

PERCEIVED IMPACT OF PRAYER ON COLLEGE STUDENTS' ACADEMIC PERFORMANCE

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Abstract. Prayer has long been recognized for its potential to positively impact well-being and influence academic performance positively. However, contemporary modern-day trends indicate a decline in prayer practices among millennials and a rising number of individuals with no religious affiliation. This descriptive correlational study aimed to determine the effects of prayer on academic performance as perceived by college students of De La Salle-College of Saint Benilde in a BIBCHUR (Bible and Church) course. An online survey was administered to 249 participants selected through convenient and purposive sampling to get their perspectives. Data were analyzed through mean and Pearson's r to answer the research questions. Results showed that students' perception of prayer is 3.40, or prayer moderately affects academic performance. This result indicates a negligible correlation between prayer and academic performance, or 0.0516. Therefore, the recommendation includes deepening prayer life through sustaining faith communities, enhancing formation programs, and developing resources for students' spiritual growth to achieve holistic learning.

Keywords: *prayer, academic performance, spiritual growth, holistic learning*

Introduction

Determining factors in academic performance in a course creates opportunities to improve educational outcomes. Teachers can allocate resources and instruction more effectively with adequate performance prediction strategies. Research has been done for at least a century to identify the variables affecting academic achievement. (Hellas et al., 2018), particularly in psychology. For example, first-year students' verbal memory tests were conducted to identify factors correlating with academic performance (Baum et al., 1919; Montague et al., 1918; White et al., 1917). Interest in identifying individuals with performance characteristics, such as the ability to program, emerged soon after (McNamara and Hughes, 1961). In addition, other factors were examined, such as individual course grades, individual exam grades, program retention or dropout, GPA or cumulative GPA, individual exam grade, and assignment performance (Hellas et al., 2018). Empirical research on prayer and academic performance, however, is limited. Extrinsic religiosity in prayer or attending religious services might not be a significant educational conflict or a barrier to educational success (Carol and Schulz, 2018). Most scientific knowledge on prayer has been gathered within the psychology of religion. However, even in this field, the empirical study of prayer remains an underdeveloped field of research (Kaščák and Gajňáková, 2012).

Despite extensive literature linking spirituality with psychological well-being, little is known about spirituality's relationship with psychological well-being and academic performance (Beggs, 2020). Although psychological and other medical literature has linked positive personal well-being measures with spirituality, investigating whether a student's spirituality is related to general student well-being and performance is scarce (Adams et al., 2000). The Smith (2021) survey found that 29% of American adults had no religious affiliation, and those leading that shift said they seldom or never pray. The

secularizing shift indicates no sign of slowing (Smith, 2021). Teens often see God as a cosmic therapist, solving problems and making people happier but distant (Ansberry, 2017). Furthermore, the Catholic Voices (2018) study revealed that the proportion of European young adults who do not identify as religious can range from 17% in Poland to 91% in the Czech Republic and 70% in the United Kingdom. Approximately 60% of young adults in Belgium, the Netherlands, Spain, and the United Kingdom "never" attend church. Moreover, almost 65 percent of young individuals in Britain "never" pray. In Belgium, Hungary, and Austria, just 2%, 3%, 6%, and 7% of young Catholic adults said they regularly attended mass.

However, in the Philippines, Catholic students understand praying and recognize God's response (Cornelio, 2017). As a result, Filipino youth have remained engrained in their Catholic tradition and sought to form a personal relationship with God. Moreover, Filipino Christian youths believe that God is present and faithful in the care and kindness of family members and neighbors and that God is the source of hope (Cacho and del Castillo, 2022). Many Filipino Catholics valued and benefitted from prayer, especially during the COVID-19 pandemic, where they described their prayer as more active, consistent, passionate, profound, and sincere (Del Castillo et al., 2021). Students often encounter significant academic and personal challenges that cause stress. However, can prayer lessen students' stress, help them perform academically, and increase their grades? Likewise, if students do not pray, does this affect their performance in school? Finally, if Filipino Catholic students have remained engrained in their Catholic tradition and have sought to form a personal relationship with God, does this mean they have better school outcomes? These are the underlying questions that this study sought to answer.

Background

The purpose of this study is to determine the impact of prayer on the academic performance of college students of De La Salle-College of Saint Benilde using the following research questions: (1) the perception of students' impact of prayer on academic performance; (2) the academic performance of the students; and (3) the relationship between the perception of prayer and students' academic performance.

Theoretical framework

This study used the theoretical framework input (personal attribute), environment (factors affecting outcomes), and outcomes (academic performance) model (*Figure 1*). The input-environment-outcome was one of the first college impact models by Astin (2012; 1970) in which outcomes or academic performance are the results of two components: the input or personal attributes and environment or factors like physical, social, intellectual, emotional, artistic, creative, and spiritual. The inputs refer to personal values and attributes of student learning that they bring to college. These include their talents, skills, and aspirations. The environment refers to those that can affect student performance, such as physical, social, intellectual, artistic, creative, and spiritual. Finally, the outcomes refer to student achievement, knowledge, skills, and values. The interaction between input and environment affects the outcomes, and the input or what students bring to college could also affect the outcomes. Therefore, in this study, students' academic performance (or the output) will depend on the kind of prayer

life they grow up in (or their input), whether religious or not, and their interactions with other people in different situations (or the environment).

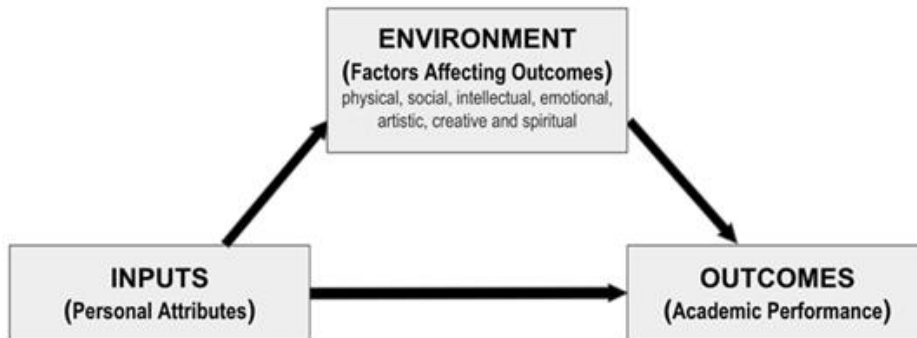


Figure 1. Inputs environment outcomes model.

Literature review

Prayer is an initial act in Catholic schools before any activities begin. It is taught that acknowledging God is an essential attitude to align whatever tasks people do. It helps people feel interpersonally close to God, especially when they need support in challenging times (Jeppsen et al., 2015). Clayton (2021) revealed that spirituality is a positive factor in the academic environment of college students. A positive association existed between students' perceptions of classroom autonomy and academic achievement. The positive direction of these relationships indicates the importance of students' beliefs within the academic environment. Similarly, Haynes (2016) study showed a positive relationship between student engagement and spirituality. Spirituality is a significant part of a student's daily life and is vital for a better understanding of how to best respond to complex questions. The frequency of personal prayer is a much stronger predictor of spiritual well-being. Thus, personal prayer is critical in forming individual spirituality (Wilkinson et al., 2018). Spirituality should be given time within each course to direct the student in the real presence of God through prayer.

Adams (2019) study analyzing millennial students' perceptions of spiritual development while attending religious colleges in the United States revealed that they experienced an increase in their perceived sense of spirituality due to their academic experience. It cultivates a campus environment open to transformation by allowing transparent and respectful interchange with their Christian worldview in a safe environment (Van der Walt, 2017). Accordingly, aligning the community's culture with the school environment is vital for students to succeed academically (Apthorp et al., 2002). Religious literacy practices contribute to students' learning in many ways, such as through emotional and bodily experiences of meaning-making (Papen, 2018). For example, prayer is found to be a solid formal and symbolic element in school socialization. Furthermore, children who prayed reported a more positive attitude toward school, English lessons, mathematics lessons, music lessons, and religious education (Kaščák and Gajňáková, 2012). Therefore, it showed a link between prayer and attitudes toward school.

To determine the critical factors that could be used to test and validate students' academic performance, collaboration between technologies and learning outcomes using e-learning could improve the academic performance of the whole learning process (Tawafak et al., 2020). Furthermore, universities provide more time and resources to

build students' emotional and social skills, such as emotional intelligence, to increase academic performance (MacCann et al., 2020). It helps monitor one's and others' emotions and uses this information to guide decisions. In addition, regulating emotion can help in critical thinking, which is helpful in students' academic success. Hu et al. (2017) examined the features necessary for student learning outcomes and examined the context, methodologies, and circumstances to improve teaching and learning. Their study revealed that activity and course features, demographic features, learning behavior features, self-reported features, and student records and performance in the current course contribute to academic performance. Therefore, looking at student history records is vital to critically examine student behavior and academic performance, which helps uncover student outcomes.

Moreover, some factors predict academic performance, such as family, institutional, personal, and social factors, as shown in the study by Kumar et al. (2017) using data mining techniques. This method is helpful for educators and policymakers in improving the teaching and learning process in the institution, enlightening decision-making to guarantee high-quality education, underscoring performance issues from the start, and proposing corrective solutions (Proaño and Villamar, 2018). The other factors for learning performance identified by Na and Tasir (2017) are learning behavior, learning level, and learning network. These are actions that learners construct during learning and can help them perform academically. Shahiri and Husain (2015) also identified cumulative grade point average (GPA), time of engagement, external assessments, extracurricular activities, family support, high-school background, internal assessment, social interaction network, study behavior, student demographics, and student interest as contributors to student performance. Family support can provide vital conditions and opportunities to enhance student confidence, self-reliance, high emotional intelligence, and performance in school activities.

Materials and Methods

The descriptive correlational method was used in this study to determine if two or more variables are related and describe the current behavior or specific features (Cohen and Manion, 1994). It includes proper analysis, interpretation, and identification of trends and relationships (Salaria, 2012). Pearson's r was used to answer the research questions. Participants of this study were 249 college students across schools of De La Salle-College of Saint Benilde: Hotel and Restaurant Institution Management, School of Design and Arts, School of Diplomacy and Governance, and School of Management and Information Technology, taking up BIBCHUR (Bible and Church) course. The participants in this study, ages 18-22, have varied religious affiliations, from Roman Catholic to Born Again Christians to Protestants like Baptist, Methodist, and Islam. Others have no religious affiliations and consider themselves atheists or agnostics. They were selected through convenient and purposive sampling. The researcher formulated 25-item online survey statements to determine students' perceptions of the effects of prayer on academic performance. All items were measured using a 5, 4, 3, 2, 1 point scale with strongly agree, agree, neutral, disagree, and strongly disagree responses. The survey statements' content was validated by a BIBCHUR (Bible and Church) expert and a statistician, and the Cronbach Alpha yielded a result of 0.973, which means that the items have excellent internal consistency. The interpretation is shown in *Table 1*.

Table 1. Cronbach's Alpha interpretation.

Cronbach's Alpha (α)	Internal consistency/Reliability
$\alpha > 0.9$	Excellent
$0.8 \leq \alpha < 0.9$	Good
$0.7 \leq \alpha < 0.8$	Acceptable
$0.6 \leq \alpha < 0.7$	Questionable
$0.5 \leq \alpha < 0.6$	Poor
$\alpha < 0.5$	Unacceptable

Data gathering procedure

The researcher first identified the participants for the study who are currently enrolled and are taking BIBCHUR (Bible and Church), a theology course in the college. Then, a letter of permission to conduct a survey was sent to their professors. Moreover, the researcher also obtained informed consent from all participants in the study. After their approval, a 25-item online survey statement using Google Forms was sent to them, and responses were generated using Excel's data filter option. The researcher also sought the Theology Chairperson's permission to pull the students' final grade records from the School of Multidisciplinary Studies, as these are vital in the study.

Data analysis procedure

Cleaning and arranging the survey data was the first step in the data analysis procedure. Next, the students' mean perception score about prayer's effect on academic performance was calculated, followed by computing the mean perception score of the students on the effect of prayer on academic performance. The researcher used the mean to answer research questions #1 and #2 and Pearson's r to answer research question #3.

Results and Discussion

The responses to the questions posed in this study are discussed accordingly.

The perception of students' effect of prayer on academic performance

Tables 2, Table 3, and Table 4 show the scale and level of agreement, description of the grand mean responses, and summary of the responses and the corresponding mean, mean interpretation, and interpretation of the mean responses, demonstrating the perception of students' effect of prayer on academic performance.

Table 2. Scale and level of agreement.

Scale	Level of agreement
1.00-1.79	Strongly Disagree
1.80-2.59	Disagree
2.60-3.39	Neutral
3.40-4.19	Agree
4.20-5.00	Strongly Agree

Table 3. Description of the grand mean responses.

Scale	Description
1.00-1.79	Prayer does not affect academic performance
1.80-2.59	Prayer has a slight effect on academic performance

2.60-3.39	Prayer has neither effect not no effect on academic performance
3.40-4.19	Prayer has a moderate effect on academic performance
4.20-5.00	Prayer has a strong effect on academic performance

Source: Blay (2013).

Table 4. Summary of the responses and the corresponding mean, mean interpretation, and interpretation of the mean responses.

Statements	Choices					\bar{x}	Mean interpretation and interpretation of the mean responses
	5	4	3	2	1		
My religious faith requires me to pray to God to accomplish my academic requirements.	58	84	60	34	13	3.52	Agree: My religious faith requires me to pray to God to accomplish my academic requirements.
It is fitting and proper to pray to God for wisdom and knowledge before doing my academic tasks.	83	100	46	15	15	3.85	Agree: Praying to God for wisdom and knowledge before doing my academic tasks is moderately fitting and proper.
I pray before starting my academic work.	43	60	96	34	16	3.28	Neutral: Before starting my academic work, I neither prayed nor did not pray.
I offer a prayer each time I do any assignments.	28	63	91	53	14	3.15	Neutral: I neither offer nor do not offer a prayer each time I do any assignments.
I pray spontaneously before planning my school or major requirements.	48	78	75	35	14	3.40	Agree: I moderately pray spontaneously before planning my school projects or major requirements.
I pray whenever I take any assessment task, like a quiz or exam.	72	77	57	26	17	3.67	Agree: I moderately pray whenever I take any assessment task, like a quiz or exam.
My groupmates and I always start with a prayer before doing a group assignment.	15	21	98	77	38	2.58	Neutral: My groupmates and I neither always start with a prayer nor start a prayer before doing a group assignment.
Prayer has made me more sensitive to others, especially collaborating with my classmates.	35	84	92	25	13	3.43	Agree: I have moderately become more sensitive to others through prayer, especially when collaborating with my classmates.
I believe there is a link between prayer and academic performance.	44	90	72	24	19	3.45	Agree: I moderately believe there is a link between prayer and academic performance.
I am inspired to think creatively and innovatively about my performance task when I pray.	56	101	55	20	17	3.63	Agree: I am moderately inspired to think creatively and innovatively about my performance task when I pray.
I feel comfortable and assured whenever I pray over my academic work.	76	107	33	20	13	3.84	Agree: Each time, I pray for my academic work. I moderately feel comfort and assurance.
Prayer gives me clarity and focus of mind on doing my school work.	63	97	56	20	13	3.68	Agree: Prayer moderately gives me clarity and focus on doing my schoolwork.
Prayer gives me the motivation to excel in my academics.	69	90	59	16	15	3.68	Agree: Prayer moderately gives me the motivation to excel in my academics.
Prayer makes a difference in my academic performance.	61	75	69	29	15	3.51	Agree: Prayer moderately makes a difference in my academic performance.
When I do not pray to God, my assignments are poorly affected.	19	48	75	73	34	2.78	Neutral: When I neither pray nor do not pray to God, my scores in my assignments are poorly affected.
My academic achievement result from my fervent prayer to God.	32	54	98	36	29	3.11	Neutral: I believe that my academic achievements neither result from my fervent prayer to God or not from my fervent prayer to God.
The more I pray to God, the higher scores I get in my assignments.	23	40	89	59	38	2.85	Neutral: The more I pray to God, neither the higher scores I get nor not get higher scores in my

My score in my assignments and other academic tasks reflect how I have prayed to God.	18	39	86	69	37	2.76	assignments. Neutral: My scores in my assignments and other academic tasks neither reflect how I have prayed to God nor how I have not prayed to God.
I have become more organized in my schoolwork because of prayer.	23	72	87	46	21	3.17	Neutral: I have neither become more organized in my schoolwork because of prayer nor not organized in my schoolwork because of prayer.
Prayer helps me know what to do in challenging academic tasks.	46	102	58	28	15	3.54	Agree: Prayer helps me know what to do in challenging academic tasks.
Prayer helps me cope with pressure and stress in my academics.	85	93	39	15	17	3.85	Agree: Prayer helps me cope with pressures and academic stress.
It makes me a God-centered person whenever I pray.	68	90	68	18	19	3.65	Agree: It moderately makes me a God-centered person whenever I pray.
I appreciate my worth as a student and individual because of praying.	52	92	68	18	19	3.55	Agree: I moderately appreciate my worth as a student and individual because of praying.
Prayer helps me practice a sense of professionalism and discipline in my academics.	46	95	66	28	14	3.51	Agree: Prayer moderately helps me practice a sense of professionalism and discipline in my academics.
Successful academic performance outcomes result from my connection to God through prayer.	43	80	72	34	20	3.41	Agree: Successful academic performance outcomes moderately result from my connection to God through prayer.
Total	1206	1932	1755	852	494	$G\bar{x}=3.40$	Agree: Prayer has a moderate effect on academic performance.

With a grand mean of 3.40, participants agree that prayer moderately affects academic performance. Furthermore, the participants agree that praying to God for wisdom and knowledge is moderately fitting and proper before doing academic tasks because prayer helps them cope with academic pressures and stress ($\bar{x}=3.85$). Moreover, praying over their academic work makes them moderately comfortable and assured ($\bar{x}=3.84$). In addition, participants moderately prayed whenever they took any assessment tasks, like quizzes or exams ($\bar{x}=3.67$). Therefore, it makes them God-centered people whenever they pray. Likewise, the participants agree that prayer gives them clarity, focus on doing their schoolwork, and the motivation to excel academically ($\bar{x}=3.64$). Thus, they are inspired to think creatively and innovatively about their performance task when they pray ($\bar{x}=3.63$). Finally, prayer stimulates their feeling to do their tasks autonomously. This result confirms several studies indicating a positive correlation between prayer and academic performance. For example, in Horwitz's (2021) study, adolescents with stronger religiosity earn better grades and complete more years of higher education. Moreover, spirituality is positively correlated with the student's academic performance (Okunlola et al., 2021), and teachers' religiosity significantly impacts students' academic achievements. Students exhibit high-quality academic achievement when interacting positively with their teachers. Likewise, the internal and practical discipline in worship contributes significantly to motivation and academic achievement, and as a result, self-confidence, trust, belief, and self-efficacy all improved (Hidayah et al., 2021).

Prayer gives strength and courage to live through academic struggles and empowers students to face numerous barriers that hinder their focus on learning. In addition, prayer gives internal peace and calmness to fight every situation that positively affects their mental health (Budhagaonkar and Bansode, 2021). It helps reduce anxiety, gives a

relaxed feeling while working on schoolwork, and increases positive thinking while managing their academics. Thus, prayer has psychological effects that help in students' academic performance. Other studies confirmed that prayer and other activities could benefit students' academic performance. For example, Sullivan's (2018) study confirmed that worship and learning are reciprocal. Additionally, Widodo and Ardhyantama (2020) confirmed that prayer and learning have effective and unique ways of solving problems and improving student learning. The students also demonstrated interest in learning and religious behavior with weekly prayer activities (Abdullah, 2020). Finally, spirituality mediated by academic wellness strongly predicts grade point average outcomes (Weikel, 2019). This research showed that prayer and other school undertakings help students succeed academically.

The student's academic performance

The grand mean for this study is 3.40. However, the De La Salle-College of Saint Benilde does not have a 3.4 grade in the grading system but a 3.0. Thus, the grade that could correspond to 3.40 is 3.0, which means that the participants' academic performance in the Bible and Church course is 3.0 or very good, which ranges from 89 to 92. *Table 5* shows the De La Salle-College of the Saint Benilde grading system.

Table 5. *De La Salle-College of Saint Benilde grading system.*

Percentage	Grade	Description
97-100	4.000	Excellent
93-96	3.500	Superior
89-92	3.000	Very good
85-88	2.500	Good
80-84	2.000	Satisfactory
75-79	1.500	Fair
70-74	1.000	Pass
Below 70	-	Repeat

Although prayer has a moderate impact on the perception of students' academic performance, participants in this study still earned very good grades in their Bible and Church course. Several influences can contribute to the success of students' academic performance. Alabdulkarem et al. (2021) identified these as upbringing, K-12 education, and structured and unstructured activities. Likewise, parents' education level and work field, type of intermediate and high schools, and attendance to prayers. In the same way, higher levels of motivation and self-regulation were found to correlate positively with intrinsic motivation and college students' grades (Turner et al., 2009). Furthermore, effective time management was also found to contribute to higher grades for college students than poor academic time management (Kitsantas et al., 2008). Finally, Ebert (2020) confirmed that academic habits have a statistically significant positive correlation with motivation and, thus, a great factor influencing academic success.

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The relationship between the perception of prayer and students' academic performance

Using Pearson's r , the relationship between the perception of prayer and the student's academic performance is 0.0516, a negligible correlation. *Table 6* shows this result. The participant's perception of prayer earned a negligible correction (0.0516), meaning prayer has no relationship to their academic performance. Although there is a 0.0026 probability that prayer can affect their academic performance, this shows a slight effect. Therefore, prayer has no connection with their academic performance. This result justifies the study of Williams (2021) with his undergraduate respondents, who yielded a negative prediction between religiosity and academic performance. Similarly, religiosity and prayer partially relate to academic performance, as revealed in the study of Kornas-Biela et al. (2020) with Catholic university students, and do not stimulate learning engagement and good academic performance (Khalid et al., 2020).

Table 6. Results linear regression.

Model	R	R ²
1	0.0516	0.00266

Implications of education

The academic performance of any learner depends on various factors, and although prayer has not been explored empirically, it has been proven to be an essential contributor to academic success. Similarly, learning should be holistic and multidisciplinary, and the spiritual aspect is essential to student outcomes. Human beings are spiritual beings, and the role of faith should be recognized in education (Zhang and Wu, 2016). Educators are crucial in learners' integral development to foster human dignity and self-worth. They serve as mentors that students can trust as they share their faith experiences and model their lives. Younger people must see a mentor's worldview becoming flesh and blood in their own lives (Van der Walt, 2017). Hence, teaching them socially, emotionally, physically, and intellectually is insufficient to produce outstanding academic students. All learners should not only master practical and theoretical skills. Developing faith and healthy spirituality is also essential for forming excellent citizens who are intellectually intact and morally responsible.

Conclusion

This study uncovered the impact of prayer on academic performance as perceived by BIBCHUR students at the De La Salle-College of Saint Benilde. It has been revealed that prayer moderately affects students' academic performance. This result affirms Astin's input-environment-outcomes model that students' learning depends on what they bring to college, their values, personal attributes, and their engagements with their school environment. Therefore, even in Catholic schools where prayer is crucial to students' activities, academic success cannot be attributed solely to prayer. Instead, individual outcomes in academics rest on individual social experiences and belief in the

effectiveness of prayer. The academic performance of any learner depends on numerous factors, and prayer is an essential contributor to academic success. It emphasizes the resilience and complex nature of academic accomplishment by acknowledging the subtle interactions among individual characteristics, contextual variables, and the efficacy of prayer, all of which help students reach their most significant potential.

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Conflict of interest

The author confirms that no conflict of interest is involved with any parties in this research study.

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