4.41	.727	Moderately True	High
9. I make good use of my study time.	4.40	.714	Moderately True	High

Indicators	Mean	SD	Description	Interpretation
10. I found it hard to stick to my study schedule.	4.03	.901	Moderately True	High
11. I have a regular place set aside for studying.	4.14	.895	Moderately True	High
12. I attend class and academic engagements regularly.	4.43	.693	Moderately True	High
13. I often find that I don't spend very much time on this course because of other activities.	3.34	1.258	Somewhat True	Fair
14. I often feel so lazy or bored when I study for this class that I quit before I finish what I planned to do.	3.13	1.313	Somewhat True	Fair
15. I work hard to do well in this class even if I don't like what we are doing.	3.98	1.149	Moderately True	High
16. When the work is difficult, I give up or only do the easy parts.	2.99	1.340	Somewhat True	Fair
17. Even when the tasks are dull and uninteresting, I manage to keep working until I finish.	4.29	.903	Moderately True	High
Overall Mean	4.01	.477	Moderately True	High

The table clearly shows that the BPE students have high self-regulation, given the overall mean of 4.01, which is interpreted as high. The overall calculated standard deviation of .477 suggests that the student's responses are clustered near the calculated mean, which means that their responses are similar to one another. BPE students can effectively manage their thoughts, behaviors, and emotions to achieve their academic goals. In addition, since they have high self-regulation, they can set realistic academic goals, develop effective study strategies, and monitor their progress toward achieving their goals.

The respondents are unanimous in ranking "When I do my tasks, I set goals for myself to direct my activities" as the highest item. Since the calculated standard deviation for this item is 0.666 or low, this indicates that the amount of variability that comes from the responses of education students majoring in BPE that are present in the dataset are clustered closer to 4.57, which is the calculated mean that is also interpreted descriptively as very high.

This remarkable finding suggests that students demonstrate a high level of goal-setting. It further means that they possess strong resilience and can persist in their studies despite being prompted with difficult or even monotonous or challenging academic tasks. This skill is essential for academic success because students can persevere despite the obstacles to achieve the set goals. Acevedo (2018) contends that goals contribute to students' motivation as they work to satisfy the demands they place on themselves. Teachers must ensure they are addressing both as they proceed with the goal-setting process because there are cause-and-effect links between motivation and goals, as well as objectives and motivation. To guarantee that goals are tackled together, motivation must start as soon as they are set. Goal setting requires motivation if it is to be successful.

On the other hand, "When the work is difficult, I give up or only do the easy parts" ranked the lowest. Since the calculated standard deviation for this item is 1.340 or moderate, this indicates that the amount of variability that comes from the responses of undergraduate education students majoring in BPE that are present in the dataset are clustered a little bit spread out to 2.99, which is the calculated mean that is also interpreted descriptively as somewhat true. It indicates that students may have difficulty settling into their comfort zones and will choose an easy task over a challenging one. If this attitude persists, it may become detrimental to academic success. However, it is also noteworthy that students in this item must be united in their responses considering the standard deviation. Other students have high self-regulation insofar as this indicator is concerned, while others have low self-regulation. Hence, it is crucial to understand the specific circumstances contributing to the students' self-regulation difficulties so that the schools and the teachers can identify strategies and interventions to improve their self-regulation skills.

### **Problem 3. What is the respondents' level of academic performance?**

Table 9 presents the student's academic performance frequency, percentage, mean, and standard deviation results. It can be drawn from the data that the student's academic performance is at a very good level, as indicated by the overall mean of 1.56.

Table 9. Academic Performance of the Students

Categories	Description	Frequency	Percentage	Overall Performance	Interpretation
1.00-1.5	Excellent	67	59.3	1.53	Excellent
1.6-2.00	Very Good	46	40.7		
2.1-2.5	Good	0	0		
2.6-3.00	Passed	0	0		
5.00	Failed	0	0		

Academic performance is the skill and knowledge students acquire while learning. After completing learning, a teacher gives a test or exam to gauge how well the pupils did in that lesson or course (Musa, 2020). Many elements, such as attitudes, intellectual capacity, motivation, and academic self-efficacy, have been found to be critical determinants of students' academic achievement.

It can be seen from the table that most of the students got a grade between 1.00 and 1.50 with a frequency of 67 or 59.3 percent, interpreted as excellent. The excellent level indicates that BPE students have developed their skills to meet the expected competencies very satisfactorily. This implies that students possess the fundamental knowledge, skills, and core understanding and transfer them independently through their respective academic performances. Notably, no student got a grade below the very good range.

**Problem 4. Is there a significant relationship between academic performance and:**

**3.1 student-teacher relationship; and,**

**3.2 self-efficacy?**

Table 10 illustrates the applicability of the relationship between academic success, teacher-student interaction, and self-efficacy. The table includes the correlation coefficients, p-values, assessment of the hypothesis at a 0.05 level of significance, and statistical interpretation. Since Table 10 only reveals one significant correlation between the linked variables, the null hypothesis, "There is no significant relationship between study habits and academic performance," is rejected.

Table 10. Correlation Analysis of Academic Performance, Student-Teacher Interaction, and Self-Efficacy

Variables	Correlation Coefficient	P-Value	Interpretation
Student-Teacher Relationship	-.023	.813	Not Significant
Helping/Friendly	-.000	.999	Not Significant
Understanding	-.006	.949	Not Significant
Certainty	.023	.813	Not Significant
Satisfaction	.012	.900	Not Significant
Authority	-.104	.272	Not Significant
Self-Efficacy	.187*	.047	Significant
Academic Self-Efficacy	.140	.138	Not Significant
Self-Regulation	.182	.053	Not Significant

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

The study’s conclusions show that only self-efficacy among independent variables significantly correlates with students’ academic achievement ( $r = .187^*$ ,  $p = .047$ ). It implies a positive relationship between self-efficacy and academic achievement, meaning that students perform better in school when they have a high level of self-efficacy.

A large body of literature backs the conclusion. Self-efficacy has been shown to enhance overall student success and performance. It has been demonstrated that high levels of self-efficacy influence students’ academic progress and educational ambitions. According to recent studies (Ansong et al., 2019; Qudsyi et al., 2020; Talsma et al., 2018), self-efficacy can predict student engagement and create a positive feedback loop with academic success. If they are created at the beginning of students’ academic journeys, high levels of self-efficacy can lead them to success that satisfies their complete personal and career aspirations. Therefore, institutional leaders should consider increasing this noncognitive factor more than examining variables such as GPA and standardized testing scores. Institutional leaders and their faculty who develop interventions may consider using self-regulated learning strategies to develop students’ confidence. Since self-efficacy was significantly correlated with academic performance, a simple linear regression analysis was conducted to determine its impact on academic performance.

**Problem 5. Which sub-variables of teacher-student and self-efficacy, singly or in combination, best predict the academic performance of BPE-SPE students?**

Table 11 presents the influence of the independent variable on the dependent variable. The student's grade is influenced by self-efficacy,  $\beta = 0.097$ ,  $t = -2.008$ , ( $p < .05$ ). The finding implies that self-efficacy significantly influences the students' academic performance.

Table 11. The Variable that Best Predicts Academic Performance of BPE-SPE Students

Model	Unstandardized Coefficients		Standard- ized Coef- ficients	T	Sig
	B	Std. Error	Beta		
(Constant)	1.940				
Self-Efficacy	.097	.048	.187	-2.008	.047
$R = .187^a$	$R^2 = .035$	$f \text{ value} = 4.030$		$p\text{-value} = .047^b$	

More precisely, the predicted score for values of the independent variable is indicated by the beta weights ( $\beta$ ), which means that each additional score/unit accounted for by the measured variable would imply an increase or decrease in students' grades. The figures in the table disclose that for every unit change in self-efficacy, there is a corresponding increase of 18.7 percent in the student's grade. This further means that the higher the level of self-efficacy, the higher the student's grades.

From the preceding analysis, the equation useful in predicting what independent variable/s significantly influences the students' grade (Y) as indicated by the  $F\text{-value} = 4.030$  with its corresponding probability value (.047) is significant at ( $p < .05$ ).

This model is illustrated:

$$Y = 1.940 + 1.87X_1$$

Where: 1.940 = constant

Y = Academic Performance

$X_1$  = Self-efficacy

According to prior studies, among the many noncognitive factors, self-efficacy is one of the most effective markers of success in college environments (Tepper & Yourstone, 2018). The ability to complete academic assignments and put in the effort required to get beyond challenges distinguishes students with high levels of self-efficacy from their less academically successful peers (Haslerig, 2018).

## CONCLUSION

The study concludes that BPE teachers establish high positive student-teacher interaction. According to the literature, teachers that have significant interactions with their students indicated that they were more engaged and attentive in their academics and had better engagement in the classroom. Quality interactions that foster relationships between teachers and their students are critical to students' academic performance in dynamic classroom environments (Quin, 2017).

Moreover, it is concluded that students have high academic self-efficacy and self-regulation. Hence, BPE students can be regarded as those who believe in one's capacity to complete academic tasks at the required level in their studies. Since they have high self-regulation, they can set realistic academic goals, develop effective study strategies, and monitor their progress toward achieving them.

Another conclusion is that self-efficacy and academic performance are significantly correlated. Hence, the null hypothesis "There is no significant relationship between academic performance and student-teacher interaction and self-efficacy" is rejected. Self-efficacy had a positive relationship with academic performance. It means that increases in self-efficacy are associated with increases in academic self-efficacy.

Lastly, considering the regression analysis results, it is concluded that self-efficacy impacted academic performance. The figures in the regression model disclose that for every unit change in self-efficacy, there is a corresponding increase of 18.7 percent in the student's grade. This further means that the higher the level of self-efficacy, the higher the student's grades.

## RECOMMENDATIONS

The following recommendations are suggested considering the abovementioned findings and conclusions.

School administrators are encouraged to motivate teachers to incorporate exercises that improve self-efficacy into their lessons. Administrators may foster a pleasant environment where students feel empowered and confident in their capacity to succeed academically by fostering a classroom setting that fosters self-belief. Additionally, providing professional development opportunities that arm teachers with efficient self-efficacy techniques can improve their capacity to encourage self-belief in students.

Teachers, who significantly impact students' lives, are crucial in fostering self-efficacy. It is advised that teachers inform their students about self-efficacy and how it affects academic achievement. Teachers can help students realize the significance of self-belief in their learning process by increasing awareness and understanding. Students' self-efficacy can be evaluated to gain important information for supportive interventions and tailored support. Additionally, praising children frequently for their high efficacy in academic assignments can help them feel more confident in their abilities. Students can be empowered and boost their self-efficacy by utilizing various self-efficacy-building intervention strategies, including modeling, guided practice, and self-reflection.

It is advised that students always set challenging but attainable academic goals. Students can build self-efficacy by consistently challenging themselves, which helps them feel competent and confident. Students shall actively participate in activities and tasks, promoting confidence and conviction in their skills. Therefore, they must take responsibility for their own self-efficacy beliefs.

Future studies could take several directions to understand better self-efficacy and how it relates to academic success. Researchers are urged to conduct additional studies considering various groups and environments to provide a thorough understanding of self-efficacy in varied scenarios.



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