



Academic Superstitions of Pre-Service Teachers: Input Positive Mental Attitude Promotion Program

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Abstract

Superstitions in general have a deep connection with the reality of everyday life, considering that the practices contained in them often become an integral component in an individual's daily life, forming a complex combination of belief systems and daily activities. The study explores the academic superstitions of the pre-service teachers in Philippine Normal University Visayas and to find out whether these beliefs have positive impact to their mental attitude with regards to the promotion of their chosen programs. This is a mixed method research that specifically uses the explanatory sequential method design which employed the researcher-made questionnaire and an interview guide as tools to gather data. Stratified sampling was utilized to come up with the seventy-two (72) respondents. The statistical tools used in the study were the mean and standard deviation. Percentage, ranking, test, and one-way-ANOVA were used as well. For the qualitative data, this study used thematic analysis. Results provide a significant insight into the contemporary student mindset, showing that superstitions are not merely disregarded as irrational notions but are acknowledged to have a substantial role in both academic and personal growth. Also, students' alignment or divergence concerning superstitions' effect on academics is not notably influenced by their native language. In the same vein, results indicate that gender does not have a decisive role in shaping students' views on superstitions in an academic context. Hence, external factors like personal experiences, family beliefs, and broader cultural influences may wield a greater influence in shaping students' perceptions of superstitions with academic settings. The presented results offer a distinctive contribution to our comprehension of superstitions and their impact on mental outlook, psychological processes, and resultant behaviors. Simultaneously, these findings propose avenues for further exploration of superstitions.

Keywords: *Superstitions; Mental Attitude; Academic and Personal Growth; Cultural Influences; Resultant Behavior*

INTRODUCTION

Over the centuries, numerous ideas have governed people's lives, whether they are ingrained in their culture or were shaped by the surroundings they live in. These can be practices and the passing of traditional beliefs from generation to generation which is widely known as "superstitions". According to a study conducted by (Chen & Young, 2018), superstition is an unjustifiable belief or custom that results from a supernatural or fictitious impression of causation. It is commonly known to have a relation with the thought of luck. Moreover, superstitions are beliefs and behaviors that may result in unfavorable outcomes, yet they typically lack any basis in truth or facts (Espinal, 2020).

Superstition had become intertwined with reality of regular daily events due to its combination with daily life. People are able to make decisions on which of superstitions and science they should always rely on because both exist in the modern world (Sheldrake, 2012). Being superstitious can have an impact on the attitude and behavior, which can affect everything from how people do on a test to how they react to placebos (Fuertes-Prieto et al., 2020; Li, 2021). In contrast to the common misconception that an unconnected action (or object) might enhance performance, superstitions seem to be a more nuanced idea (Ichino, 2020).

The influence of ancestral superstitious habits and beliefs on Filipinos continues to be significant in present times, as stated by (Santisteban & Galay, 2023). Research has shown that

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these superstitious beliefs can have an impact on various aspects of life, such as the stock market (Bai et al., 2020), academic performance (Mocan & Yu, 2020), financial decision-making (Hirshleifer et al., 2018; Huang et al., 2023), and educational policies (Mocan & Pogorelova, 2017). Additionally, the researchers found out that the study of (Besa et al., 2021), which aims to cater the millennials' perspective nowadays on some Filipino superstitious beliefs were connected to the researcher's study. Hence, this study of Besa et al., elevates the concerns of the researchers to investigate how millennials perceive Filipino superstitious beliefs in terms of academics and their overall influence on their performance.

Overall, this drives the researchers to collect the superstitious beliefs present up to this time; if the students of Philippine Normal University-Visayas still believe and practice the academic superstitious beliefs. The researchers also opt to preserve the academic literature, to recognize and appreciate these beliefs which mirror out the culture toward localization and contextualization. Indeed, this study must not be ignored for this is such a worthy endeavor to elevate cultural roots into its pedestal.

LITERATURE REVIEW

In this chapter, related literature from local and foreign literatures are provided to supply a deeper understanding of intentions and goals about the presented topic.

Superstitious Beliefs

People frequently define superstition as the faith in a spiritual link that is unsupported by facts. These beliefs include elements of religion and topics associated with it, such as superstitious ideology, astrology, omens, witchcraft, and prophecies. According to a study by (Karmakar & Chattopadhyay, 2021), religion can play a positive or negative impact in a person's personal and societal life; it helps people develop their morals and standards. Furthermore, the study argues that religion bestows security and ease on individuals, but it also contends that religion causes people to believe in destiny, which leads to superstition and even anti-scientific behavior in people.

In addition, according to a piece by C3 Teachers (n.d.) every town in the world has its unique culture. A community's behavior reveals its culture. Languages spoken, habits, traditions, behaviors, and religious convictions are only a few of the many differences between how people live today and how they did in the past. These artifacts are all being conserved now to pass on to future generations. To compare culture to superstition, these topics are kept alive in the present to pass on to the next generation and act as a reflection of how the community conducts itself.

As a matter of fact, there are many superstitions, some of which may seem trivial yet have a real-world influence. These superstitions include wearing charms, wearing particular clothing, liking particular colors and numbers, avoiding certain situations, and visiting places associated with good fortune. This demonstrates how superstitions can occasionally give comfort and help people deal with anxiety. While this may be the case, research by (Dagnall, 2018) demonstrates how superstitious conduct can develop into a habit and become self-reinforcing. And if someone doesn't perform the aforementioned "ritual" or superstition, it might cause worry and distress.

It is also stated in a study according to parapsychologists (Dagnall, 2018), which reveals that superstition is more prevalent when individuals are stressed or anxious because many people feel that practicing their superstitions provides them a sense of control and alleviates their anxiety and suffering. This is especially true when society is unstable and the economy is struggling. Although there may not be a clear definition of superstition, it is usually understood to signify a belief in supernatural influences, such as fate, and a desire to place a bias on unforeseen events that dispels doubt and uncertainty.

Moreover, in accordance with (Foster & Kokko, 2009) people are readily swayed by feelings

of luck, regardless of whether it is good or negative. Since people frequently base their decisions on superstitions, superstitions have a huge impact on decision-making. Furthermore, (Levental et al., 2021) note that superstitions have been a source of inspiration for choices throughout human history. These notions have developed in reaction to people's capacity to rationalize potentially dangerous situations over which they have no control.

Thus, according to another study done by (Uwayezu et al., 2021), superstitions can be broadly classed for cultural, religious, and personal benefits.

Academic Superstitious Beliefs

Filipinos enjoy objectifying the concepts of fortune, faith, and good luck. Objects have significance, and people need to comprehend the language that these objects express. That even in academics, superstitious beliefs were practiced.

According to the study entitled "Perceptions of Millennials on Filipino Superstitious Beliefs" (Besa et al., 2021) states that millennials continue to believe in superstitions. They continue to base their beliefs on what their family, friends, or even personal experiences have taught them. This study correlates to the study of (Ocampo & Aragon, 2018) which shows that the student's progress in forming moral convictions, family, friends, and the larger community play a significant role in determining an examinee's framework of ideas that later reflects the moral standards they uphold.

Another findings, in the study conducted by (Ocampo & Aragon, 2018) shows that student test takers had both positive and negative superstitious beliefs that they followed before, during, and after the exam. In contrast to the incentive of success, the motive of avoiding failure in the test takes precedence. Superstitions can have both good and bad impacts, depending on the individual. Additionally, student examinees' projection led to the development of their claim and personal intent to pass the test. The superstitious ideas were established to get rid of the student examinees' anxieties and to protect their emotional world from unpleasant emotions and any unfavorable prospects.

Moreover, the study of (Naaz, 2019) examines the impact of academic level and Gender on superstitious attitude among graduate and post-graduate students. The findings revealed that the level of superstitious attitude was varying among graduate and undergraduate students, male and female students and the overall sample of the students. Additionally, many students believe in superstitious beliefs and it is said that females expressed higher levels of practicing that belief than males (Andrews & Tyson, 2019)

This study also supports the study of (Farley, 2015), which proves that a sense that an unrelated action (or thing) can enhance performance does not seem to be the whole scope of superstition. A person who uses an SB seems to go through a process of figuring out which of the three ways the conduct is acknowledged as being superstitiously strong. Additionally, the ongoing employment of SB may result in views of external sources of power, specific guidelines for its use, and the results of reminders of its execution throughout performance. Sport psychology practitioners should benefit from a deeper comprehension of SBs, especially in regards to how to apply mental skills training, such as pre-performance routines or refocus routines, depending on whether the athlete uses an SB prior to performing or not.

In addition, according to a study by Gallagher and Lewis, 2001, the rates of superstitious belief among college students surrounding tests. This particular study includes 426 students who completed a 22-item questionnaire covering superstitious behaviors related to tests, general superstitious beliefs ("I would prefer not to take a sociology test on Friday the 13th", p.4), religion, and academic standing. Almost half, approximately 48%, of the students reported feeling luck played a role in every test, and approximately 56% of the total students reported a small to medium amount of luck rituals for tests.

Another study revealed that superstitions has been found to increase both cognitive and physical performance (Damisch et al., 2010). They found out that the suggestion of “good luck” increased performance, perception of performance, and willingness to pursue with the given task. Performing superstitions could play a role in increasing individual’s sense of self-efficacy (i.e., an individual beliefs to complete the task at hand) and, in turn, increasing their level of performance (Damisch et al., 2010). Hypothesizing that superstition must have effects beyond physical rewards, (Damisch et al., 2010) analyzed the effects of lucky charms on a cognitive skill of a memory game and word anagrams.

RESEARCH METHOD

This portion of the study presents the following subheads: The research design, Research instrument, Participants or corpus of the study, Data collection procedure, Data analysis and lastly The Ethical consideration of the study.

Research Design

This study is a mixed method research design. Mixed methods design combines both quantitative and qualitative research methods to gain a more comprehensive understanding of a research topic. Specifically, it used the exploratory sequential mixed method design (Creswell & Poth, 2018). In this design, the researchers started collecting quantitative data, which was being followed with quantitative data.

The researchers used researcher-made survey questionnaire and an interview guide. The survey questionnaire consists of two parts: The first part consist of the demographic profile of the participants; the second part consist of the list of superstitious beliefs; while the last part consists the statement showing the extent of their belief. On the other hand, an interview guide consists of open-ended questions which deals with the influences of the superstitious beliefs of the students towards their academic performance.

Participants of the Study

One-hundred thirty-four (134) Students from PNU-V (Third year council) were served as the study's respondents, and they were asked about how superstitious beliefs affect their academic performance. Stratify sampling was used by the researchers to come up with the participants of the study. In stratified sampling, respondents were divided into subgroups called strata based on shared factors (gender, section, and language spoken at home). A different probability sampling technique was used to randomly sample each subgroup after it has been divided (Thomas, 2022). Out from 134 participants, only 72 were included in the study. Sixty-four participants were purposely chosen since they were the ones who claim to believe in academic superstitions.

Data Gathering

To gather data about academic related superstitious beliefs, the researchers conducted surveys and interviews with students who hold these beliefs. The researchers first wrote a letter to the school heads. After having the approval, they looked for a subject to be interviewed with their consent. During the interview, the researchers recorded and took documentation in a confidential manner. By gathering the data, the researchers gained a deeper understanding of the role that superstitious beliefs play in human culture and psychology.

Data Analysis

To find out the academic related superstitious beliefs of the pre-service students percentage and ranking were used.

To find out what level of agreement do students have towards the influence of superstitions in their academic endeavors mean and standard deviation was being used.

To find out the significant differences on the level of agreement do students have towards the influence of superstitions in their academic endeavors when the variables are considered (Sex, Section, Language Spoken at Home), t-test and one-way-ANOVA were used.

To know how do superstitions influence the pre-service teacher education students, a thematic analysis by (Tulip et al., 2020) was followed.

Ethical Considerations

To preserve the rights and wellbeing of the study participants, the researchers made sure to adhere to ethical standards and principles. Informed consent is one ethical consideration. The nature of the study, including its goals, methods, and potential risks and benefits, should be thoroughly disclosed to participants. They got the chance to learn more and decide whether or not to participate after having the chance to ask questions. Additionally, researchers guaranteed that participants have the freedom to leave the study whenever they want. Additionally, the researchers were also committed to confidentiality and took precautions to preserve the privacy of their study participants. This involved the use of pseudonymous or anonymous data collecting techniques to restrict access and disclosure. The potential risks and advantages of their study were also taken into account by researchers. In light of this, the researchers took measures to reduce any potential harm, such as offering participants access to resources for emotional support or making appropriate referrals to mental health professionals, if needed. The researchers also has taken into consideration the cultural background of superstitious beliefs. As a result, the researchers became more mindful of the participants' cultural backgrounds and refrained from forcing their own views or values on them. Researchers was able to conduct a fruitful study while preserving the highest standards of ethical conduct by adhering to ethical principles and norms.

FINDINGS AND DISCUSSION

This section presents the results and discussions of the research.

The Academic Superstitions of the Participants

Superstitious Beliefs generally have a positive effect on perceived performance and mental health of college students (Boer et al., 2021).

It has a favourable psychological impact on the thinking and confidence of students. When students believe in lucky charms or rituals it can provide reassurance and lessen worry, resulting in better attention and concentration during tests or essential assignments. Furthermore, such ideas can increase students' self-esteem and drive, encouraging them to continue and work harder to attain their objectives. Through the power of positive thinking, superstitions can motivate students to do better in school. Students' psychological confidence might increase and their performance anxiety can decrease when they believe in superstitions. However, it is critical to remember that academic performance is mostly determined by factors such as hard work, excellent study habits, and peer and teacher support.

Thus, the following tables show the practiced superstitious beliefs in different academic aspects (Before, During, and After).

Table 1. Superstitious Beliefs of the Students: Before, During, and After Studying

No	During	After
1	Chewing a gum.	Putting all the notes under the pillow.
2	Eats banana.	
3	Eating chocolate	
4	Eating peanuts while studying.	

Table 1 presents the Superstitions of pre-service teachers that they practiced before, during, and after studying. The most common pre-study ritual of the students is to “take a bath”. It is believed that you can get in the zone, help relax your body and mind, reduce stress before. Taking a bath can create a conducive environment for focused learning that can stimulate creative thinking and problem-solving abilities. Warm water has the ability to improve cognitive function, reduce muscle tension, and circulate blood.

“Chewing a gum” is one of the most common practice of the students while studying since it can enhance sensations of relaxation, boost focus, reduce stress, and enhance memory. During studying, the pre-service teachers also “eat banana, peanuts, and chocolate” as they believed it help them to boost their energy. Chocolates helps produce endorphins that can help you increase your mood, which will help you study and focus. Bananas are known as brain foods full of fiber and vitamins and nuts also have protein so will feel full and satisfied.

In “after studying” aspect, most of the participants practiced “putting all the notes under the pillow” since according to them it will helps to remember all the lessons better. With this manifestation, the lessons being studied that night will be absorbed by your subconscious and it will be easier to review in the morning.

Table 2. Superstitious Beliefs of the Students: Before, During, and After Taking an Examination

Before	During	After
Eating peanuts.	Eating of chocolates and peanuts.	Keeping the pen and never let it get lost.
Eating chocolates.	2. Chewing gums.	2. Break the pencil after the exam.
Doesn't eat egg.	3. Wearing a lucky charm, e.g bracelet	3. Directly going out the door without looking back.
Never cuts hair before the exam.	Putting a coin inside the shoe.	
Putting the notes under the pillow.	Always step the right foot first before and after entering the examination room.	
6 Avoid eating round food before examination.	4. Wear something red e.g underwear, headbands etc.	
	5. Always choosing the letter C as an answer.	
	6. Using certain pen/pencils e.g., Monggol 2 pencil.	
	7. Sitting on the same sit during examination.	
	8. Using black pen during examination.	
	9. Kicking the door and the seat when entering the examination room.	
	10. Avoid taking a bath.	

Before	During	After
	11. Crossing of fingers.	
	12. Tapping the head 3 times with a pen/pencil.	
	13. Look at something which is color blue.	

Table 2 presents the Superstitious Beliefs of students before, during, and after taking examination, including various responses from the participants. According to the “before” examination column, some students believe that cutting their hair before the exam will cause them to lose knowledge. Additionally, students tend to eat peanuts and chocolates before exams, as they think nuts enhance brainpower and chocolate brings positive outcomes. On the other hand, students avoid consuming eggs or round-shaped foods because they fear the exam results might be circular or zero. Furthermore, students have a belief that placing their notes under their pillows before the exam will help them retain and absorb knowledge better.

It was then evident that in the table above that students have various superstitious beliefs during examinations. They believe that consuming specific foods like peanuts and chocolates will lead to better results. They also engage in actions such as chewing gum, placing a coin in their shoe, or wearing something red, thinking it will attract success. Lucky charms are considered essential for good luck. Moreover, some believe stepping into the examination room with the right foot or kicking the door and seat will influence their performance. Using particular pens like the Monggol 2 pencil, tapping the head thrice with a pen, and always choosing the letter C are believed to lead to correct answers. Crossing fingers and sitting in the same seat are associated with seeking consistency and good luck. Additionally, some students avoid bathing on the day of the exam, fearing it will erase their knowledge. These superstitious beliefs are based on the idea that external forces can affect the outcome, either good luck or bad luck but they lack concrete evidence and may lead to varying results (Ocampo & Aragon, 2018).

To elaborate, on the column “after” examination, students have a belief that after taking exam, they should immediately leave the room without looking back, keeping their focus ahead to prevent the possibility of returning to repeat the exam. Additionally, there is a mention belief in breaking the pencil after the exam to avoid failing, which contradicts another superstition of keeping the pen safe to avoid failure. Despite the contradiction between the two beliefs, the ultimate conclusion is that student follow these superstitious practices to avoid failing the examination

Table 3. Superstitious Beliefs of the Students: Before, During, and After Presenting/Reporting Activity

Before	During	After
Write the word “hope” in the palm.	Wear favorite attire or coat.	Throw any paper that used as a guide.
Putting the notes under the pillow.	2. Crossing of fingers.	
Putting a coin inside the shoe.	3. Biting the pinky finger.	
Step three times before any stage presentation.	Wear something red.	
Stay quiet for almost 2-3 hours before the presentation.	Avoid black cats.	
	4. Doesn’t drink coffee.	
	5. Wearing lucky charms, e.g. bracelet	
	6. Putting a coin inside the shoe.	

Before	During	After
	7. Using certain pens.	
	8. Chewing gums.	
	9. Refrain reading at least 5 minutes before the examination.	

Table 3 represents the practiced superstitious belief of the pre-service teachers before, during and after presenting or reporting activity, the table above includes the various responses from the participants. Under the column before presenting/reporting activity, there are participants who responded “*writing the word hope in the palm of their hand*” signifying a positive outlook for them, with this belief it improves their confidence and relieves them from nervousness while preparing for their presentation. The next respondent answered “*putting the notes under the pillow*” according to them it will help remember all the lessons they studied the whole week or the number of nights or days they’ve studied the lesson/presentation. With this manifestation, the lessons being studied that night will be absorbed by your subconsciousness and it will be easier to review the day of the presentation. The next participant answered that before a presentation or reporting activity he/she “*steps three times before any stage presentation*” as this belief brings good luck to your performance, according to them it is similar to knocking on the wood three times as it signifies this manifestation helps to avoid the performance to be jinx or have a bad presentation. And the last respondent stated that before presenting/reporting an activity he/she “*stay quiet for almost 2-3 hours before the presentation*” as it helps absorb all the important information needed to be presented because according to the respondents if you talk too much before your presentation slowly all the content you studied will get out of your subconsciousness and you will forget or be unable to deliver the important parts during your presentation.

The second column represents during the presentation/reporting activities, the there are participants who responded “*wear favourite attire or coat*” which brings good luck, through this manifestation it gives a positive outcome for the respondent. There are respondents who believe “*wear something red*” give good luck as red signifies luck and happiness. This belief was taken from the conventional Chinese color symbolism, it also stands for joy, vigor, and fertility. Chinese brides typically wear red because it is said to ward off evil (Evans, 2017). Some respondents believed to “*avoid black cats*” as it gives you bad luck, this is a common belief as it is said that black cat may represent evil or the furry animal is said to be possessed by evil spirits (SarahScoop, 2023; Yuko, 2021). Some respondents stated “*wear of lucky charms*” gives good luck during presentation, according to Psychologist Lysann Damisch of the University of Koln, Germany, she suspects that the activation of superstitious thinking directly prior to a task may boost a person’s confidence in his or her ability to succeed—what’s known as self-efficacy—which in turn boosts expectations and persistence, thus improving performance. Lastly, the third column represents after the presentation/reporting activity, some responded that after the presentation you must “*throw any paper that used as a guide*” this manifestation indicates that you are already done with the task and the burden or the stress that your feeling will transfer to that object, and it also indicates that you will be moving to the next task or you already accepted the outcome of your performance.

Table 4. Superstitious Beliefs of the Students: Before, During, and After Attending an Interview

Before	During	After
Wear something red.	Crossing of fingers.	Not looking back when going out.
Never drink coffee.	2. Putting a coin inside the shoe.	
Avoid red things.	3. Kicking the door once.	
Cleaning the shoes.	.	
Wearing lucky charms.		
Putting the notes under the pillow.		
Always bow from north, south, east, and west before leaving the house.		
Doesn't eat eggs.		
Eat banana when stepping in for the first time inside the classroom. Keep the banana peel until going home.		
Doesn't took pictures.		
Wearing black shirt.		

Table 4 shows the practiced Superstitious Beliefs of the pre- service teachers Before, During and After Attending an Interview. Some of them stated that “wearing something red” or “wearing lucky charms” is something that they usually practice before attending the interview. According to them, red is a color of strength and energy. Meaning to say, once you wear something red before an interview, it can imply that one is a candidate that possesses leadership and courage. On the contrary, another set of pre- service teachers revealed that they usually avoid red things before attending an interview for a reason that red as a color signifies “blood”, which means bad luck. On the other hand, some pre- service teachers stated that wearing a black shirt serves as their lucky charm. Since black is also a powerful color, based on their answers, it also exhibits confidence and authority. In terms of some beliefs practiced by pre- service teachers related to food, some stated that they usually “avoid drinking coffee” or also “avoid eating eggs”. As coffee is a stimulant, if you drink some before an interview, you might get jittery or flub up your interview. Also, an egg is a round food, according to them, it signifies “zero”, which means you won't be able to answer the interview questions properly. Lastly, participants stated that “eating a banana before stepping inside the room” where the interview will be conducted is something they always practice. According to them, a banana will help calm the pre- interview nerves.

Aside from that, some pre- service teachers also said that they usually “bow from north, south, east and west before leaving the house” for the interview since this signifies good luck. Lastly, some of them stated that they don't usually take photos before the interview for a reason that this will jinx the manifestation of good luck. Additionally, another set of pre- service teachers revealed that “cleaning their shoes” before the interview is a good practice for a reason that dirt signifies bad luck and they want to get rid of it.

During the Interview, some pre- service teaches revealed that they would always “cross their fingers” during the interview to release the tension and the nervousness. Also, another stated that “putting a coin inside your shoe” during the interview can imply that you will pass and get a good score. On the other hand, some pre- service teachers also revealed that “kicking the door during the interview” is essential since it screams authority and good luck, especially with the thought that

they are also kicking off all the negative energy.

After the interview, some pre- service teachers stated that they usually practice “not looking back” especially when going out of the room where the interview was being held, to avoid the jinx of the good luck that is about to come.

Table 5. Mean and Standard Deviation on the agreement of students towards the influence of superstitions in their academic endeavors

Category	N	Mean	SD
Overall Category	64	4.63	1.59
Gender			
Male	9	3.96	1.94
Female	47	4.77	1.54
LGBTQ	5	4.90	1.28
Preferred not to say	3	3.90	1.73
Section			
BECE	5	4.40	1.35
BEE	12	5.07	1.63
BFE	12	4.30	1.55
BME	14	5.29	1.32
BSEE	10	3.68	1.60
BPHE	7	5.09	1.67
BMSSE	4	3.78	1.83
Language Spoken			
Cebuano	46	4.66	1.61
Hiligaynon	18	4.54	1.57

Scale: (6.14-7.00)-Strongly agree; (5.29-6.23)-Agree; (4.43-5.28)-Somewhat agree;(3.57-4.42)-Neither agree or disagree;(2.71-3.56)-Somewhat disagree; (1.86-2.70)-Disagree;(1.00-1.85)-Strongly disagree

The complex tapestry of human belief often finds its threads in the academic realm, a place where logical thinking and rationality are the cornerstones. Yet, a recent study illuminated the fascinating intersection of superstition and academic endeavors among a group of students. This essay delves into the findings, examining patterns across gender, academic sections, and language backgrounds.

Table 5 shows the mean and standard deviation on the agreement of students towards the influence of superstitions in their academic endeavors.

In the overarching assessment, a cohort of 64 students somewhat agree towards the influence of superstitions in their academic activities (M= 4.63; SD=1.59). This indicates a subtle inclination but not a strong consensus about the role of superstitions.

A deeper stratification across gender shows distinct variations. Male students, albeit a small group of 9, registered a mean of 3.96, falling into the "Neither agree or disagree" realm. Their larger standard deviation of 1.94 suggests diverse opinions within this cohort. In contrast, the predominant group of female students, totaling 47, leaned towards "Somewhat agree" with a mean of 4.77. Their standard deviation of 1.54 portrays a relatively consistent response. The LGBTQ community, with 5 respondents, also resonated with the "Somewhat agree" category with a mean of 4.90, and their responses showed the most cohesion, given the lowest standard deviation of 1.28. Lastly, those who opted not to disclose their gender closely mirrored the male perspective, neither agreeing nor disagreeing markedly.

Upon evaluating agreement based on academic sections, intriguing patterns emerge.

Students from BEE, BME, and BPHE predominantly "Agree" with the influence of superstitions in their studies. BECE and BFE students lie in the "Somewhat agree" spectrum. On the other end, sections BSEE and BMSSE indicate a neutrality or skepticism, leaning closer to "Neither agree or disagree."

Language, another facet of identity and culture, surprisingly did not usher in drastic divergences. Cebuano speakers, comprising a significant portion of 46 students, showed a mean of 4.66, while Hiligaynon speakers, totaling 18, registered a mean of 4.54. Both groups fell into the "Somewhat agree" category. The consistency in standard deviations, 1.61 for Cebuano and 1.57 for Hiligaynon, reinforces the idea that linguistic backgrounds did not play a substantial role in shaping their views on this matter.

Lastly, while the academic sphere is a crucible of reason and logic, the subtle influence of superstitions appears to have a foothold, more pronounced in certain sections and among female students. The study, however, emphasizes the diversity of perspectives and the need for more extensive research, especially considering the small sample sizes in some categories. The crossroads of belief and education, as this analysis underscores, is a fascinating space of continued exploration.

Superstitions have always been a fascinating subject of study, with a broad range of people either staunchly believing in them or dismissing them outright. The impact of these beliefs on different aspects of life is significant, and as shown in Table 6, the influence of academic superstitious beliefs on students' academic journeys is no exception.

Table 6. The level of agreement of the students on the influence of superstitions to the academic endeavors

Statement on the Influences of Superstitions to the Academic Endeavor	Mean	SD
The academic superstitious beliefs...		
1. Have helped me in my academic performance.	4.55	0.21
2. Have motivated me to strive hard in my studies.	4.68	0.21
3. Have guided me stay on track with my dreams.	4.60	0.20
4. Have given me the opportunities to be in myself all the time.	4.82	0.22
5. Have helped me in my mental health.	4.60	0.22
6. Have guided me to have the right attitude in my studies	4.49	0.23
7. Have been my guiding principles to succeed in my studies.	4.42	0.21
8. Have kept me moving in spite of difficulties in life.	4.78	0.22
9. Have taught me to believe on the significance of supernatural beings.	4.60	0.21
10. Have given me the courage to face the life uncertainties.	4.89	0.21
Total	4.64	0.20

Scale: (6.14-7.00)-Strongly agree; (5.29-6.23)-Agree; (4.43-5.28)-Somewhat agree;(3.57-4.42)-Neither agree or disagree;(2.71-3.56)-Somewhat disagree; (1.86-2.70)-Disagree;(1.00-1.85)-Strongly disagree

Table 6 presents the level of agreement among students concerning the influence of superstitions on their academic endeavors. This analysis aims to interpret the data and uncover the underlying sentiments and beliefs among the student population on this unconventional topic.

The table is composed of ten statements, each followed by a mean and standard deviation (SD) that quantify the level of agreement among the respondents. The scale provided at the bottom of the table defines the ranges for different levels of agreement, ranging from "Strongly Agree" to "Strongly Disagree."

The total mean score of 4.64, with a standard deviation of 0.20, falls within the "Somewhat Agree" category of the scale. This suggests a general agreement among students that superstitious beliefs have had a positive impact on various facets of their academic lives.

Statements 1, 3, 6, and 7 (Academic Performance & Guidance) address the influence of superstitions on academic performance and guidance. The mean scores for these statements range from 4.42 to 4.55, indicating that students somewhat agree that superstitions have helped them in their performance and acted as guiding principles in their studies.

Statements 2 and 4, (Motivation & Attitude) with mean scores of 4.68 and 4.82 respectively, suggest a slightly stronger agreement among students that superstitions have motivated them to strive harder and have allowed them to remain true to themselves.

Statements 5 and 8 (Mental Health & Resilience) highlight the influence of superstitions on mental health and perseverance. With mean scores of 4.60 and 4.78, these statements reflect a belief that superstitions have positively affected students' mental health and helped them keep moving despite difficulties in life.

Statements 9 and 10 (Belief in Supernatural & Facing Uncertainties) focus on the belief in the supernatural and the courage to face uncertainties. Both have mean scores above 4.6, pointing towards a substantial belief in the significance of supernatural entities and the role of superstitions in providing courage.

The table represents a noteworthy insight into the modern student's psyche, revealing that superstitions are not merely dismissed as irrational beliefs but are perceived to play an influential role in academic and personal development. From enhancing motivation and self-belief to improving mental resilience and performance, superstitions appear to hold a tangible place in students' lives.

However, it's worth noting that the mean scores are all within the "Somewhat Agree" range, suggesting that while the impact is acknowledged, it may not be overwhelmingly strong for all respondents. Additionally, the relatively low standard deviation values indicate a general consensus among students on this topic, with little variability in their responses.

Table 7. t-test results on the differences on the agreement of students towards the influence of superstitions in their academic endeavors in terms of language spoken at home

Compared Groups	DF	Mean	SD	t-ratio	t-prob
Language Spoken at Home					
Cebuano	62	4.66	1.61	.220	.788
Hiligaynon		4.54	1.57		

P> .05 Not Significant at 0.05 Alpha

Table 6 presents the findings regarding the differences in students' agreement towards the influence of superstitions in their academic endeavors, based on the language spoken at home. The analysis reveals no significant difference in the students' agreement concerning the impact of superstitions on academics when categorized by the language spoken at home, with $t(62) = 0.220$ and $p = 0.788$. In other words, the students' agreement or disagreement with the idea that superstitions influence their academics did not vary meaningfully based on the language they speak at home.

This suggests that the language spoken at home, often considered a strong marker of cultural and social identity, does not appear to play a defining role in shaping students' perceptions of superstitions in their academic pursuits. Whether a student speaks Cebuano or Hiligaynon at home, their views on the influence of superstitions on their studies seem to be relatively uniform.

This finding might point to the universality of certain beliefs or attitudes regarding superstitions, transcending linguistic barriers. It also emphasizes that other factors, not explored in this particular study, might be more influential in shaping students' views on the role of superstitions in their academic life.

Table 8. One-Way ANOVA results on the differences on the agreement of students towards the influence of superstitions in their academic endeavors in terms gender

Source of Variance	df	SS	MS	F	P.
Between Groups	3	6.979	2.326	.920	.437
Within Groups	60	151.661	2.528		
Total	63	158.640			

P> .05 Not Significant at .05 alpha

The interpretation of the One-Way ANOVA results regarding the differences in students' agreement towards the influence of superstitions in their academic endeavors, categorized by gender, provides an insight into how different genders perceive superstitions within the educational context.

The table presents the One-Way ANOVA results, highlighting the differences in students' agreement towards the influence of superstitions in their academic endeavors, categorized by gender. The statistical values $f(3,60) = 0.920$ and $p = 0.437$ indicate that the variance in agreement across the different gender groups (e.g., male, female, LGBTQ, preferred not to say) is not statistically significant. In essence, the students' perceptions of how superstitions influence their academic pursuits do not vary meaningfully based on their gender.

This finding suggests that gender does not play a defining role in shaping students' beliefs about superstitions in the context of academics. Whether a student identifies as male, female, LGBTQ, or prefers not to disclose their gender, their views on the influence of superstitions on their studies seem to be consistent across these categories.

This uniformity across gender lines might point to a broader cultural understanding of superstitions that transcends gender differences. It also underscores the complexity of belief systems and how they might be influenced by factors other than gender, such as personal experiences, family upbringing, educational environment, or cultural background.

Table 9. One-Way ANOVA results on the differences on the agreement of students towards the influence of superstitions in their academic endeavors in terms sections

Source of Variance	df	SS	MS	F	P.
Between Groups	6	23.412	3.902	1.645	.152
Within Groups	57	135.228	2.372		
Total	63	158.640			

P> .05 Not Significant at .05 alpha

The interpretation of the One-Way ANOVA results displayed in Table 4 provides an insightful look into the students' perceptions of the influence of superstitions on their academic endeavors, specifically in terms of different academic sections.

Table 9 presents the One-Way ANOVA results concerning the differences in students' agreement on the influence of superstitions in their academic endeavors, categorized by academic sections. The findings indicate that there is no statistically significant difference in the agreement among students regarding the impact of superstitions on their academic pursuits, as evidenced by the values $F(6,57) = 1.645$ and $p = 0.152$.

With statistical values of $F(6,57) = 1.645$ and $p = 0.152$, the results indicate that the variations in students' agreement or disagreement regarding the influence of superstitions in their academic pursuits are not statistically significant across the different academic sections considered in the study.

This suggests that the particular academic section to which a student belongs does not markedly shape their beliefs about superstitions within the context of their studies. The shared views across these distinct academic sections might reflect a more universal or general cultural

attitude towards superstitions, one that transcends the boundaries of specific academic disciplines or areas of study.

The finding can also imply that other factors—perhaps personal experiences, familial beliefs, or broader cultural influences—might be more instrumental in shaping students' perceptions of superstitions in academia. The absence of significant differences across academic sections emphasizes the multifaceted nature of belief systems and the complexity in pinpointing singular determinants. It opens the door for further exploration into what might influence these perceptions, beyond the realm of academic categorization.

Influences of superstitions towards the academic endeavors of the students

The below are the data which offer a broad perspective on how superstitious beliefs affect students in their academic performance. The views expressed range from the strong belief in the efficacy of superstitions to outright disbelief and skepticism. Through a thematic analysis, it can categorize the students' statements into the following major themes:

Disbelief in Superstitious Beliefs

Many students express the idea that superstitions have no real impact on their academic performance. They attribute their success or failure to hard work, preparation, dedication, and effort. This can be observed through the following statement from the students.

"For me, I don't think that those superstitious beliefs had help me in my academic performance. For me, it is my dedication and hard work who had helped me pass the exams and tests."

"I don't believe in those superstitious beliefs."

"I can't say that practicing these superstitious belief is helpful. I'm a realist person, if you don't do well, your academic performance will be affected."

Psychological Comfort and Confidence Booster

Another prevalent theme is that while superstitions may not have a direct effect on academic performance, they often provide a psychological comfort. Many students see these beliefs as calming nerves, boosting self-confidence, reducing anxiety, and increasing positivity. As evidence to this the following statement from the participants are provided:

"Sometimes it maybe not helped me in my answers but rather it helped me being at comfort and ease when I am wearing those items."

"These superstitious beliefs do not have direct positive impact on my academic performance however, these beliefs helped in boosting my self-confidence, to having a positive mindset, and reducing anxiety."

"They increase my confidence somehow."

Luck and Positive Manifestation

Some students see superstitions as lucky charms, or as ways to manifest positive outcomes in their studies. Even without scientific explanation, these beliefs are perceived as effective or true for those who believe in them. Specifically, these are the statement of the participants:

"I believe that when I wear my ring and put one peso in my shoes I could answer any questions in a test."

"Wearing a bracelet as a lucky charm, putting my reviewer underneath my pillow, and wearing something red I gain to trust my guts and confidence on doing such things with the help of beliefs."

Indifferent or Neutral Stance

A number of students express neither a strong belief nor disbelief in superstitions. They may practice them occasionally but do not attribute significant importance to them in relation to their academic performance. Interestingly, these are some of the statement of the participants:

"I don't know if they're helping me but doing those just makes me feel comfortable because it's already like a routine to me."

"I don't know if it helps my academic performance. I just do it because it's what I'm used to."

Reliance on Superstitions

There is a smaller group of students who actively rely on superstitions, considering them beneficial to their academic performance. Here are their statements:

"It results in a positive result since, most of my practices integrated with prayers."

"Pretty good actually. By relying on my bizarre reverse luck I somehow pass all my tests and exams including the PNUAT."

The data offer a complex picture of the role of superstitious beliefs in students' academic lives. While there's no uniform belief or practice among the respondents, the themes highlight different ways in which superstitions are interpreted, from mere psychological support to tangible beliefs in luck and good fortune. The variations reflect individual differences in personality, cultural background, and personal experiences. Whether providing emotional comfort or being dismissed as irrelevant, superstitious beliefs occupy a diverse and nuanced place in the academic experiences of these students.

Interesting Patterns Regarding the Influences that Shape Individuals' Beliefs in Superstitions

Family Influence

The family's influence, especially parents and grandparents, is a prevalent theme in the data. Many respondents directly cited their family members as the main source of their beliefs in superstitions.

"My grandparent."

"Parents, grandparents."

"My grandmother."

"My Lola on both sides and my Mother."

"As Filipinos, of course, we have a deep relation and history when it comes to superstitions or superstitious beliefs. Oftentimes, our grandparents always tells us about various superstitious beliefs and thus this leads us to grow up equipped with these superstitions..."

Peer and Friend Influence

Friends, peers, schoolmates, and classmates have also emerged as significant influencers in forming superstitious beliefs.

"Friends and Internet."

"My friends and classmates."

"My peers, schoolmates, and parents."

"Some of my peers during my high school."

Media and Cultural Exposure

Media platforms such as social media and YouTube, as well as exposure to cultural traditions such as Kdrama and teachings from elders, play a role in shaping superstitions.

"I just saw it on soc med."

"Peers and YouTube."

"Kdrama, my teacher in high school, my mom, and friends."

"Socmed, Peers, and Friends."

Personal Agency

Some respondents expressed a sense of personal agency, indicating that they create or sustain superstitions through self-realization or personal experiences.

"Myself."

"No one, I create this superstition by self-realization."

"I grew up in a community with so much superstitious belief, but I was never influenced by it 'that much.' I once tried to put my notes under my pillow because my sister told me that it would increase the chance that I would ace the exam."

The data reveals a rich landscape of influences on superstitions, primarily revolving around family, friends, cultural exposure, personal experiences, and media. Family, particularly grandparents, emerges as a strong, traditional source of influence, reflecting cultural values and heritage. Meanwhile, friends and modern media channels represent newer sources of influence, highlighting the dynamics between tradition and contemporary social interaction.

While the majority seem to draw from external influences, a unique subset emphasizes personal agency and self-realization, indicating a complex interplay of factors in shaping beliefs in superstitions. Some respondents also explicitly deny being influenced, hinting at a possible skepticism or rejection of superstitious beliefs within certain individuals.

CONCLUSIONS

A detailed examination of trainee teachers, as revealed in the accompanying tables, exposes an intricate array of superstitious beliefs and customs that they embrace before, during, and after different educational endeavors such as studying, testing, giving presentations, and participating in interviews. The superstitions manifest in various ways, encompassing preparatory actions such as bathing, consuming specific foods, donning particular colors, and employing lucky objects.

The core of these behaviors rests in a deep-seated belief in the capacity of certain acts, objects, and rituals to influence outcomes, in contradiction to rational evidence. While numerous individuals follow these superstitions, the beliefs vary greatly. Discrepancies in some—like differing views on the color red or breaking pencils after a test—illustrate the uniqueness and complexity of these practices.

This research depicts students navigating the challenges and uncertainties of scholarly life by integrating tradition, symbolic meaning, and personal conviction. Although these superstitions have no scientific basis, they might instill a sense of control, ease, and hope. Practices such as wearing a cherished piece of clothing, avoiding particular foods, or placing notes under one's pillow may alleviate anxiety and foster a sense of empowerment. It is, however, vital to recognize that these widespread beliefs may not necessarily translate into genuine academic success. They might induce a placebo effect, enhancing confidence and potentially influencing readiness, but they can't replace essential elements of scholarly achievement like perseverance, hard work, and intellectual diligence.

To conclude, the findings of this research highlight an interesting intersection between

education and superstition, where rationality and mysticism coexist. It underscores our ongoing fascination with the mystical and urges further study into the roots, development, and mental satisfaction of these beliefs. The study also ignites a conversation about the place of superstition in contemporary education and how educators should address these beliefs.

Neither gender differences nor academic divisions had a statistically significant impact on student perceptions, suggesting that the reach of superstitions might cross such thresholds as gender or fields of study.

In the same vein, the home language, often a key cultural marker, did not have a notable influence on beliefs about superstitions in educational pursuits. This consistency across language backgrounds emphasizes a potential universal cultural comprehension of superstitions.

Though the research emphasizes the gentle sway of superstitions over robust agreement among students, it advocates for more extensive research considering the subtle tendencies and limited sample sizes in some categories. The absence of marked differences based on typical demographic factors like gender, language, and academic fields points to other underlying determinants like personal history, familial influence, or broader cultural contexts in shaping student opinions. The results depict a multifaceted scenario where superstitions hold a delicate position within the educational sphere, neither entirely embraced nor outright dismissed.

The intersection between belief and education in this study presents a fascinating platform meriting continuous scrutiny. It prompts reflection on the complexity of human belief systems and their connection with logical, educational pursuits, paving the way for further exploration.

Patterns regarding the forces shaping individual superstitious beliefs also surface in the study. Family members, notably grandparents, appear as a conventional influence, while friends, media, and personal preferences reflect more modern elements, demonstrating the equilibrium between tradition and present-day social engagement.

Ultimately, the study implies that superstitions are not merely relics of the past; they remain a multifaceted aspect of student life, mirroring wider social, cultural, and psychological dynamics requiring further investigation.

The analysis of students' attitudes and perceptions concerning the role of superstitions in academic efforts reveals a wealth of subtleties and nuances. While there's a gentle consensus among students regarding superstitions' role in academia, this consensus fluctuates across diverse contexts. The study's insight into the impact of superstitious beliefs on students' academic performance unveils a multifaceted and shaded image, spanning a broad range of beliefs, from outright skepticism to full reliance on superstitions. Regardless of being ignored, regarded as mental aids, or deemed essential to success, superstitions compose an intricate pattern of human beliefs and behaviors that demand ongoing examination and comprehension.

The detailed examination of superstitious beliefs and customs among trainee teachers and students offers valuable insights into the complex relationship between superstitions and academic pursuits. The presence of these beliefs across various demographic and cultural backgrounds suggests a universal phenomenon that can impact students' confidence, readiness, and possibly their approach to education. Given these findings, educators and educational institutions should consider the following: (1) Recognize that superstitions may play a significant role in students' lives, reflecting their personal beliefs, cultural backgrounds, and psychological needs. Educators should approach these beliefs with understanding and respect without necessarily endorsing them. (2) Educational curricula might benefit from incorporating discussions about superstitions, contrasting them with empirical evidence and scientific reasoning. Such dialogues can foster critical thinking and provide opportunities to explore cultural diversity and individual belief systems. (3) Since superstitions appear to be mechanisms for coping with stress and anxiety, educators should consider implementing strategies that directly address these issues. Techniques to manage stress,

build confidence, and promote well-being could support students in healthier ways. (4) While fostering a spirit of rational inquiry and scientific thinking is essential, it should be done without alienating or dismissing students' superstitious beliefs. A balanced approach that encourages logical thinking without undermining personal beliefs can create an inclusive and effective educational environment. (5) In conclusion, the complex interplay between superstitions and academic endeavors demands a nuanced approach. By integrating the insights from this study into educational practices, educators can create a more supportive, inclusive, and reflective learning environment, aligning with the diverse needs and beliefs of students. It is a path towards fostering not only intellectual growth but also emotional intelligence and cultural sensitivity.

LIMITATION & FURTHER RESEARCH

The limitations of the study are those characteristics of design or methodology that impacted or influenced the interpretation of the findings from your research. Further research should suggest the number of gaps in our knowledge that follow from our findings or to extend and further test of the research.

The study calls attention to the need for more extensive research in this area, given the nuanced findings and limited sample sizes. A broader examination will help in understanding the underlying influences, including personal experiences, family impact, and wider cultural contexts. It will also aid in determining the practical implications of superstitions in education. Future studies might benefit from exploring the cultural, geographical, or disciplinary differences that might shape these perceptions, as well as investigating how these superstitions are manifested and whether they have any real or placebo effect on academic success.

REFERENCES

- Andrews, R. A. F., & Tyson, P. (2019). The superstitious scholar: Paranormal belief within a student population and its relationship to academic ability and discipline. *Journal of Applied Research in Higher Education*, 11(3), 415–427. <https://doi.org/10.1108/JARHE-08-2018-0178>
- Bai, M., Xu, L., Yu, C.-F. (Jeffrey), & Zurbruegg, R. (2020). Superstition and stock price crash risk. *Pacific-Basin Finance Journal*, 60, 101287. <https://doi.org/10.1016/j.pacfin.2020.101287>
- Besa, A. S., Abusama, H. P., Lao, G. M., Abraham, E. G., de la Cruz, F., Duldulao, S. L., & Perocho, S. N. S. (2021). Perceptions of millennials on Filipino superstitious belief. *ASEAN Journal of Science and Engineering Education*, 1(2), 101–104.
- Boer, L. L., de Rooy, L., & Oostra, R.-J. (2021). Dutch teratological collections and their artistic portrayals. *American Journal of Medical Genetics Part C: Seminars in Medical Genetics*, 187(2), 283–295. <https://doi.org/10.1002/ajmg.c.31902>
- Chen, N., & Young, M. J. (2018). The relationship between belief in stable luck and a propensity for superstition: The influence of culturally conferred agency beliefs. *Journal of Cross-Cultural Psychology*, 49(7), 1098–1113.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry & research design (Fourth edi)*. Sage Publications.
- Dagnall, N. (2018). *The science of superstition – and why people believe in the unbelievable*. Manchester Metropolitan University. <https://www.mmu.ac.uk/news-and-events/news/story/8081/>
- Damisch, L., Stoberock, B., & Mussweiler, T. (2010). Keep Your Fingers Crossed!: How Superstition Improves Performance. *Psychological Science*, 21(7), 1014–1020. <https://doi.org/10.1177/0956797610372631>

- Espinal, A. (2020). *Superstitions From Around the World*. https://repository.stcloudstate.edu/cgi/viewcontent.cgi?article=1005&context=ma_tesol
- Evans, G. (2017). *The story of colour: an exploration of the hidden messages of the spectrum*. Michael O'Mara Books.
- Farley, A. A. (2015). *A qualitative analysis of superstitious behavior and performance: how it starts, why it works, and how it works*.
- Foster, K. R., & Kokko, H. (2009). The evolution of superstitious and superstition-like behaviour. *Proceedings of the Royal Society B: Biological Sciences*, 276(1654), 31–37.
- Fuertes-Prieto, M. Á., Andrés-Sánchez, S., Corrochano-Fernández, D., Urones-Jambrina, C., Delgado-Martín, M. L., Herrero-Teijón, P., & Ruiz, C. (2020). Pre-service Teachers' False Beliefs in Superstitions and Pseudosciences in Relation to Science and Technology. *Science & Education*, 29(5), 1235–1254. <https://doi.org/10.1007/s11191-020-00140-8>
- Hirshleifer, D., Jian, M., & Zhang, H. (2018). Superstition and financial decision making. *Management Science*, 64(1), 235–252.
- Huang, M., Sun, K., & Xie, Y. (2023). Numerological superstition and earnings management: evidence from China. *China Accounting and Finance Review*, 25(3), 396–418. <https://doi.org/10.1108/CAFR-01-2023-0001>
- Ichino, A. (2020). Superstitious Confabulations. *Topoi*, 39(1), 203–217. <https://doi.org/10.1007/s11245-018-9620-y>
- Karmakar, A., & Chattopadhyay, C. (2021). The Manifestation of superstition in terms of COVID-19. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 18(1), 4054–4060.
- Levental, O., Carmi, U., & Lev, A. (2021). Jinx, Control, and the Necessity of Adjustment: Superstitions Among Football Fans . In *Frontiers in Psychology* (Vol. 12). <https://www.frontiersin.org/articles/10.3389/fpsyg.2021.740645>
- Li, H. (2021). Confidence Charms: How Superstition Influences Overconfidence Bias in Han and the Qiang Ethnic Minority Chinese. *The Journal of Psychology*, 155(5), 473–488. <https://doi.org/10.1080/00223980.2021.1902918>
- Mocan, N., & Pogorelova, L. (2017). Compulsory schooling laws and formation of beliefs: Education, religion and superstition. *Journal of Economic Behavior & Organization*, 142, 509–539. <https://doi.org/https://doi.org/10.1016/j.jebo.2017.07.005>
- Mocan, N., & Yu, H. (2020). Can superstition create a self-fulfilling prophecy? school outcomes of dragon children in China. *Journal of Human Capital*, 14(4), 485–534.
- Naaz, K. (2019). Impact of Academic Level and Gender on Superstitious Attitude among Graduate and Post-Graduate Students. *International Journal of Indian Psychology*, 7(2).
- Ocampo, D. M., & Aragon, D. A. A. (2018). Beliefs and Practices in Taking Licensure Examination for Teachers as Spectrum of Teachers' Moral Principles: A Case Probe. *Online Submission*, 7, 16043–16050.
- Santisteban, C. A. V., & Galay, M. J. (2023). *Superstitious Beliefs Unveiling Truth*.
- SarahScoop. (2023). *Symbolism of Black Cats: Spiritual Meanings*. SarahScoop. <https://sarahscoop.com/symbolism-of-black-cats/>
- Sheldrake, R. (2012). *The Science Delusion: Freeing the Spirit of Enquiry (NEW EDITION)*. Hachette UK.
- Thomas, G. (2022). How to do your research project: A guide for students. *How to Do Your Research Project*, 1–100.
- Tulip, C., Fisher, Z., Bankhead, H., Wilkie, L., Pridmore, J., Gracey, F., Tree, J., & Kemp, A. H. (2020). Building Wellbeing in People With Chronic Conditions: A Qualitative Evaluation of an 8-Week Positive Psychotherapy Intervention for People Living With an Acquired Brain Injury . In *Frontiers in Psychology* (Vol. 11).

<https://www.frontiersin.org/articles/10.3389/fpsyg.2020.00066>

Uwayezu, D., Ntigura, E., Gatarayiha, A., Erem, S., Majumder, A., Haque, M., & Razzaque, M. S. (2021). *Conflict between science and superstition in medical and dental practices.*

Yuko, E. (2021). *Why Black Cats Are Associated With Halloween and Bad Luck.* History.Com.
<https://www.history.com/news/black-cats-superstitions>