

EXPLORATION OF MUSLIM CHILDREN'S ENGAGEMENT IN RELIGION AND
SPIRITUALITY AND ASSOCIATIONS WITH ACADEMIC FUNCTIONING, SOCIAL
BEHAVIORS, AND WELL-BEING

by

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ABSTRACT

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Evidence suggests that religion and spirituality contribute to positive outcomes in youth, including academic functioning, social behaviors, and well-being. Islamic psychology merges psychological and spiritual well-being within the individual. Studies have shown positive outcomes for adult engagement in Islamic religious practices (i.e., salat prayer and dua), however studies have yet to explore whether these relationships exist for Muslim children. This study examined the relationship between Islamic religious practices (i.e., salat prayer and dua) and academic functioning, prosocial behaviors, happiness, and satisfaction with life in a sample of Muslim school children attending an urban private Islamic school. In addition, this study assessed several mediation models to examine the indirect association of student's engagement in salat prayer and dua and student outcomes through student's spirituality (i.e., relationship with God and mindful salat). The findings indicated a robust relationship between student's religious practices and academic engagement, mediated by student's relationship with God. Student's religious practices were also associated with their social behaviors. Lastly, religious practices were indirectly associated with student's well-being through their relationship with God. The results expand on the literature by providing empirical support for the significant contribution that religious practices and spirituality play in enhancing the academic, social, and well-being

experiences of Muslim children. These findings reveal that for this marginalized population, Muslim American school children, their religious and spiritual practices are a source of empowerment.

Keywords: spirituality, religion, Islamic psychology, Muslim children, academic functioning, prosocial behaviors, well-being

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CHAPTER ONE

Exploration of Muslim Children's Engagement in Religion and Spirituality and Associations with Academic Functioning, Social Behaviors, and Well-Being

Researchers link religion and spirituality with positive academic functioning, prosocial behaviors, happiness, and satisfaction with life in youth (e.g., Holder et al., 2010; Horwitz, 2021; Jeynes, 2003, 2020; Pandya, 2017). Specifically, Jeynes (2003) found evidence linking religious practices to better academic outcomes among Black and Latino adolescents in urban environments. Additionally, adolescents with stronger religiosity perform better in schools than their peers (Horwitz, 2021).

Regarding prosociality, a meta-analysis of prayer engagement found it influenced various positive outcomes for youth. For example, these outcomes included positive behaviors such as self-discipline and compassion (Jeynes, 2020). Furthermore, children who participated in a spiritual intervention program showed increased prosocial behaviors, such as helpfulness (Pandya, 2017). Likewise, studies have examined the relationship between religion, spirituality, and well-being in children. In a study with children, Holder et al. (2010) found that happiness links to spirituality but not religiosity.

Several underlying mechanisms relate to the relationship between religion and spirituality and positive outcomes. Research with Muslim adults uncovered mindfulness in salat prayer and one's relationship with God as mediators in the relationship between religious practices and positive outcomes (e.g., Albatnuni & Koszycki, 2020; Ijaz et al., 2017). Researchers theorize that prayer links with skills such as mindfulness (e.g., Ijaz et al., 2017). Mindfulness may promote well-being (Dunning et al., 2019), increase attention, and reduce stress. Therefore, prayer could help students focus on self-discipline, socially constructive behavior, and the teacher during instruction (e.g., Jeynes, 2020). Consequently, these benefits may support students in their ability

to learn. Therefore, student's relationship with God and mindful salat, referred to as spirituality in this study, were examined as mediators in the relationship between religious practices and positive student outcomes.

There have been mixed results within the literature regarding religion and spirituality. Scholars theorize that this may be due to the inconsistencies in how religion and spirituality are defined and measured (e.g., Baumsteiger & Chenneville, 2015). This study contextualized religion and spirituality within an appropriate Islamic worldview, considering the population sample of Muslim children. Therefore, Bronfenbrenner's (1986) social-ecological theory was used as a theoretical framework to understand the Muslim child's social and environmental influences of religion and spirituality. Muslim children in the United States attending Islamic religious schools likely engage in practices and discussions of Islam at home and school. Therefore, Islamic religious and spiritual practices and beliefs likely play a significant role in their development. The context of Islamic tradition was used to define Muslim children's religious and spiritual practices and beliefs.

Islamic psychology refers to modernizing traditional Islamic psychological concepts (York Al-Karam, 2018a, 2018b, 2020). Although not originally referred to as "psychological," many traditional Islamic scholars developed various theories to explain the development, relationships, and functioning of emotions and behaviors (Awaad et al., 2020; Iqbal & Skinner, 2021; York Al-Karam, 2018a, 2018b, 2020). Therefore, psychologists consider these Islamic psychological theories to fall under the current umbrella of psychology. A unique component of Islamic psychology is the integration of psychological well-being with spiritual well-being. Specifically, Islamic psychology encompasses emotions, behaviors, cognitions, and one's relationship with God. The latter strongly influences the former three (Rothman & Coyle, 2018).

Furthermore, determining the state of one's connection to God (e.g., positive vs. negative; strong vs. weak) is one's beliefs and practices. This study focused on the religious practices of salat prayer and dua (i.e., supplication) and the spiritual practices of students' relationship with God and mindfulness in salat, referred to as mindful salat for simplicity throughout the rest of this study.

Islamic religious and spiritual practices and beliefs are often first introduced and taught during childhood, around seven years of age (e.g., Ipgrave, 1999; Syeed & Ritchie, 2006). Therefore, it is likely that Muslim children regularly engage in Islamic practices in their Islamic schools. However, depending on their families' religious engagement, Muslim children may be less engaged in these practices outside of school. Therefore, students are likely to engage in these practices at various frequencies.

Studies conducted with Muslim adults have demonstrated encouraging outcomes regarding engagement in Islamic religious and spiritual practices such as salat prayer, dua, and mindful salat (Albatnuni & Koszycki, 2020; Chamsi-Pasha & Chamsi-Pasha, 2021; Ijaz et al., 2017). However, due to developmental differences, researchers cannot assume the generalizability of these results to Muslim children. In a systematic review, Mata-McMahon (2016) stresses that there are likely nuances in children's spiritual understanding. These may differ from adult and adolescent perspectives. For example, children view God more positively than adults (Mata-McMahon, 2016). Therefore, she recommends that future studies assess empirically based data on children's unique experiences of religion and spirituality.

The nuances of children's spirituality include considering the diversity of the Muslim population in the United States (Pew Research Center, 2017). Specifically, race/ethnicity and immigrant status may affect the relationship between religion and the measured outcomes.

Therefore, children's immigrant status was a controlled variable. Specifically, this factor is a unique consideration in Muslim children's engagement in religion and spirituality and their related outcomes.

School psychologists are responsible for understanding the diverse backgrounds of the students they serve, including religious backgrounds. Specifically, as outlined in domain eight of the National Association of School Psychologists (NASP) 2020 practice model, religion may be linked with students' development and functioning. However, only some studies in school psychology address spirituality and religion (Parker et al., 2021). A religious and spiritual competency assessment of school psychology practitioners detailed that most participants rated themselves low for implementing religious/spiritual interventions in clinical work (Parker et al., 2023). Parker et al. (2023) suggest that religion and spirituality fall under culturally responsive practices. As a result, building on and integrating families' strengths into interventions and interactions is a worthwhile endeavor of school psychologists' practice.

There is a gap in the literature concerning the relationship between religion and spirituality in Muslim children, despite studies exploring the relationship in Christian children. Furthermore, the current socio-political environment marginalizes Muslim children due to their cultural and religious identities. Their religious practices and spirituality may serve as protective factors for their mental health in the face of Islamophobia and bullying (Ahmed et al., 2011; Goforth et al., 2016). While their religious and spiritual practices and beliefs may be a potential source of strength, research on children's engagement in Islamic practices is limited.

In summary, investigations of diverse youth and their religious and spiritual practices have uncovered positive links in behavior, mental health, and academic outcomes. However, there is a gap in the literature regarding how Muslim children's religious and spiritual practices

may be uniquely related to their academic functioning, social behaviors, and well-being. School psychologists, teachers, and other providers that may work in Islamic schools have a role in providing guidance and support for their diverse students. As a result, this study helps broaden their capacity to serve culturally diverse Muslim children and their families.

Purpose

This study focused on the relationship between Islamic religious practices (i.e., salat prayer and dua), spiritual practices (i.e., mindful salat, and relationship to God) with students' academic functioning (i.e., academic achievement and engagement) and social behaviors, and well-being (i.e., happiness, and satisfaction with life). This study had three objectives. The first research objective examined the association between religious practices and student academic functioning, prosocial behaviors, happiness, and satisfaction with life. The second research objective examined whether students' engagement in spiritual practices mediated the significant associations theorized for the first objective. Lastly, the third supplemental objective explored student motivations for engaging in salat prayer and dua. Results from this study can assist school personnel in understanding how prayer and dua influence Muslim students' academic functioning, social behaviors, and well-being.

Definition of Terms

Religious Practices

Salat prayer: formal Islamic religious prayer, required five times a day at set times, recitations are done in the Arabic language.

Dua: informal Islamic prayer, also known as supplication.

Spirituality

Mindful salat: also known as khushoo, is paying attention to one's physical movements and recitations during salat prayer.

Relationship with God: is defined in this study as a student's perception of their relationship with God. This can present as a positive, negative, or neutral perception of God.

Academic Functioning

Academic achievement: measures a student's ability to perform and achieve in academic settings, as evidenced by standardized test scores and grades. This study utilized student's grade point average (GPA) for the 2022 academic year.

Academic engagement: a student's active and meaningful engagement in class, homework, and other related classroom pursuits.

Social Behaviors

Prosocial behaviors: are actions directed towards others that include positive behaviors such as helping, sharing, caring, and cooperating.

Well-Being

Happiness: refers to a range of positive emotions and feelings, such as contentment, pleasure, satisfaction, and joy.

Life satisfaction: a subjective sense of contentment and fulfillment derived from one's overall experiences, achievements, and alignment with personal values and goals.

CHAPTER TWO

Theoretical and Conceptual Frameworks

This study was situated within the theoretical and conceptual frameworks of (a) culturally responsive practices in school psychology, (b) Bronfenbrenner's bioecological theory, and (c) Islamic psychological theories. Culturally responsive practices in school psychology continue to grow in importance. For instance, the National Association of School Psychologists (NASP) competencies emphasize the importance of religion. Specifically, school psychologists should know how students' religious backgrounds relate to their functioning (NASP, 2020). Consequently, this study informs school psychologists of the beneficial role of Islamic practices in Muslim students' functioning.

Religion and spirituality play a meaningful role in the lives of Muslim children. Specifically, Muslim children engage in practices and beliefs as taught by those in their microsystem (i.e., family members). They may also engage in these practices and beliefs within their mesosystems, such as in school and religious settings. Lastly, students are likely influenced by the cultural and religious expectations within their macrosystems. Many Muslim children grow up in religious households, attend religious centers and schools, and engage with their Muslim community. These children likely participate in Islamic religious and spiritual practices and beliefs at various frequencies. Consequently, these practices may link to students' academic functioning, social behaviors, and well-being.

Moreover, many studies report inconsistent findings on the benefits of religion and spirituality. This may partly be due to inconsistent definitions and assessments of these constructs (e.g., Baumsteiger & Chenneville, 2015). Therefore, the theoretical framework of Islamic psychology was used to define Islamic religious practices and spirituality. Additionally,

this framework provided guidance for understanding the mediating role of mindful salat and one's relationship with God.

Culturally Responsive Practice in School Psychology

School psychologists serve a diverse range of children. Within the NASP 2020 practice model, domain eight is titled "Equitable Practices for Diverse Student Populations" (NASP, 2020). This domain highlights the need for school psychologists to possess relevant knowledge of student differences. Within this domain, religion is mentioned: "[School psychologists] understand principles and research related to diversity in children, families, schools, and communities, including factors related to ...religion..." (NASP, 2020). This highlights that school psychologists should understand religion's influence on development and learning. This is consistent with the field of Islamic psychology. Malik Badri (1979) is one of the founders attributed to the field of Islamic psychology. Badri stressed the importance of considering the context of Muslim communities prior to implementing interventions. Specifically, Badri's seminal text, *the Dilemma of Muslim Psychologists* (1979), emphasizes religious and spiritual considerations within psychology.

Unlike cultural diversity, spirituality and religion are rarely addressed in the school psychology literature (Parker et al., 2021). This is likely due to the secular nature of most schools. However, educators can still make appropriate religious and spiritual considerations for students (e.g., Goforth et al., 2016; Parker et al., 2021), especially if they are situated within an Islamic school. Parker et al. (2023) conducted a religious and spiritual competency assessment of school psychology practitioners. They found that most participants perceived themselves as mostly or completely competent in religious and spiritual multicultural competencies (Parker et al., 2023). However, items on implementing religious/spiritual interventions and understanding

religious/spiritual resources for well-being and recovery received the lowest ratings. Parker et al. (2023) suggest that religion and spirituality fall under culturally responsive practices. As a result, it is important to build on and integrate families' strengths into school interventions (Parker et al., 2023).

Bioecological Theory

Researchers who explore religion and spirituality have used Bronfenbrenner's bioecological model as a theoretical framework for exploring these constructs with children (Boyatzis, 2008, as cited in Mata-McMahon, 2016). This model proposes that various factors within children's multiple environments (i.e., home and school) influence their functioning (e.g., Bronfenbrenner, 1986; Bronfenbrenner & Morris, 2007). Specifically, this theory organizes a child's environment into several systems. Firstly, the microsystem is where a child has direct contact with their surroundings. This system is where a child interacts and is influenced by their parents, peers, and teachers. For example, children attending an Islamic school likely engage in Islamic religious practices during school-wide and class-wide activities. Parent religious practices in the microsystem could influence children's religious practices and outcomes like prosocial behaviors, warranting future study.

Encompassing the microsystem is the mesosystem. The mesosystem joins two or more systems, such as the home environment with the school. For example, children who reside in Muslim households may engage in and observe their family's engagement in Islamic practices and beliefs. However, some children's families may not be particularly religious. Therefore, students' level of engagement with Islamic religious and spiritual practices and beliefs is likely to be variable. Next is the exosystem, which plays a more indirect role in the child's functioning.

For example, parents with positive religious community ties may promote religious and spiritual practices more in the home setting.

The macrosystem broadly encompasses cultural influences on behavior, including social expectations. For example, some cultures may promote greater spiritual practices than religious ones or vice versa, depending on their cultural significance. Lastly, the chronosystem involves the passage through time, which allows for a developmental focus on a child's behavior (Bronfenbrenner, 1986). For example, Mata-McMahon (2016) reported that younger children typically have more positive perceptions of God than adults.

Additionally, considering macro-level factors, Muslims are a racially and nationally diverse population in the United States (Pew Research Center, 2017). Therefore, race, ethnicity, and immigrant status may relate to outcomes such as academic functioning, prosocial behaviors, and well-being. For example, Muslim Arab American youth experience discrimination and prejudice linked to their ethnicity and religion. In addition, those with refugee mothers reported having more school hassles (e.g., challenges with academic achievement; Aroian et al., 2016). Lastly, research suggests that Muslim Arab American adolescents who maintain their Arab heritage, cultural traditions, and values are less likely to have psychological problems (Goforth et al., 2014). Controlling for student race/ethnicity and immigration status was important in studying the impact of student's religious practices.

Islamic Psychology

Theoretical approaches from Islamic psychology explain how religion and spirituality are related to behavior and well-being. Psychologists engaged in the re-emergence of Islamic psychology explore different ways of applying psychology to Muslim people. Consequently, they plan to advance the science of psychology in general by developing frameworks of

psychology rooted in and inspired by an Islamic worldview. Numerous psychologists, researchers, and Muslim clients felt that the Eurocentric narratives of psychology did not focus on religion or spirituality. Therefore, they did not address their psychological needs (Haque et al., 2016; Iqbal & Skinner, 2021). Historically, the field developed during the late 1970s. Malik Badri and Muhammad Uthman Najati, Muslims trained as clinical psychologists from Western universities, are commonly referred to as the field's founders (Iqbal & Skinner, 2021). Although what we today call psychology has always been part of Islamic and Muslim societies (for example, see the work of Awaad, Elzamzamy, Haque, and many others who wrote on the works of early Muslim scholars). Like Western psychology, Islamic psychology utilizes an empirical and rational approach to understanding human cognition and behaviors. However, it does so in addition to integrating scriptural sources to study both the physical (i.e., behaviors) and metaphysical (i.e., spiritual) aspects of people (Awaad et al., 2020; Iqbal & Skinner, 2021; York Al-Karam, 2018a, 2018b, 2020). These scriptural sources include the Quran (i.e., the religious text of Muslims believed to be the word of God; Esack, 2016), hadith (i.e., reported sayings and lifestyle of the Prophet Muhammad; Motzki, 2016), and Islam's intellectual heritage (i.e., historical and present-day interpretations of the Quran and hadith by Islamic scholars) to study human cognition, affect, behaviors, and spirituality (Iqbal & Skinner, 2021; Keshavarzi & Ali, 2020).

Islamic psychology researchers have provided theories and models for understanding an individual's psychological and spiritual functioning. Many of these theories consider how an individual perceives God as a spiritual influence that can influence the individual's thoughts, feelings, and behaviors (e.g., Iqbal & Skinner, 2021; Rothman & Coyle, 2018). This connection to or perception of God is an active and ongoing relationship that influences an individual's

cognitions and behaviors (Iqbal & Skinner, 2021). Therefore, Islamic psychology researchers emphasize how spiritual well-being intertwines with psychological health for Muslims, advancing psychology's understanding within an Islamic worldview (e.g., Rothman & Coyle, 2018).

Rothman and Coyle (2018) introduced an Islamic model of the soul by interviewing various Muslim psychologists and Islamic scholars. Islamic tradition has had multiple theories of the individual rooted in a spiritual and psychological foundation. Rothman and Coyle (2018) reintroduced some of these constructs to the field, including a model of the soul. This model describes how an individual's innate connection to God exists and interacts with cognition and emotions. This direct connection to God is called the 'ruh,' and the ruh resides within a construct called the 'fitrah .' The ruh is considered stable and unchanging, but the fitrah is in a constant state of change. Therefore, it is possible one can 'lose touch' with their ruh, and therefore to God (Iqbal & Skinner, 2021; Rothman & Coyle, 2018). This disconnect from God can manifest as adverse behavioral and emotional outcomes (e.g., Rothman & Coyle, 2018). However, refocusing one's mind, heart, and soul to focus on God can promote positive behavioral, emotional, and spiritual outcomes. Individuals can repair or strengthen this connection by engaging in Islamic beliefs and actions (e.g., religious worship; Haque & Mohamed, 2009). The belief in God as an active change agent could significantly influence therapeutic guidance and goals for Muslims (Iqbal & Skinner, 2021; Rothman & Coyle, 2018).

Within the model of the soul are the stages of the soul (Rothman & Coyle, 2018). These stages closely follow Al-Ghazali's (i.e., an 11th-century Islamic scholar) model of the soul. The ruh, an unchanging soul part, coexists with the ever-changing constructs within the fitrah, like emotions and attention. This is where religious practice and contemplation can intervene. By

intervening, one can reestablish their connection to God. Practicing Muslims often strive to purify their souls, aiming to perfect virtuous character traits and Islamic morals (Rothman & Coyle, 2018). Soul purification involves self-reflecting on character traits for improvement, as documented in Islamic tradition and informed by the Quran and Sunnah (e.g., Al-Ghazzali & Usmani, 2004). This research study did not address the lifelong process of purifying the soul. Instead, the intentional process of purifying the soul may be an advanced practice for children. Foundational Islamic practices are introduced and taught in childhood, typically by age seven (e.g., Ipgrave, 1999; Syeed & Ritchie, 2006). Additionally, parents may introduce them even younger if they are modeling religious and spiritual practices and beliefs in the home.

Salat Prayer, Dua, and Mindful Salat

This literature review combined Islamic psychology research and traditional Islamic scholarship to define the studied religious practices. Specifically, the work of the 12th-century scholar Abu Hamid Al-Ghazali (2019) was used to define salat prayer, dua, and mindful salat. In addition, supplemental literature describing the respective Islamic practices provided alternative perspectives when relevant.

Salat Prayer

The salat prayer is a canonical prayer for Muslims. Specifically, it is a required act of Islamic practice for Muslims, which occurs five times a day (Katz, 2013). Al-Ghazali (2019) grouped the act of salat prayer into two categories: the internal and the external. The external actions focus on the physical movements of the body. Consequently, the internal actions focus on the mindset or concentration of the individual engaging in salat prayer (Al-Ghazali, 2019).

Regarding external actions, there are physical movements of the salat prayer practiced by most sects and schools within Islam (Katz, 2013). These include starting the prayer by standing

upright, facing the qibla, and reciting similar verses. The five daily prayers are based on the sun's position, so the times change as the sun's cycle changes. In addition to the required five daily prayers, Muslims can perform optional prayers. Scholars recommend that individuals pray the five obligatory salat prayers with others (Katz, 2013). Some scholars believe that salat prayer is an exercise in developing one's character, such as improving self-discipline (Katz, 2013).

Dua

Most Islamic scholars define dua (i.e., supplication) as one way to ask God for things (e.g., Al-Ghazali, 2019; Fareed, 2016). Furthermore, Al-Ghazali (2019) included speaking to God as a part of dua. He quoted the Quran, as God states, "Call upon Me, and I will answer you" (Quran 40:60, n.d., as cited in Al-Ghazali, 2019, p. 117). In addition, despite the less standardized expectations of dua, Al-Ghazali (2019) summarized the practice of dua into ten properties. For example, Al-Ghazali (2019) recommended that one of the best times to engage in dua is after completing the salat prayer. In addition, he recommended speaking humbly when speaking to God.

Moreover, according to a text that reviewed various definitions and constructs of Islamic practices, Katz (2013) highlighted the importance of asking within dua. She pointed out that the very core of dua is to speak to God by making a direct request. Katz (2013) specified that many of these requests occur when the individual is in a negative state (e.g., asking God for help when one is ill). However, Katz (2013) asserted that the dua should also include praising or thanking God. In addition, Katz (2013) provided a relevant example of a student's straightforward dua to God, "Please let me just pass this test!" (p. 29). Moreover, Katz (2013) mentions that various scholars recommend individuals memorize dua made by the Prophet or taken directly from the Quran.

Combined with making dua to God, a well-known hadith mentions the importance of action to achieve one's goals. Specifically, one hadith reported that a man asked the Prophet if "[he] should tie [the camel and rely on Allah] or leave it loose and rely [upon Allah]?" The Prophet responded, "Tie it and rely [upon Allah]" (At-Tirmidhi, n.d.,11:2517). Consequently, this hadith implies that dua should co-occur with action toward the goal whenever possible.

Mindful Salat

Al-Ghazali (2019) considered the internal practices of salat prayer to be a separate but unified concept with the physical movements of salat prayer. Specifically, he described khushoo (i.e., Mindfulness in salat prayer) as meaning concentration or mindfulness during salat prayer (Al-Ghazali, 2019). For example, an individual engaged in khushoo thinks about God and reflects on the meaning of his recitations. Conversely, an individual not engaged in khushoo thinks about other thoughts during the external acts of prayer (Al-Ghazali, 2019; Katz, 2013). An example is someone engaging in salat prayer while thinking about lunch rather than the meaning of their recitations. Al-Ghazali (2019) stressed that the objectives of salat prayer are for people to remember God and reflect on the verses they recite. Specifically, Al-Ghazali (2019) emphasized the verse in the Quran: God states, "... and perform the prayer for My remembrance" (Quran 2014, n.d., as cited in Al-Ghazali, 2019, p. 48). In addition, Al-Ghazali (2019) described several internal constructs of prayer besides khushoo, including intention and presence of heart. This study only addressed the construct of khushoo. However, scholars vary in their definitions of khushoo. Some scholars consider it to include specific internal cognitive and affective states. Other scholars consider it related to controlling the external body during physical movements (i.e., not fidgeting with one's clothes during prayer). Moreover, others combined the internal khushoo and the external khushoo (Katz, 2013). This study adopted Al-Ghazali's definition of

khushoo. He defines khushoo as controlling one's active thoughts and physical movements during salat prayer (Al-Ghazali, 2019).

Among the abundance of Islamic scholarship, this study primarily utilized Al-Ghazali's definition of khushoo. Firstly, Al-Ghazali's works have been translated into English, making them more accessible than other Islamic scholarly works. Additionally, Al-Ghazali offers a comprehensive definition of khushoo, addressing its physical and internal dimensions (Al-Ghazali, 2019; Katz, 2013). This two-fold perspective is important to appreciate the mind-body connection embodied in salat prayer (Munsoor & Munsoor, 2017). Lastly, Al-Ghazali's definition of khushoo is simplified, focusing on prayer movements and recitation words. This simplicity may aid in children's comprehension. In conclusion, Al-Ghazali's definition of khushoo provides a valuable lens for understanding mindfulness in salat prayer in the context of children's spirituality.

Islamic Religious Practices Differentiation from Christian Religious Practices

While Islam and Christianity are both Abrahamic religions and share many commonalities, there is unique variability within these two religions (e.g., Boyd, 2019). The nuances between these two religious traditions may have substantial implications on how children from these religious backgrounds engage with their faith. Consequently, this may impact their functioning and development differently.

The two most salient practices to this study are salat prayer and dua. Salat prayer is more structured and frequent than Christian prayer (e.g., Marshall & Mosher, 2013). In Islam, supplication is more frequent which fosters a sense of perpetual God-consciousness (*Taqwa*), a unique Islamic concept (Marshall & Mosher, 2013). The differences in prayer between Islam and Christianity may potentially impact the outcomes linked with engagement in these practices.

The mind-body connection is a prominent aspect of salat prayer (Munsoor & Munsoor, 2017), potentially more prevalent than any Christian prayer. Specific definitions of mindful salat emphasize the importance of prayer's physical movements and mental focus, like God's remembrance (e.g., Al-Ghazali, 2019). This connection involves both mind and body, engaging the mind through recitations and the body through physical movements like prostration (Munsoor & Munsoor, 2017). The frequency and emphasis on the mind-body connection in Islamic practices may impact children's outcomes related to their engagement in salat prayer.

These differences between Islamic and Christian prayer practices may be consequential in research, particularly in studies examining outcomes linked to children's religious engagement. Specifically, the more structured and frequent Islamic practices could impact a child's spiritual development differently than the less structured Christian practices. While not the focus of this study, establishing Islam and Christianity's differences highlights the need for research on Islamic practices.

Relationship Between Religious Practices, Spirituality, and Student Outcomes

Children's Religious and Spiritual Practices and Beliefs

Studies conducted with Muslim adults have demonstrated encouraging outcomes regarding engagement in salat prayer and dua. However, researchers cannot assume the results apply to Muslim children. For example, the perspectives of dua vary by age (Guhin, 2019). A qualitative study of American Muslims found that older Muslim Americans insisted on reciting dua from the Prophet (i.e., formal supplication). The young Muslim students viewed dua as asking God for help in whatever words or language they needed (i.e., informal supplication). Either way, both groups sought to connect with God by engaging with dua (Guhin, 2019).

A difference (Mata-McMahon, 2016) between adult spirituality and children's spirituality is that children view God more positively (Moore et al., 2012 as cited in Mata-McMahon, 2016). Therefore, Mata-McMahon (2016) strongly urges researchers not to assume that the patterns and links found in adult samples regarding spirituality can apply to children. Instead, she stresses that there are nuances in children that differ from adults, such as children's more positive beliefs about God (Mata-McMahon, 2016). Understanding children's spirituality aids in creating relevant interventions and treatments. Researchers and educators can contribute to this understanding (Mata-McMahon, 2016).

Mata-McMahon (2016) highlights how many of the studies in her review approach the research of children's spirituality from a Judeo/Christian perspective. Some religious and spiritual studies included samples of Muslims (e.g., Moore et al., 2012). However, these studies' theoretical framework, constructs, and measurements may be less applicable to Muslims (Badri, 1979). For example, Moore et al. (2012) included a sample of Muslim children in their qualitative study. However, they analyzed their results thematically, grouping Muslim children's responses with those of other children. One example is their analysis of where children perceive God. Numerous children perceived God as being in the sky, but children raised in the Islamic tradition likely perceive one's connection to God lies in their heart or soul. Analyses that do not differentiate faith traditions may overlook nuances in children's perceptions of God across various religions. Mata-McMahon (2016) notes that researchers should consider different religious practices and cultural and environmental influences when studying children's spirituality. This will provide a more nuanced understanding of spirituality related to the outcomes studied. She recommends that future studies should focus on assessing empirically based data on children's unique experiences of religion and spirituality (Mata-McMahon, 2016).

Academic Functioning

Scholars have explored academic outcomes and their links with religious and spiritual practices with adolescents. A meta-analysis (Jeynes, 2003) used academic measures to compare religiously committed Christian students to their less religious peers. The academic measures included standardized tests developed by the Educational Testing Service (ETS), and topics included mathematics, reading, science, and social studies. Religiously committed Christian students in urban schools outperformed their less religious peers on all standardized academic test topics, even when controlling for SES, race, and gender. While adding the SES variable lowered the effects for religious students, the model was still significant for religious students. Further analysis indicated differences between religious students of the Christian faith and other religious faiths. These results suggest that different religions (i.e., Islam) should be considered in the effects of religion on the academic achievement of children (Jeynes, 2003).

In addition, Jeynes (2020) conducted a meta-analysis that explored prayer and Christian students. He found that the exercise of prayer links with higher academic achievement. Jeynes (2020) used academic measurements such as GPA, test scores, and standardized math, reading, science, and social studies assessments. In addition, Jeynes (2020) included measurements of SES, race, and gender. The effect size for prayer was .35, which indicates a moderate effect (Jeynes, 2020).

Furthermore, another meta-analysis by Jeynes (2012) explored academic outcomes by school type. He found that religious schools, compared to public and public charter schools, were related to better academic outcomes (Jeynes, 2012). However, in a previous meta-analysis, school type did not significantly affect student academic outcomes (Jeynes, 2003). Jeynes (2020) theorizes that prayer links with skills such as mindfulness. During classroom instruction, student

prayer could help students focus more on self-discipline, socially constructive behavior, and the teacher (Jeynes, 2020).

Social Behavior and Well-Being

Researchers have explored prosocial outcomes and their links with religious and spiritual practices in studies conducted with youth and families. Specifically, some of the behavioral outcomes Jeynes (2020) explored are more relevant to adolescents (i.e., excessive alcohol drinking). However, he also reported on measures relevant to elementary school students, such as positive expressions of love, integrity, self-discipline, and compassion (Jeynes, 2020).

Furthermore, studies found that children from religious households had better social skills, even when accounting for parenting styles (Schottenbauer et al., 2007). In addition, Pandya (2017) found that a spiritual intervention program targeted at children linked with the development of their prosocial behaviors. Specifically, Pandya (2017) utilized the Prosocial Personality Battery (PPB; Penner et al., 1995), measuring positive social and behavioral skills such as student helpfulness. Lastly, Michaelson et al. (2014) explored the relationship between religious group participation and health outcomes, including prosocial behaviors. They found that children in religious groups reported higher prosocial behaviors than their peers (Michaelson et al., 2014).

The relationship between religion, spirituality, and well-being has been assessed in children and adolescents (Holder et al., 2010, 2016). In Zambia, a study found that spirituality predicted happiness and life satisfaction more in adolescents than children (Holder et al., 2016). However, in a study conducted with children in North America, children's spirituality, but not their religious practices, was strongly linked to their happiness. More spiritual children reported more significant amounts of happiness, with spirituality accounting for between 3% and 26% of the unique variance in children's happiness (Holder et al., 2010). Lastly, Marques et al. (2013)

explored adolescents' spirituality and found that hope and spirituality, but not religious practice, were most strongly linked with their life satisfaction.

Mindful Salat and Relationship with God as Mediators

Conceptual Understanding of Mindful Salat and Relationship with God as Mediators

Mindfulness may be a potential mechanism to explain the mediating effects of the relationship between religious practices and student outcomes. According to researchers who have explored Islamic religious practices and spirituality (e.g., Ijaz et al., 2017), prayer may promote mindfulness. Mindfulness has recently received growing attention in the scientific community due to its numerous benefits, including stress reduction (Brown & Ryan, 2003; Kabat-Zinn, 2003). Islamic religious practices, such as prayer, may effectively foster mindfulness in individuals (Thomas et al., 2017). Mindfulness links with positive student outcomes, such as decreased stress and increased attention, potentially leading to better academic performance (Jeynes, 2020). Commonly, researchers define mindfulness as maintaining attention and awareness of the present moment with non-judgment, openness, and receptivity (Brown & Ryan, 2003). This definition derives from a Buddhist tradition, but many spiritual traditions, including Islam, include some practice of mindfulness (Thomas et al., 2017). Despite the presence of mindfulness in various traditions, the secular mindfulness defined by Kabat-Zinn (2003) has received the most research attention.

Specific to Islamic practices, one type of mindfulness in salat prayer, *khushoo*, is paying attention to one's prayer and physical movements and reflecting on the recited verses during prayer. This mindfulness practice is specific to salat prayer and will be called mindful salat throughout this paper for simplicity. Prayer verses often include requests for guidance, thanks, and submission to God. Mindful salat involves present-moment awareness with the potential for

varied emotions, not just neutrality. Consequently, this mindful salat cultivated through prayer was examined as a mediator between religious practices and student outcomes.

In addition, research has found that a positive relationship with God may mediate the relationship between religious and spiritual practices and positive outcomes (e.g., Chamsi-Pasha & Chamsi-Pasha, 2021; Jeppsen et al., 2022). For example, Islamic prayers stress the importance of connection and attention to God (Chamsi-Pasha & Chamsi-Pasha, 2021; Jeppsen et al., 2022). Furthermore, Muslim religiosity and spirituality are rooted in the remembrance and submission of God (e.g., Iqbal & Skinner, 2021; Rothman & Coyle, 2018). A positive perception of God during salat prayer may enhance happiness by reducing stress and negative thoughts. Consequently, a positive relationship with God in Islamic practices was examined as a mediator between student's religious practices and positive outcomes, like happiness and satisfaction with life.

Foundational Research of Mindful Salat and Relationship with God as Mediators

Research indicates that religious and spiritual practices and beliefs link to various psychological outcomes. For example, research has observed that salat prayer, dua, and mindful salat are all related to positive psychological outcomes in adults. Ijaz et al. (2017) explored mindfulness in salat prayer and its link with mental health. They found that individuals who offered salat prayer regularly and with mindfulness had better mental health outcomes. This is compared to those who did not offer salat prayer regularly and without mindfulness (Ijaz et al., 2017). Chamsi-Pasha and Chamsi-Pasha (2021) reviewed studies exploring the effects of salat prayer on health between 1966 and 2020 with adults. They found that salat prayer was linked with positive psychological outcomes, including decreases in anxiety, depression, and stress. They reviewed studies comparing adult patients practicing only salat's physical movements with

those engaging in physical and verbal components. They found that salat prayer involving Quranic recitation significantly decreased anxiety, depression, and stress. This review emphasized that the goal of Islamic practice is remembering God and training attention during prayer to focus on God (Chamsi-Pasha & Chamsi-Pasha, 2021). Similarly, Doufesh et al. (2016) explored the brain activity of participants authentically engaged in salat prayer. They compared it to the brain activity of participants who only mimicked the movements of the salat prayer. His team discovered that brain activity was higher for those who engaged in the authentic salat prayer than the participants who only engaged in the movements. They theorize that this brain activity is related to focused attention during authentic salat prayer.

Additionally, religious practices and relationship with God were found to be associated with positive outcomes in Muslim adults. Albatnuni and Koszycki (2020) conducted a study with Canadian Muslim adults. They explored spirituality, mindfulness, optimism, and religion-based social support as potential mediators of the link between prayer and well-being. They found that only the frequency of spiritual experiences mediated the relationship between prayer and well-being. They defined spiritual experiences in their study as connectedness with God (Albatnuni & Koszycki, 2020). Moreover, Jeppsen et al. (2022) investigated adult participants' perceptions of their relationship with God. They found that it mediated the relationship between prayer and mental health for the Christian and Muslim participants.

It may be that mindfulness during salat prayer, and one's reported connectedness to God may mediate the outcomes linked with religious practices (Albatnuni & Koszycki, 2020; Chamsi-Pasha & Chamsi-Pasha, 2021; Ijaz et al., 2017; Jeppsen et al., 2022). These studies conducted with Muslim adults demonstrate promising outcomes.

Applications of Islamic Religious Practices in Practice

In addition, researchers have integrated Islamic practices into evidence-based interventions with clinical adult populations. One example is a cultural adaptation of cognitive behavioral therapy (CA-CBT) designed to treat traumatized Muslim Egyptian populations (Jalal et al., 2017). This intervention integrates salat prayer and dua with CBT to encourage participants' attention to transition away from rumination. Another example is the Islamic Trauma Healing intervention that integrates dua and other spiritual and religious practices with Cognitive Behavioral Therapy (Bentley et al., 2021). These and similar culturally- and religiously-informed interventions improved treatment outcomes for participants (Bentley et al., 2021; Jalal et al., 2017). However, integrating Islamic religious considerations in evidence-based interventions for Muslim children has yet to be developed. This may be due to various factors, including uncertainty about the benefits associated with their religious and spiritual practices.

Conclusion

Muslim Americans are a marginalized religious group comprised of a diverse ethnic and immigrant population (Abu-Ras & Suarez, 2009; Elkassem et al., 2018; Farooqui & Kaushik, 2021). Muslim children's religious and spiritual practices and beliefs may be a potential source of strength (e.g., Ahmed et al., 2011; Goforth et al., 2016). Thus far, researchers have explored Islamic religious and spiritual practices with reported positive outcomes for Muslim adults (Albatnuni & Koszycki, 2020; Chamsi-Pasha & Chamsi-Pasha, 2021; Ijaz et al., 2017). Limited research explores these practices with Muslim children, but some researchers have reported on samples of multi-religious and multicultural children (Mata-McMahon, 2016). These studies have uncovered positive links in behavioral, emotional, mental health, and academic outcomes for children and adolescents (e.g., Holder et al., 2010; Jeynes, 2003, 2020).

Nevertheless, studies have yet to explore whether Muslim children's engagement in salat prayer and dua is related to academic functioning, social behaviors, or well-being. The cultural and religious context of Muslim children provides a unique worldview and perspective, which is different from that of Christian children. Islamic practices like salat prayer are frequently engaged in and have an inherent mind-body connection (Munsoor & Munsoor, 2017). This may impact Muslim children differently than Christian children. Developmentally, Muslim children's religious practices and beliefs may impact them differently than they do for Muslim adults. Specifically, it was important to consider the nuances associated with children's different cognitive, emotional, and social functioning.

Additionally, Muslim children often have multiple marginalized identities, such as belonging to a racial minority. They might be immigrants or have parents not born in the US. (Pew Research Center, 2017). These factors are unique to Muslim children and may not be present in the same frequency for Christian children in the United States. Furthermore, studies have primarily focused on Christianity, and there is much less research on Muslim children. Therefore, it is difficult to say whether the strength of relationships is similar to Muslim students compared to Christian students. For instance, intersecting identities may be more significant for Muslim children. Therefore, the effect size may differ from existing studies. As a result, this study was primarily exploratory.

School psychologists are well-positioned to guide and support religiously diverse children and their families (Parker et al., 2023). However, there is a gap in the literature regarding how Muslim children's religious and spiritual practices play a role in their academic functioning, prosocial behaviors, and well-being. This study addressed that gap to broaden

school psychologists' and other school-based mental health professionals' (SBMHP) capacity to serve Muslim school children.

Research Objectives and Questions

Objective 1. The first research objective examined the link between salat prayer and dua and student academic functioning (i.e., academic achievement and engagement) and social behaviors, and well-being (i.e., happiness and satisfaction with life). Research has found that religious practices (e.g., Jeynes, 2003, 2020) are linked with positive outcomes, including academic achievement (Jeynes, 2003, 2020), prosocial behaviors (Jeynes, 2020; Pandya, 2017), and well-being (Holder et al., 2010, 2016). In this study, I focused on Islamic religious practices (i.e., salat prayer and dua) regarding their link with academic functioning, social behaviors, and well-being.

There are five research questions under objective one, which examined the association between student engagement in salat prayer and dua and (a) academic achievement (i.e., student grade point average; GPA), (b) academic engagement (student-report and teacher-report), (c) prosocial behaviors, (d) happiness (e) satisfaction with life.

Objective 2. The second research objective examined the mediating effects of student's spirituality (i.e., mindful salat and student's relationship with God) on their religious practices and student outcomes. The mediating role of mindful salat is hypothesized because mindfulness decreases stress and increases attention. This is theorized to promote increased student academic functioning (Jeynes, 2020). In addition, mindfulness promotes self-regulation, linked with increased academic achievement among students (e.g., Zimmerman & Kitsantas, 2014). Lastly, self-regulation is linked to emotional regulation (e.g., Teper et al., 2013), likely promoting students' prosocial behaviors and happiness.

The second hypothesis is that the relationship with God will have a mediating impact on student religious practices and outcomes. Albatnuni and Koszycki (2020) found that one's reported connectedness to God likely mediated the relationship between prayer and well-being. Additionally, it is important to consider the variability of outcomes linked with specific practices and beliefs. Specifically, students with a positive relationship with God will likely reflect positively on God during their salat prayer. These reflections may promote happiness by redirecting rumination through emotional regulation (Teper et al., 2013).

There are five research questions situated within objective two, which examined the mediating roles of student's spirituality on the association between student religious practices and (a) academic achievement (i.e., GPA), (b) academic engagement (student-report and teacher-report), (c) prosocial behaviors, (d) happiness, and (e) life satisfaction.

For both the first and second objectives, I considered key covariates, including race/ethnicity, gender, immigrant status, student metacognition, and teacher engagement in class-wide dua. These variables may be directly related to the measured outcomes. For instance, race/ethnicity and gender likely influence student academic achievement and social-emotional functioning (e.g., Bécaries & Priest, 2015). Additionally, metacognition is related to academic functioning (e.g., Bakhtiar & Hadwin, 2022; Veenman et al., 2006; Xue et al., 2023). Moreover, teacher religiosity may impact students' likelihood of engaging in the salat prayer and dua. For example, students with Muslim teachers likely engage more often in class-wide dua than with non-Muslim teachers.

Objective 3. The third supplemental objective explored student's motivations for engaging in salat prayer and dua. The single-school focus of this study enhanced its relevance to community-based research. This supplemental objective highlights the importance of research

that is also practically applicable and responsive to the needs of the community. Understanding these motivations is important to the target school, as it provides educators and administrators with insights into the broader spiritual and emotional well-being of their students. It revealed how religious practices are not just ritualistic acts but are deeply intertwined with the students' day-to-day lives.

Researcher Positionality Statement

I recognize my standpoint as a visible Muslim American. I did not attend a private Islamic school as a child. Additionally, I was not involved with the target school of this study or the student population. Specifically, I have yet to interact with the students or teachers or work in any capacity with the target school. However, I may share similarities with many participants. As a child, I was encouraged to engage in Islamic religious and spiritual practices. I also attended a Sunday school at the Milwaukee mosque from age five to 12. Therefore, I have developed a natural curiosity surrounding Islamic religious and spiritual practices, beliefs, and positive outcomes. My position has likely had an impact on the development of this project.

CHAPTER THREE

Method

Participants

Background Private Islamic Elementary School

According to the principal of grades K4-8th, the target school does not require students to be Muslim, but all students currently identify as Muslim or come from a Muslim background. Additionally, she reported that some teachers are Muslim while others identify with other or non-faith backgrounds. The school has a daily morning assembly during which all students gather to recite a dua (supplication). For salat prayers during school hours, students and Muslim-identifying teachers and staff will pray together in the cafeteria/gym. Lastly, all student's complete coursework relating to Arabic and Islam.

Regarding the selection process, the advertisement and mission statement of the school is two-fold: (1) pre-college preparation and (2) Islamic education. According to the school website, the mission is to:

[P]rovide a loving, unique, and Islamic environment for the care and education of our children. It is our goal to develop in each child a love for and understanding of God and Islam and to nurture an identity in each child as a confident and faithful American Muslim (Target School, 2023).

Therefore, all students currently come from an Islamic background due to the integration of Islamic and Arabic studies in all grades. However, according to the principal, some Muslim families value the school's diverse identity and academics more than its Islamic education goals. Therefore, these students still engage in Islamic religious practices and lessons in the school but may only engage in these practices in the school setting. Other families enroll their children because of the focus on Islamic religiosity and development, and these families also engage their

children in these practices and lessons at home. Therefore, students have varying levels of engagement in Islamic religious practices. Lastly, this is a private school with yearly tuition averaging about \$7,000 for elementary school-aged children. However, students who meet the economic criteria can apply for school choice. This means that the state will fund their tuition. Lastly, all students can receive scholarship funds (Target School, 2023).

Demographic Background

The Wisconsin Department of Public Instruction (WI-DPI, 2023) provides reports of the schools in Wisconsin, including private schools that receive public funding. This data is collected and available for public view. It reports achievement, growth, target group outcomes, and graduation data. The accountability ratings include five categories from Fails to Meet Expectations to Significantly Exceeds Expectations. The target school falls in the Significantly Exceeds Expectations category.

According to data collected for the 2021-2022 academic year, the target school includes grades K4-12 (WI-DPI, 2023). Academically, the students perform around average or above average in all academic areas, and the overall attendance rate is 92%. The total enrollment is 813 students during the 2021-2022 academic year (WI-DPI, 2023). According to the school website, there is a total enrollment of 1050 students for the 2022-2023 year (Target School, 2023), with 500 students enrolled in grades K4-5. The school's demographic (i.e., K4-12) in 2021-2022 was 50.6% Asian, 15.9% Black or African American, and 32.7% White (WI-DPI, 2023). The White group represented a Middle Eastern/Arab population (e.g., Maghbouleh et al., 2022). About 15% of students are English Language Learners (ELLs; [WI-DPI, 2023]); according to the principal, many students are bilingual but not ELL. In addition, many of the ELL students are from refugee backgrounds.

The participants for this study included 103 students enrolled in this private Islamic elementary school. Table 1 outlines the sample demographics. Regarding gender, there is a slight imbalance, with a greater amount of female than male students. Grade levels are evenly distributed across the 4th, 5th, and 6th grades. The racial composition of the sample reflects the diversity of the students, with 55.8% identifying as Asian, 13.5% as Black, and 29.8% as White. Ethnicity further demonstrates this diversity, encompassing a range of backgrounds (e.g., Burmese, Somali, Palestinian). Regarding immigration background, 46.2% of the participants were born in the United States, and 51.0% were born elsewhere.

The total number of teachers/classrooms that participated was 11, with two teachers identifying as non-Muslim and the rest as Muslim. Additionally, six teachers reported not engaging in class-wide dua, while five reported engaging in class-wide dua.

Table 1
Participant Characteristics

Variable	Full Sample	
	n	%
Gender		
Female	65	62.5%
Male	38	39.5%
Grade		
4th	36	34.6%
5th	40	38.5%
6 th	27	26.0%
Race		
Asian	58	55.8%
Black	14	13.5%
White	31	29.8%
Ethnicity		
Burmese	37	35.6%
Indian/Pakistani	18	17.3%
Palestinian/Syrian	29	27.9%
Other	18	17.3%
Immigration Status (Non-US-born=1)		
Yes US-Born	48	46.2%
No US-Born	53	51.0%

Further analyzing immigrant background, ethnicity distribution varied significantly among the US-born and non-US-born groups (Table 2). A crosstabulation between the variables US Born and Ethnicity (Burmese, Pakistani/Indian, Palestinian/Syrian, and Other) was significant. The Pearson Chi-Square ($\chi^2 [3, N = 104] = 42.32, p < .001$) suggests a significant association between being born in the United States and the reported ethnicities. Specifically, the Burmese group had the highest count of non-US-born individuals, with 34 students endorsing non-US-born and three endorsing Yes for US-born. The Pakistani/Indian and Palestinian/Syrian groups had the highest count of US-born individuals. Thus, individuals in the Burmese group are most likely to be non-US-born compared to the Pakistani/Indian and Palestinian/Syrian groups, whom are the most likely to be US-born.

Table 2
Relationship Between Birthplace and Ethnicity

Where you born in the US?	Ethnicity				Total
	Burmese	Pakistani/Indian	Palestinian/Syrian	Other	
Yes	3	15	21	8	47
No	34	3	6	10	53
Total	37	18	27	18	100

Note. $\chi^2(3, N = 104) = 42.32, p < .001$. Zero cells (0.0%) had expected counts less than 5. Chi-square tests indicated a significant association between US-Born/non-US-born and Ethnicity.

Inclusion and Exclusion Criteria

The inclusion criteria required students to understand English at a 4th-grade level (i.e., the survey was administered in English). However, researchers assisted students by reading aloud all questions. I collected teacher reports of student behaviors and data from the Islamic school. Students were enrolled in grades 4th, 5th, or 6th grade. Grades younger than fourth grade

likely would not have been able to comprehend the questions adequately. Moreover, children older than 6th grade possess unique developmental considerations (i.e., adolescence) that were not within the scope of this study. I verified eligibility through conversations with teachers to confirm that students who met the previously stated criteria were the only participants. Students who met the criteria were pulled from their classes to complete the surveys. Those who did not meet the criteria were provided with an alternative activity (i.e., completing an activity such as coloring at their desk). They were also compensated similarly to their peers.

Effect Size Estimate

Effect size estimates in this study were derived from two key meta-analyses (Jeynes, 2003; Jeynes, 2020). The initial meta-analysis by Jeynes (2003), utilizing data from the 1992 National Education Longitudinal Study (NELS), found that adolescents with a higher commitment to religious practices, predominantly from urban backgrounds, outperformed their less religious peers across various academic domains. This performance difference persisted even after accounting for socioeconomic status (SES), race, and gender, with a noted effect size of .18 for standardized tests encompassing math, reading, science, and social studies ($F[1, 11280] = 26.71, p < .0001$; Jeynes, 2003). A subsequent analysis by Jeynes (2020) differentiated the effect sizes based on the presence of sophisticated controls for SES, race, and gender, revealing an effect size of .35 ($p < .05$) without these controls and an effect size of .23 ($p < .05$) with these controls for the relationship between prayer practices and various student outcomes. Consequently, the anticipated effect size for the present investigation, focusing on the influence of salat prayer and dua on student academic functioning, social behaviors, and well-being, was established at .25.

Regarding the mediation models, the PROCESS Macro by Hayes (2023) was used. This analytical tool uses bias-corrected bootstrap methodology. A review of Fritz and MacKinnon's (2007) recommendations on sample size for mediation analysis indicated that for bias-corrected bootstrap methods with an effect size of .26 (which is proximate to the expected effect size in this study), a minimum of 148 is required to achieve a power of .80.

In the current study, the recruitment efforts resulted in a sample size of 103 participants, falling short of the approximately 150 participants (Fritz & Mackinnons, 2007) recommended to ensure at least 80% statistical power for detecting an indirect effect. However, given the exploratory nature of this study, the decision was made to proceed with these analyses. The implications of this limitation are thoroughly discussed in Chapter 5.

Procedures

Before data collection, this study was approved by the University's Institutional Review Board (IRB; 23.186). It was an original data collection project during the spring semester of 2023. To recruit participants, I used convenience sampling to recruit the school. The school was selected based on the student population's religious demographic and willingness to participate. The data collection occurred in late spring to ensure students had spent sufficient time with their teachers to achieve reliable ratings of student behaviors and functioning. A timeline and proposal were shared with the principal (see Appendix A). The researcher sent an email to the principal. The principal shared the email with all 11 teachers (see Appendix B). A consent form was provided for the teachers (see Appendix C). In addition, parents were informed of the study through a letter and consent form sent home by the teacher (see Appendix D). Students with parent permission to participate completed an assent form (see Appendix E). Two research team members were present for the survey administration. The survey was administered online via

Qualtrics, and one team member read aloud each item to account for reading differences (see Appendix F for student surveys). The total completion time for the student survey was 25-35 minutes. Upon completion, all students in the participating classroom received a gift of a notebook and pencil.

Teachers for the participating classrooms completed, via paper and pencil, the teacher report on student prosocial behaviors, student academic engagement, student metacognition, teachers' religious background, and engagement in classroom-wide dua (see Appendix G). Teachers completed via paper-and-pencil, a packet with a list of the participating students and the number of necessary surveys for them to complete per student. The estimated total time commitment for the teacher survey was 45 minutes to one hour. Upon completion, the teachers received a 20\$ amazon gift card for compensation.

Measures

Table 3 lists the measures used for each variable. A literature review was conducted to obtain valid and reliable measurements for the constructs in this study. However, when there were none, the I adapted validated and reliable measures. For example, I adapted language to be developmentally appropriate, as Curvis et al. (2014) recommended, and used 5-point scales, as recommended by Mellor and Moore (2014). An average of items of a scale was calculated for each continuous variable. Moreover, for measures that required significant adaptation or were researcher-created, I conducted exploratory factor analyses (EFA). The EFA was used to assess the validity of these adapted or newly developed scales including the religious practices (i.e., student's engagement in salat prayer and dua), the Relationship with God, and Mindful Salat measures.

Self-Report

Researchers recognize the value of children's self-report of their internal experiences, including well-being and strengths, by utilizing developmentally appropriate strategies (e.g., Bevans et al., 2010; Coombes et al., 2021). However, the consensus varies regarding the most reliable age at which children can provide self-report measures. Some researchers agree that age eight is when a child's self-report measure is most reliable (Coombes et al., 2021). Others suggest adaptations (i.e., verbal questions; Curvis et al., 2014) to some self-report measures are reliable with children as young as six. Regarding children eight years and older, some studies recommend using 3-point scales (Coombes et al., 2021; Curvis et al., 2014), and others report using a 4- or 5-point scale (Mellor & Moore, 2014). Lastly, researchers suggest that the minimum age of self-report validity likely depends on the specific construct and questionnaire properties (e.g., item phrasing; Taber, 2010). One way to combat the uncertainty regarding children's self-report measure is by utilizing a multi-informant approach whenever possible. This can be peer or teacher reports (e.g., De Los Reyes et al., 2015). However, utilizing multi-informants is only sometimes possible. This is due to certain constructs considered primary sources or internal constructs that are difficult for others to observe (Lagattuta et al., 2012). Therefore, the questionnaire was piloted with around 10 4th grade Muslim children. There were relevant adaptations made when children did not understand the questions due to developmentally inappropriate language.

Religious Practices (i.e., Student Engagement in Salat Prayer and Dua). The researcher created the measure of Student Engagement in Salat Prayer and Dua using the Practices and Beliefs Scale (PBS) used by Holder et al. (2010). Specifically, the item “How often do you pray or meditate privately outside of church or other places of worship?” from the PBS

was used to develop the six items in the Student Engagement in Salat Prayer and Dua scale. This scale assessed students' frequency and independent engagement in salat prayer and dua. This study utilized six items that reflected the Muslim children's religious practices (e.g., "In the past week, how often did you pray salat prayer at home, on your own?" and "In the past week, how often did you make dua on your own, without being reminded?"; see Appendix F for all six items). The response items were: Never during the week (0), 1 or 2 times during the week (1), 3 or 4 times during the week (2), 5 or 6 times during the week (3), every day (4). A pilot confirmed that Muslim children as young as 4th grade could understand the items.

To refine the scale, the researcher conducted an exploratory factor analysis. Prior to conducting the factor analysis, the Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity were used to determine that the data was acceptable for running a factor analysis (Kang, 2013). These two tests evaluate the sample and presence of any significant relationships among variables (Kang, 2013). The KMO measure and Bartlett's Test of Sphericity determined acceptability for conducting a factor analysis. The initial eigenvalues indicated the presence of one meaningful component after the removal of two items and the final scale consisted of four items. These four items explained a substantial portion of the total variance. The exploratory factor analysis indicated that these four items primarily load onto one factor, representing religious engagement in salat prayer and dua. The correlations between these four items indicated that all items are significantly correlated after the factor analysis. This suggests a coherent measure of student engagement in salat prayer and dua. Lastly, the reliability analysis using Cronbach's alpha to assess the internal consistency of the final measure was 0.80 (Table 11 in Appendix I), indicating a satisfactory level of internal consistency.

Mindful Salat (i.e., Practice of Khushoo). The researcher developed three items based on Al-Ghazali's (2019) definitions of mindfulness in salat prayer, using face validity. These three items measured student engagement in Mindful Salat. I gathered input from 4th-grade children to ensure they comprehended the items before data collection. An example of one of the three items is, "How much do you pay attention during salat prayer?" on a 4-point rating scale "never (0), sometimes (1), often (2), almost always (3)."

The KMO measure suggested that running a factor analysis may not be recommended due to the relatively low value. However, a significant Bartlett test indicated the possibility of conducting a factor analysis. The initial eigenvalues and the variance explained by each component suggest the presence of one dominant component. The results demonstrate high factor loadings for "how focused you are during salat prayer" and "how often you pay attention during salat prayer." Therefore, I removed one item to improve reliability and validity. After the removal of the item both items were significantly correlated. The final scale includes two items. Table 12 (Appendix I) reports the items and item-total correlation. The overall reliability is acceptable, with a Cronbach's alpha of 0.72.

Relationship with God. The Relationship with God subscale measured students' relationship with God. An adapted version of the What I Believe and Do scale (Sifers et al., 2012) measured students' relationship with God. The researcher adapted the items by changing the term God to *Allah*. Cronbach's alpha for the eight items that comprise this subscale was 0.89 in a previous study (Sifers et al., 2012). Sifers et al. (2012) developed this scale to assess various spiritual factors related to youth from Abrahamic religious backgrounds (i.e., Christianity, Islam, and Judaism).

An example is the item, "How sure are you that Allah exists?" and "How much do you trust Allah?". Eight items assessed children's relationship with God on a 5-point scale. Specifically, six items used a 5-point scale that includes Not at all (0), A little bit (1), Some (2), A lot (3), Very much (4). Furthermore, two items used a 5-point scale, Never (0), Few times (1), Sometimes (2), Lots of times (3), Always (4).

The KMO measure indicated that it may not be sufficient to run a factor analysis. However, Bartlett's test was significant, supporting a factor analysis. The initial eigenvalues and the variance explained by each component suggest the presence of one component containing four items. After the removal of four items, the analysis revealed a single component measuring student's relationship with God. Pearson's correlation between the items revealed a correlation among most of the four items. The overall reliability is low, with a Cronbach's alpha of 0.58 (Table 13 in Appendix I).

Happiness. Four items assessed children's happiness. First, the Subjective Happiness Scale (Lyubomirsky & Lepper, 1999) was used by Holder et al. (2010, 2016) to assess subjective happiness in eight to 12-year-old children. This scale includes three items using a 7-point scale, which the researcher adapted to 5-points based on recommendations by Mellor and Moore (2014). The Cronbach's alpha reported in a study with 12-year-old children was .72 (Uusitalo-Malmivaara & Lehto, 2013). Holder et al. (2010, 2016) adjusted some of the language of the questions to be developmentally appropriate. One example of the items is, "Considered with most of my peers, I consider myself." While Holder et al. (2010, 2016) did not use descriptive responses, I included descriptive responses. This included the responses: less happy (0), slightly less happy (1), neither happy nor unhappy (2), slightly more happy (3), more happy (4). The fourth item was the Faces Scale. This is a single-item measure. It includes simple depictions of

five faces on the extreme ends of happy to unhappy. Participants respond to a single question: "Overall, how do you usually feel?" The student marked the face out of five options representing their happiness level. All four items in the Happiness scale exhibited good internal consistency with a Cronbach's alpha of .80.

Satisfaction with Life Scale adapted for Children. The Satisfaction with Life Scale Adapted for Children (SWLS-C) by Gadermann et al. (2010) assessed life satisfaction from the students' perspective. This scale has undergone validation processes specifically tailored for children (Gadermann et al., 2010). Students were given five items on a 5-point scale to rate their level of agreement, disagree a lot (0), disagree a little (1), do not agree or disagree (2), agree a little (3), agree a lot (4). Examples include statements such as "So far, I have gotten the important things I want in life" and "I am happy with my life." Gadermann et al. (2010) reported an internal consistency of .86, indicating a high level of reliability. In the present study, the Satisfaction with Life scale also exhibited good internal consistency with a Cronbach's alpha of 0.82.

Academic Engagement. The behavioral subscale from the Engagement Versus Disaffection with Learning: Student Report (Skinner et al., 2009) measured academic engagement from the student's perspective. The students rated themselves on five items, each on a 4-point scale: not at all true (0), not very true (1), sort of true (2), very true (3). Samples of the items include "I try hard to do well in school" and "When I'm in class, I listen very carefully." This academic engagement measure exhibited good internal consistency with a Cronbach's alpha of .74.

Teacher-Report

Prosocial Behaviors. The Child Behavior Scale (Ladd & Profilet, 1996) assessed teachers' beliefs about students' prosocial behaviors. The Child Behavior Scale (CBS; Ladd & Profilet, 1996) measures aggressive, withdrawn, and prosocial behaviors in children. A longitudinal investigation of CBS psychometric properties was conducted with children in grades 1st to 8th (Ladd et al., 2009). The results suggest that most of the CBS subscales provide reliable data about behavioral and peer relational constructs. In addition, Ladd et al. (2009) recommends that CBS can be used to assess children ages five through 13.

Teachers completed the Prosocial with Peers subscale of the CBS for this study, which included eight items. Ladd and Profilet (1996) reported that Cronbach's alpha for the Prosocial with Peer's subscale of the CBS varies from .91 to .92. In this study, the scale showed excellent internal consistency with a Cronbach's alpha of 0.92. In addition, the scale meets the requirements for content validity because the items directly assess the construct of students' engagement in prosocial behaviors with their peers. For example, samples of the items include, "Seems concerned when classmates are distressed," "Is kind toward classmates," and "Shows concern for moral issues (e.g., fairness, the welfare of others)." Teachers rated each item as, note true (0), sometimes true (1), and often true (2).

Academic Engagement. The Behavioral subscale from the Engagement Versus Disaffection with Learning: Teacher Report (Skinner et al., 2009) measured academic engagement from the perspective of the student's teacher. The teacher rated students on five items, on a 4-point scale: not true at all (0), not very true (1), sort of true (2), very true (3). Samples of the items include "When working on classwork in my class, this student appears involved" and "In my class, this student does more than required." Cronbach's alpha for this

subscale typically falls between .87 and .88 (Skinner et al., 2009). In this study, the scale demonstrated excellent internal consistency with a Cronbach's alpha of .94.

School Report

Grade. This study utilized student's GPA scores from the 2021-2022 academic year as an indicator of academic achievement. Jeynes (2020, 2003) gathered various academic measures (i.e., standardized tests and GPA) in their meta-analysis exploring religious practices and academic functioning. GPA ranged from 0 to 4 points.

Covariates

Metacognition. The metacognitive questionnaire was used to assess metacognitive abilities in students (Carr & Kurtz, 1991; Metallidou & Vlachou, 2010). This questionnaire has been validated and demonstrates high internal consistency, as indicated by a Cronbach's alpha coefficient of .96 (Carr & Kurtz, 1991; Metallidou & Vlachou, 2010). Teachers rated students on the questionnaire, evaluating the students' metacognitive skills. Teachers rated students on nine statements such as "How careful is this child in his or her completion of work?" and "How much does this child explore new strategies?" They rated them on a scale of one to five, with one representing a low score and five representing a high score (0-4).

Metacognition is defined as the awareness and understanding of one's thought processes (Veenman et al., 2006). It is a key component of successful learning. For several reasons, controlling for metacognition in late elementary school students when measuring academic engagement and achievement is important. First, metacognition influences how and what students learn (Veenman et al., 2006). Children who know their learning processes are likelier to engage with academic content. Consequently, they may achieve better results because they can self-regulate their learning (Bakhtiar & Hadwin, 2022). For instance, these students may

strategically plan, monitor their understanding, and adjust their strategies when they struggle with a task (Bakhtiar & Hadwin, 2022; Veenman et al., 2006; Xue et al., 2023). Second, metacognition is critical for problem-solving and critical thinking which are essential academic achievement skills (Bakhtiar & Hadwin, 2022; Veenman et al., 2006; Xue et al., 2023). Researchers have reported that metacognition is correlated with intelligence and is a significant predictor of academic performance after controlling for intelligence (Ohtani & Hisasaka, 2018). In this study, the metacognition questionnaire displayed excellent internal consistency with a Cronbach's alpha of .97.

Race/Ethnicity. Societal influences have historically impacted certain racial and ethnic groups and therefore literature has uncovered the impacts on marginalized children's development. Several studies have documented disparities in academic achievement among different racial and ethnic groups. For instance, research has shown that African American/Black and Hispanic/Latino children often face educational challenges. For example, they have lower standardized test scores and high school graduation rates than their White counterparts (Nitardy et al., 2015).

Gender. Research has shown that gender plays a significant role in children's functioning. Specific to academic functioning, boys generally report higher self-efficacy than girls in math and science, while girls often report higher self-efficacy in verbal abilities and reading comprehension (Huang, 2013). However, a gap exists wherein girls have tended to outperform boys in almost all subject areas according to a meta-analysis that explored elementary students up to university students (Voyer & Voyer, 2014). Additionally, gender influences children's well-being. Studies report that girls tend to report lower overall subjective well-being when compared to boys (Chen et al., 2020; Kaye-Tzadok et al., 2017). Furthermore,

research suggests that gender differences exist in prosocial behaviors, with girls demonstrating more prosocial behaviors than boys (Longobardi et al., 2019). Girls tend to engage in indirect aggression, which links with higher prosocial behaviors. However, boys tend to engage in direct aggression, which is related to poor peer relationships (Card et al., 2008). Therefore, it is important to control for gender when examining academic functioning, social behaviors, and well-being.

Immigrant Status. This study controlled for students not born in the United States. According to a recent meta-analysis, second-generation students performed better academically than first-generation peers. This is theorized to relate primarily to acculturation (Sirin & Sin, 2023). Immigrant status also relates to student disengagement (Motti-Stefanidi & Masten, 2013). Regarding immigrant youth's well-being, there is variability depending on the developmental context, acculturation, social, and contextual factors. Specifically, because immigrant youth often navigate between two cultures (i.e., home and school), they can be at risk of lower levels of well-being (Motti-Stefanidi, 2019). Understanding the impact of immigrant status on these variables allows for a more comprehensive understanding of the relationship between religious engagement and children's academic functioning, social behaviors, and well-being.

Teacher Religiosity and Engagement in Class-Wide Dua. I controlled for teacher religious background/identity and teacher engagement in class-wide dua. It is important to account for these factors to account for potential variations in religious practices. Specifically, this helps separate the influence of classroom engagement in religious practices from students' engagement in those practices.

Validity Variable

Social Desirability. I included three items to check response validity regarding social desirability (BASC-3; Reynolds & Kamphaus, 2015). These items evaluated the likelihood that participants presented themselves in a socially desirable manner. The participants were presented with the following three statements: "I tell the truth every single time," "I have some bad habits," and "I never get angry," and responded via a two-point response of either false (0) or true (1).

Table 3
Summary of Variables and Reliability

Variable	Reliability	Variable Type	Reporter
Validity and Covariates			
Social Desirability	-	Categorical	Self
Race/Ethnicity	-	Categorical	School
Gender	-	Categorical	School
Immigrant Status	-	Categorical	Self
Teacher-Class Wide Dua	-	Categorical	Teacher
Metacognition	.97	Continuous 1-4 Point Scale	Teacher
Mediators			
Mindful Salat	.72	Continuous 1-4 Point Scale	Self
Relationship with God	.58	Continuous 1-5 Point Scale	Self

Independent (Predictor)

Religious Practices (i.e., Salat Prayer and Dua)	.80	Continuous 1-5 Point Scale	Self
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Dependent (Predicted Variables)

GPA	-	Continuous 0-4 Point Scale	School
Academic Engagement	.74	Continuous 1-4 Point Scale	Self
Academic Engagement	.94	Continuous 1-4 Point Scale	Teacher
Prosocial Behaviors	.92	Continuous 1-5 Point Scale	Teacher
Happiness	.80	Continuous 1-5 Point Scale	Self
Satisfaction with Life	.82	Continuous 1-5 Point Scale	Self

Analysis Overview

All analyses were conducted using the software Statistical Package for the Social Sciences Version 29.0.1.0. The questions were analyzed using multiple regression and mediation analyses. As a result, the data was examined to confirm that the relevant assumptions were met before conducting the analyses. These included evaluating the relationship between the independent variables and outcomes. Additionally, it included checking for any measurement

errors in the independent variables, homoscedasticity, independence of the residuals, and normality of residuals (Azen, 2021). The following are the three objectives that were analyzed:

Objective 1: Examination of the association between student engagement in religious practices (i.e., salat prayer and dua) and student outcomes. The research questions are: how is student engagement in salat prayer and dua associated with (a) academic achievement, (b) academic engagement, (c) prosocial behaviors, (d) happiness, and (e) life satisfaction?

Objective 2. Examination of students' engagement in mindful salat and/or their relationship with God as mediators of the association between religious practices (i.e., salat prayer and dua) and student outcomes. The research questions are: do students' engagement in mindful salat and/or their relationship with God mediate the associations between student's engagement in salat prayer and dua and student's (a) academic achievement, (b) academic engagement, (c) prosocial behaviors, (d) happiness, and (e) life satisfaction?

Through SPSS, I utilized Hayes' PROCESS macro (Hayes, 2023). Hayes' PROCESS macro is a tool designed to analyze mediation within SPSS. This tool offered a structured approach to investigating hypotheses that include direct and indirect effects in statistical analyses. Specifically, model four from Hayes' PROCESS macro was used to analyze the questions for objective two. Model four provided the capacity to account for covariates which was important in obtaining a more nuanced understanding of the relationships of the variables (e.g., immigrant background, metacognition).

Exploratory Objective. Lastly, a supplemental exploratory objective was included to understand students' motivations for engaging in salat prayer and the subject's students focused on in their duas. Specifically, students completed the fill-in-sentences (a) "I pray salat because ___" and (b) "I make dua for ___". Student responses to the fill-in-sentences were entered into

Dedoose (2023), a platform to code and sort qualitative data. A form of thematic coding, in which the supplemental data was used to develop the coding scheme, was used to categorize student responses (Flick, 2013). The primary researcher first reviewed the patterns and themes within the data and used this existing data to develop a coding scheme (see Appendix H). This led to two primary codes used to sort student's motivations for engaging in salat prayer, which were (1) extrinsic and (2) intrinsic motivation. Three categories were identified to sort the subject's students focused on in their duas, which were (1) dua for others, (2) dua for self, and (3) dua to thank Allah. A second coder independently coded the transcripts using the code book (see Appendix H) in Dedoose. Dedoose provided a rating for inter-rater reliability, which was acceptable.

CHAPTER FOUR

Results

Data Screening

Student survey reports were downloaded from Qualtrics and screened for any incomplete responses, missed items, and validity of entries. The researcher entered teacher-reported and school-wide data twice to check for accuracy. The validity of entries was assessed utilizing three items that assessed student inclination to present an overly positive self-image that was unlikely to be accurate. I removed two participants from the data set who failed all three social desirability items. This ensured that the data analysis focused on genuine and reliable responses, minimizing potential biases introduced by socially desirable responses. Moreover, any missing cases were minimal across the study variables, with one or two missing variables. After considering missing items and the validity check, both teacher-reported and student-reported data had less than 1% of data missing.

Preliminary Analyses

Preliminary analyses were conducted to examine the association between religious practices and spirituality, and academic functioning, social behaviors, and well-being. The analyses included Pearson correlations to assess the association between continuous variables. Moreover, the analyses included independent samples T-tests and ANOVAs to examine group differences.

Correlations Between Continuous Variables

Table 4 summarizes all measures' means, standard deviations, and Pearson correlations. The independent variable, engagement in salat prayer and dua, demonstrated significant and positive correlations with the following dependent variables: student-reported academic engagement, teacher-reported academic engagement, and prosocial behaviors. The independent

variable also demonstrated significant and positive correlations with both mediating variables, mindful salat, and the relationship with God. The independent variable was not correlated with happiness, satisfaction with life, or metacognition.

Furthermore, the mediators were significantly and positively correlated with some dependent variables. Specifically, mindful salat demonstrated significant positive correlation with the other mediator, the relationship with God. The relationship with God was significantly positively correlated with happiness, satisfaction with life, student-reported academic engagement, and GPA.

Additionally, the metacognitive covariate significantly correlated with some of the dependent variables. Specifically, it significantly correlated with student-reported academic engagement, teacher-reported academic engagement, prosocial behaviors, and GPA.

Lastly, some of the dependent variables correlated to other dependent variables. Specifically, happiness correlated with satisfaction with life. Student-reported academic engagement was correlated with happiness and satisfaction with life. Additionally, teacher-reported academic engagement correlated with student-reported academic engagement. Moreover, prosocial behaviors correlated with student-reported academic engagement and teacher-reported academic engagement. Lastly, GPA was correlated with satisfaction with life, student-reported academic engagement, teacher-reported academic engagement, and prosocial behaviors.

Table 4*Means, Standard Deviation, and Pearson Correlations for Measures*

Scale	M	SD	1	2	3	4	5	6	7	8	9
1. SD	2.48	1.06	-								
2. MS	2.26	.67	.30**	-							
3. RwG	3.25	.53	.22*	.25*	-						
4. Hap	2.50	.79	.10	.10	.44**	-					
5. SwL	2.60	.86	.14	.09	.45**	.68**	-				
6. SR AE	2.23	.46	.30**	.20	.30**	.39**	.42**	-			
7. TR AE	1.99	.77	.30**	.03	.14	.12	.11	.33**	-		
8. PB	1.55	.45	.22*	.02	.13	.15	.13	.29**	.59**	-	
9. MC	1.73	.75	.17	.14	.09	.10	.13	.22*	.66**	.29**	-
10. GPA	3.23	.65	.25*	.16	.21*	.20	.24*	.45**	.77**	.43**	.65**

Note. SD = Student engagement in salat prayer and dua; MS = Mindful Salat ; RwG = Relationship with God; Hap = Happiness; SwL = Satisfaction with Life; SR AE = Student-reported academic engagement; TR AE = Teacher-reported academic engagement; PB = Prosocial behaviors; MC = Metacognition. Listwise deletion N=100

* $p < .05$. ** $p < .01$.

Demographic and Classroom Effects

Table 5 and Table 6 includes the results of demographic variables including immigrant status, gender, class-wide engagement in dua, and grade level. Independent samples T-tests were used to analyze the effect of immigrant status (Table 5). T-tests revealed significant differences between US-born and non-US-born individuals for the following variables: metacognition,

teacher-report of academic engagement, student-report of academic engagement, satisfaction with life, and GPA.

Overall, teachers rated US-born students' metacognition and academic engagement higher than non-US-born peers. US-born individuals self-reported higher academic engagement and satisfaction with life than non-US-born individuals. Lastly, US-born students had higher GPAs compared to non-US-born individuals. Given the observed relationship between immigrant status and ethnicity, I used immigrant status rather than race/ethnicity when examining the effects of demographic variables in order to identify differences. Regarding gender, the data showed no gender differences.

Regarding classroom engagement in a class-wide dua (Table 5), the limited number of participating classrooms ($N = 11$) meant that using a hierarchical linear model would not be appropriate. Therefore, an independent t-test was used for this binary variable. The class-wide dua item had a varied response with five teachers responding “no,” and six teachers responding “yes.” This variable was selected to examine group differences at the classroom level. There were differences in the relationship with God, happiness, student-reported academic engagement, and prosocial behaviors between students in classes with class-wide dua and students in classes without class-wide.

Unexpectedly, children in classrooms with class-wide dua, compared with children in classrooms without class-wide dua, reported a lower level of relationship with God, happiness, academic engagement, and prosocial behaviors. As such, I did not include this variable in the analysis because the differences in class-wide dua are more likely due to the small sample size or other unmeasured covariates than class-wide dua.

One-way analysis of variance was conducted to determine any differences by grade level (i.e., 4th, 5th, and 6th). Significant differences were noted, but a post-hoc analysis revealed minimal overall differences. Tables 6 summarizes the results of the ANOVA. There was a significant difference in the relationship with God. Specifically, 4th graders reported a stronger relationship with God than 5th graders. Additionally, there were differences in happiness as 4th graders had a higher mean than 5th graders, and satisfaction with life where 4th graders had a higher mean than 5th graders.

Based on these preliminary analyses, I included US-Born as a covariate in the primary analyses. There were significant differences between several of the dependent variables based on whether students were born in the US or not born in the US. There were no significant gender differences or class level differences and therefore those variables were not included as covariates. The class-wide dua variable resulted in unexpected differences. This was likely due to unmeasured constructs or the smaller sample size. Therefore, they were not included as a covariate in the primary analyses.

Table 5

Results of T-Tests: Differences by US Born, Gender, and Class-Wide Dua

	US Born (n = 47)		Non-US Born (n = 51)		df	t	p	d
	M	SD	M	SD				
SD	2.49	1.08	2.50	1.06	96	-.05	.48	-.01
MS	2.29	.570	2.22	.76	92.06	.53	.23	.11
RwG	3.25	.52	3.24	.56	96	.09	.46	.02
Hap	2.53	.78	2.47	.81	96	.38	.35	.08
SwL	2.78	.81	2.39	.88	96	2.28	.01	.46

SR AE	2.31	.46	2.15	.44	96	1.88	.03	.38
TR AE	2.14	.77	1.86	.76	96	1.80	.04	.36
PB	1.57	.46	1.54	.46	96	.27	.39	.06
MC	1.94	.73	1.53	.73	96	2.81	.00	.57
GPA	3.41	.64	3.04	.63	96	2.90	.00	.59
	Female (n=62)		Male (n=38)		df	<i>t</i>	<i>p</i>	<i>d</i>
	M	SD	M	SD				
SD	2.37	1.10	2.65	.97	98	-1.29	.10	-.27
MS	2.29	.67	2.20	.68	98	.67	.25	.14
RwG	3.24	.54	3.26	.53	98	-.17	.43	-.04
Hap	2.48	.87	2.53	.67	92.78	-.34	.37	-.07
SwL	2.61	.92	2.56	.77	98	.28	.39	.06
SR AE	2.25	.46	2.19	.47	98	.53	.30	.11
TR AE	2.00	.81	1.97	.70	98	.19	.43	.04
PB	1.58	.44	1.51	.47	98	.76	.22	.16
MC	1.68	.76	1.80	.73	98	-.73	.23	-.15
GPA	3.20	.70	3.28	.57	98	-.55	.29	-.11
	Class-wide Dua (n=54)		No Class-wide Dua (n=46)		df	<i>t</i>	<i>p</i>	<i>d</i>
	M	SD	M	SD				
SD	2.35	1.04	2.63	1.07	98	1.34	.09	.27
MS	2.22	.66	2.29	.69	98	.53	.30	.11
RwG	3.15	.56	3.35	.49	98	1.90	.03	.38
Hap	2.35	.77	2.68	.80	98	2.12	.02	.43

SwL	2.47	.85	2.74	.86	98	1.61	.06	.32
SR AE	2.15	.48	2.31	.43	98	1.76	.04	.35
TR AE	1.95	.78	2.04	.76	98	.56	.29	.11
PB	1.48	.49	1.64	.39	97.55	1.73	.04	.34
MC	1.84	.78	1.60	.70	98	-1.60	.06	-.32
GPA	3.19	.72	3.28	.58	98	.68	.25	.14

Note. SD = Student engagement in salat prayer and dua; MS = Mindful Salat ; RwG = Relationship with God; Hap = Happiness; SwL = Satisfaction with Life; SR AE = Student-reported academic engagement; TR AE = Teacher-reported academic engagement; PB = Prosocial behaviors; MC = Metacognition.

Table 6

ANOVA by Grade Level

Variable	SS	df	MS	F	<i>p</i>
Student Engagement in Salat and Dua					
Between Groups	1.88	2	.94	.84	.44
Within Groups	108.88	97	1.12		
Total	110.76	99			
Mindful Salat					
Between Groups	.06	2	.03	.07	.94
Within Groups	44.69	97	.46		
Total	44.75	99			

Relationship with God

Between Groups	1.77	2	.89	3.28	.04
Within Groups	26.23	97	.27		
Total	28.00	99			

Happiness

Between Groups	5.46	2	2.73	4.65	.01
Within Groups	56.91	97	.59		
Total	62.38	99			

Satisfaction with Life

Between Groups	4.40	2	2.20	3.1	.05
Within Groups	69.39	97	.72		
Total	73.80	99			

Student Reported Academic Engagement

Between Groups	.62	2	.31	1.48	.23
Within Groups	20.47	97	.21		
Total	21.09	99			

Teacher Reported Academic

Engagement

Between Groups	1.52	2	.76	1.30	.28
Within Groups	57.03	97	.59		
Total	58.55	99			

Prosocial Behaviors

Between Groups	.32	2	.16	.79	.46
Within Groups	19.69	97	.20		
Total	20.01	99			

Metacognition

Between Groups	.79	2	.39	.70	.50
Within Groups	54.71	97	.56		
Total	55.49	99			

Grade Point Average

Between Groups	2.33	2	1.17	2.83	.06
Within Groups	40.02	97	.41		
Total	42.35	99			

Assumptions

To answer the research questions, I employed multiple regression analyses. The analysis included checks for assumptions regarding normality, linearity, and homogeneity of variance. Regarding normality (Table 14 in Appendix I), the Shapiro-Wilk’s coefficient for the independent and dependent distributions indicated that almost all variables showed non-normal distributions. This is expected considering that the data was taken from a private religious school where students are engaged in religious practices at a higher frequency than the general public. GPA and prosocial behaviors showed negative skewness (Table 15 in Appendix I). This indicated that many children demonstrated higher GPA scores ($M = 3.23$, $SD = 0.65$). This is a school that is focused on college prep, and therefore it is likely that the students overall have higher GPA’s than students at other schools. Additionally, teachers rated many students high on prosocial behaviors ($M = 1.55$, $SD = 0.45$). Three students had very low GPAs and were spread

across three separate classrooms. Two students had very high metacognition scores, and both students were from different classrooms. Therefore, the extreme scores are accurate measurements of unique cases rather than errors. The analysis included assessing homogeneity (Table 16) using the Levene Statistic. No significance was noted, thereby meeting the assumption of homogeneity.

Primary Analyses

Multiple linear regression analyses were used to examine the association between student engagement in salat prayer and dua and the dependent variables of (a) GPA, (b) student-reported academic engagement and teacher-reported academic engagement, (c) prosocial behaviors, (d) happiness, and (e) satisfaction with life. The study controlled for the relevant demographics and covariates in these analyses, including immigration status and metacognition. All results are summarized in Table 7.

The Association between Religious Practices and Academic Functioning

(a) GPA Question one focused on the extent to which student religious practices (i.e., engagement in salat prayer and dua), the relationship with God, and mindful salat were associated with GPA. Together, all the predictors included in the model explained 46.1% of the variance in GPA ($R^2 = .46$, $F[5, 94] = 17.91$, $p < .001$). Regarding the covariates, metacognition was significantly associated with GPA ($\beta = .58$, $p < .001$), but immigrant status was not. After controlling for the covariates, students' engagement in salat prayer and dua, relationship with God, and mindful salat were not significantly associated with GPA.

(b) Student-reported and teacher-reported academic engagement Question two focused on the extent to which student religious practices, their relationship with God, and mindful salat were associated with student-reported and teacher-reported academic engagement.

Together, all the predictors included in the model explained 16.8% of the variance in student-reported academic engagement ($R^2 = .17$, $F[5, 94] = 5.01$, $p < .00$). Regarding the covariates, neither metacognition nor immigrant status were significantly associated with student-reported engagement. After controlling for the covariates, student engagement in salat prayer and dua was significantly associated with student-reported academic engagement ($\beta = .25$, $p = .01$). The relationship with God was also significantly associated with student-reported academic engagement ($\beta = .24$, $p = .02$). However, mindful salat was not.

The analysis was also conducted for teacher-reported academic engagement. Together, all predictors included in the model explained 48.1% of the variance in teacher-reported academic engagement ($R^2 = .48$, $F[5, 94] = 19.37$, $p < .001$). Regarding the covariates, metacognition was significantly associated with teacher-reported academic engagement ($\beta = .63$, $p < .00$), but immigrant status was not. After controlling for the covariates, mindful salat was significantly associated with teacher-reported academic engagement ($\beta = -.17$, $p = .03$). Furthermore, student's engagement in salat prayer and dua was significantly associated with teacher-reported academic engagement ($\beta = .17$, $p = .00$). Lastly, the relationship with God was not significantly associated with teacher-reported academic engagement.

The Association Between Religious Practices and Social Behavior and Well-Being

(c) **Social Behavior** Question three focused on the extent to which student religious practices, their relationship with God, and mindful salat were associated with student's prosocial behaviors. Together, all the predictors included in the model explained 2.0% of the variance in prosocial behaviors ($R^2 = .02$, $F[5,94] = 1.46$, $p = .22$). Regarding the covariate, immigration status was not significantly associated with prosocial behaviors. After accounting for the covariate, student's engagement in salat prayer and dua was significantly associated with

prosocial behaviors ($\beta = .09, p = .05$). However, the relationship with God and mindful salat were not significantly associated with prosocial behaviors.

(d) Happiness Question four focused on the extent to which student religious practices, their relationship with God, and mindful salat were associated with happiness. Together, all the predictors included in the model explained 16.4% of the variance in happiness ($R^2 = .16, F[4,95] = 5.87, p < .001$). Regarding the covariate, immigrant status not significantly associated with students' happiness. After accounting for the covariate, students' engagement in salat prayer, dua, and mindful salat were not significantly associated with happiness. Only the relationship with God was statistically associated with happiness ($\beta = .44, p < .001$).

(e) Satisfaction with life Question five focused on the extent to which student religious practices, the relationship with God, and mindful salat were associated with satisfaction with life. Together all the predictors included in the model explained 23% of the variance in satisfaction with life ($R^2 = .23, F[4, 95] = 8.32, p < .001$). Regarding the covariate, immigrant status was negatively and significantly associated with satisfaction with life ($\beta = -.22, p = .01$). After accounting for the covariate, students' engagement in salat prayer and dua and mindful salat were not significantly associated with students' satisfaction with life. However, the relationship with God was significantly associated with students' satisfaction with life ($\beta = .44, p < .001$).

Table 7

Multiple Linear Regression Models: Religious Practices, Spirituality, Academic Functioning, Social Behaviors, and Well-Being

Predictors	<i>B</i>	<i>SE</i>	β	<i>p</i>
Academic Functioning				
<i>GPA</i>				
Covariates				
Metacognition	.52	.07	.58	<.001
Immigration Status (Non-US-Born = 1)	-.18	.10	-.13	.09
Main Predictors				
Student Engagement in Salat Dua	.10	.05	.15	.06
Relationship with God	.18	.10	.14	.08
Mindful Salat	-.04	.08	-.04	.63
<i>Student-Reported Academic Engagement</i>				
Covariates				
Metacognition	.06	.06	.11	.27
Immigration Status (Non-US-Born = 1)	-.15	.09	-.16	.09
Main Predictors				
Student Engagement in Salat Dua	.11	.04	.25	.01
Relationship with God	.20	.08	.24	.02
Mindful Salat	.01	.06	.01	.93

Teacher-Reported Academic Engagement

Covariates

Metacognition	.65	.08	.63	<.001
Immigration Status (Non-US-Born = 1)	-.04	.12	-.02	.76

Main Predictors

Student Engagement in Salat Dua	.17	.06	.23	.00
Relationship with God	.11	.11	.08	.31
Mindful Salat	-.20	.09	-.17	.03

Social Behaviors and Well-Being

Prosocial Behaviors

Covariate

Immigration Status (Non-US-Born = 1)	-.02	.09	-.02	.86
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Main Predictors

Student Engagement in Salat Dua	.09	.05	.22	.05
Relationship with God	.08	.09	.10	.37
Mindful Salat	-.04	.07	-.06	.60

Happiness

Covariate

Immigration Status (Non-US-Born = 1)	-.06	.15	-.04	.68
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Main Predictors

Student Engagement in Salat Dua	.03	.07	.04	.67
Relationship with God	.66	.14	.44	<.001
Mindful Salat	-.05	.12	-.04	.67

Satisfaction with Life

Covariate

Immigration Status (Non-US-Born = 1)	-.39	.16	-.22	.01
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Main Predictors

Student Engagement in Salat Dua	.09	.08	.10	.28
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Relationship With God	.72	.15	.44	<.001
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Mindful Salat	-.10	.12	-.07	.44
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Summary

Overall, student religious practices (i.e., engagement in salat prayer and dua) was significantly and positively associated with academic engagement (i.e., both student-reported and teacher-reported) and prosocial behaviors. Student engagement in salat prayer and dua was not associated with GPA, happiness, or satisfaction with life. Students' relationship with God was significantly and positively associated with happiness and life satisfaction. Unexpectedly, mindful salat was significantly and negatively associated with teacher-reported academic engagement.

Mediation Analyses

I conducted mediation analysis using the PROCESS macro for SPSS (Hayes, 2023). This analysis was used to examine whether mindful salat and the relationship with God mediate the associations between students' engagement in salat prayer and dua and student outcomes. These outcomes include (a) GPA, (b) student-reported and teacher-reported academic engagement, (c) prosocial behaviors, (d) happiness, and (e) satisfaction with life. By employing this statistical technique, I aimed to account for the mechanisms through which Islamic religious practices are associated with student outcomes. In all mediation models I controlled for immigrant status, and

for the academic functioning models I controlled for metacognition. Table 8 summarizes the results.

Mediation of the Relationship with God and Mindful Salat: Academic Functioning

(a) GPA The mediation analyses were conducted to examine whether the relationship with God and/or mindful salat mediate the association between student engagement in salat prayer and dua and GPA. The indirect effects of student engagement in salat prayer and dua on GPA were not significant through either the relationship with God ($b = .02$, $SE = .02$, 95% CI [-.01, .07]) or mindful salat ($b = -.10$, $SE = .02$, 95% CI [-.04, .03]). Regarding the covariates, metacognition was a strong predictor of GPA ($p = .00$) with a confidence interval that does not include zero (95% CI [.38, .65]) and immigrant status was not statistically significant.

(b) Student-reported and teacher-report academic engagement The mediation analyses were conducted to examine whether the relationship with God and/or mindful salat mediate the association between student engagement in salat prayer and dua and student-reported academic engagement. The indirect effect of student engagement in salat prayer and dua on student-reported academic engagement through the relationship with God was significant ($b = .02$, $SE = .02$, 95% CI [.00, .06]). That is, students who engaged in salat prayer and dua more frequently perceived a higher quality relationship with God, which, in turn, was associated with higher levels of academic engagement. Mindful salat was not a significant mediator ($b = .00$, $SE = .01$, 95% CI [-.02, .03]). Regarding the covariates, metacognition and immigration status did not significantly relate to student-reported academic engagement.

The mediation analyses were also conducted for teacher-reported academic engagement. The indirect effect of student engagement in salat prayer and dua on teacher-reported academic engagement through the relationship with God ($b = .01$, $SE = .02$, , 95% CI [-.02, .07]) and

mindful salat ($b = -.04$, $SE = .02$, 95% CI [-.09, -.00]) were not significant. Regarding the covariates, metacognition ($p = .00$) was significantly associated with teacher-reported academic engagement, but immigration status was not significantly associated with teacher-reported academic engagement.

Mediation of the Relationship with God and Mindful Salat: Social Behaviors and Well-Being

(c) Social behaviors The mediation analyses were conducted to examine whether the relationship with God and/or mindful salat mediate the association between student engagement in salat prayer and dua and prosocial behaviors. The indirect effects of student engagement in salat prayer and dua on prosocial behaviors were not significant through either the relationship with God ($b = .01$, $SE = .01$, 95% CI [-.01, .04]) or mindful salat ($b = -.01$, $SE = .02$, 95% CI [-.05, .02]). Regarding the covariate, immigrant status was not significantly associated with prosocial behaviors.

(d) Happiness The mediation analyses were conducted to examine whether relationship with God and/or mindful salat mediate the association between student engagement in salat prayer and dua and happiness. The indirect effect of the relationship with God was significantly associated with happiness ($b = .07$, $SE = .03$, 95% CI [.02, .14]). That is, students who engaged in salat prayer and dua more frequently perceived a higher quality relationship with God, which, in turn, was associated with higher levels of happiness. The indirect effect of mindful salat was not significantly associated with happiness ($b = -.01$, $SE = .03$, 95% CI [-.07, .04]). Regarding the covariate, immigrant status was not found to be significant.

(e) Satisfaction with life The mediation analyses were conducted to examine whether the relationship with God and/or mindful salat mediate the association between student engagement in salat prayer and dua and satisfaction with life. The indirect effects of student engagement in

salat prayer and dua on satisfaction with life through the relationship with God was significant ($b = .08$, $SE = .04$, 95% CI [.02 .16]). That is, students who engaged in salat prayer and dua more frequently perceived a higher quality relationship with God, which in turn, was associated with higher levels of satisfaction with life. However, mindful salat was not significantly associated with satisfaction with life ($b = -.02$, $SE = .03$, 95% CI [-.07, .03]). Regarding the covariate, immigrant status was negatively associated of satisfaction with life, with US-born children reporting higher levels of satisfaction with life ($p = .01$).

Table 8

Indirect Effects of Student Engagement in Salat Prayer and Dua on Student Outcomes through Student's Relationship with God and Mindful Salat

Variable	Effect	SE	<i>p</i>	95% CI
Academic Functioning				
<i>GPA</i>				
Relationship with God	.02	.02		[-.01, .07]
Mindful Salat	-.01	.02		[-.04, .03]
<i>Student-Reported Academic Engagement</i>				
Relationship with God	.02	.02		 [.00, .06]
Mindful Salat	.00	.01		[-.02, .03]
<i>Teacher-Reported Academic Engagement</i>				
Relationship with God	.01	.02		[-.02, .07]
Mindful Salat	-.04	.02		[-.09, -.00]
Social Behaviors and Well-Being				
<i>Prosocial Behaviors</i>				
Relationship with God	.01	.01		[-.01, .04]
Mindful Salat	-.01	.02		[-.05, .02]
<i>Happiness</i>				
Relationship with God	.07	.03		 [.02, .14]
Mindful Salat	-.01	.03		[-.07, .04]
<i>Satisfaction with Life</i>				
Relationship with God	.08	.04		 [.02, .16]
Mindful Salat	-.02	.03		[-.07, .03]

Summary

The indirect effects were significant for relationship with God but not for mindful salat. Specifically, relationship with God mediated the association between student engagement in salat prayer and dua and (1) student-reported academic engagement, (2) teacher-reported academic engagement, (3) happiness, and (4) satisfaction with life.

Qualitative Data

An adapted thematic coding method (Flick, 2013) for qualitative data was used to construct the coding framework for analyzing the content of student responses. Initially, the first researcher used open coding for identifying major themes within the qualitative data, which led to the development of a coding scheme (see Appendix H). A second coder independently applied this coding scheme to the student transcripts using Dedoose. Dedoose is a qualitative and mixed methods data analysis software for organizing, analyzing, and visualizing data sets (Dedoose, 2023). This software supports qualitative coding by providing tools that allow researchers to assign codes to data excerpts, manage code systems, and track inter-coder reliability. The inter-rater reliability was lower than desired and discussion between the primary coder and research assistant were used to resolve discrepancies. However, even though the final inter-rater coded reliability, as assessed based on Cohen's Kappa, was .73, which is considered good agreement (Landis & Koch, 1977), future researchers should aim for greater reliability for more consistent coding. This is addressed further in the limitations section.

This process led to the identification of main categories for coding. The first category was (a) student's motivations for participating in salat prayer, which were then categorized into two sub-categories: (1) extrinsic and (2) intrinsic motivation. Moreover, (b) the subjects of

students' duas were separated into three categories: (1) dua for others, (2) dua for self, and (3) dua to thank Allah.

Student Motivations for Praying Salat Prayer

Students' motivations for performing salat prayer are multifaceted. After coding, student motivations were categorized into intrinsic and extrinsic groups. Regarding intrinsic motivation, students cite a sense of connection with Allah, evidenced by statements like, "I feel a connection with Allah" and a desire for "talking to Allah." There is also an emphasis on the emotional and psychological benefits of salat. Some students articulated feeling calm, having peace in their hearts, and associated salat prayer with virtues and positive behaviors. For instance, one participant noted, "Salat is part of my faith [it] makes me feel more relaxed and motivated." Lastly, love for Allah and the Prophet was another intrinsic motivation source.

On the other hand, extrinsic motivations include abiding by the divine command, "It is a command from Allah (SWT)," desiring rewards (e.g., heaven), and avoiding adverse outcomes (e.g., hell). Social and environmental influences, like commands from family or teachers, also play a role. For instance, a student mentioned, "My teacher/parents make me do it, but I always feel like I'm forced to do it." The data presented in Table 9 reflects the themes that motivate students to engage in Salat prayer.

Table 9
Student Motivations for Praying Salat

Primary Category	Secondary Category	Tertiary Category	Example Quote
Intrinsic Motivation	Connection with Allah	Connection/Closeness to Allah	"I feel a connection with Allah."
		Opportunity for Dua/Talking to Allah	"I want to talk to Allah and sometimes ask for help."

	Emotional and Psychological Benefits	Emotions (e.g., calm) Psychological (e.g., virtues, behavior)	“It feels good, [and] I have peace in my heart.” "Salat is part of my faith... makes me feel more relaxed and motivated." "I love Allah."
	Love for Allah and/or Prophet	Love for Allah Love for Prophet	"I want to be as close to the Prophet (s) as possible."
Extrinsic Motivation	Divine Command Desire for Reward	Gaining Positive Outcome – Jannah/Heaven	"It's a command from Allah (swt)." "I want to achieve the ultimate reward of Jannah."
		Gaining Positive Outcome – Other Desires	"To get good deeds and to get more iman [faith] in my life."
		Avoiding Negative Outcomes – Hell	"...thinking of Jahannam [hell] scares me so I fear that and Allah a lot."
		Avoiding Negative Outcomes – Other	"Every time I don't pray a day I have a bad day. Praying protects me from all bad things and makes me more cautious of any bad deeds."
	Social and Environmental Influences	Family (e.g., parents) School (e.g., teachers)	"My parent tell me to." "My teacher/parents make me do it, but I always feel like I'm forced to do it."

Note. Students responded to the statement: Fill in the sentence: I pray salat because...

What Students Make Dua For

Table 10 presents various types of dua that students reported making. There are three primary categories: Dua for Others, Dua for Self, and Dua for thanking Allah. Under the "Dua for Others" category, students expressed making prayers for the health and well-being of others, seeking forgiveness on behalf of others, praying for deceased relatives, and wishing good for their family, friends, the general world, teachers, and the underprivileged. Examples from this category include making dua for the health of every sick person and praying for countries and people suffering. The "Dua for Self" category captured personal prayers for academic success, enhancing communication with Allah, personal health and well-being, and desires for personal possessions. Examples in this category ranged from praying to increasing one's GPA to making dua for a new game. Lastly, with the third category, "thanking Allah", an example is a prayer of gratitude for blessings.

Table 10
Subject of Student's Duas

Subject of Dua	Sub-Category	Example quote
Others	Health/Wellbeing	"I make dua for every sick person to be healthy and strong."
	Forgiveness	"...and for Allah to forgive the people who have done bad."
	Spiritual Rewards	"I make dua that everybody will go to jenna [heaven]."
	Deceased Relatives or People	"My grandma to be in heaven."
	Family	"I make dua for my family and to make them have a good life."
	Friends	"I make duaa for my friends, family, teachers, and people in need."

	General Good in the World	"I also make dua for countries that are suffering and the people that are suffering."
	Teachers	"Good health, keeping my family safe and healthy, good grades and for my teachers and friends."
	Those in Need	"My family and others that are homeless."
Self	Academic Success	"My GPA to go up."
	Communication with Allah	"To talk to Allah."
	Forgiveness	"I make dua because I want to ask for forgiveness."
	Health/Wellbeing	"I make dua for my health or something I want."
	Personal Possessions or Desires	"I make dua since like salat, sometimes those things happen way later. Like I make dua for a new game, or grade."
	General Self	"I make dua for myself."
	Spiritual Rewards	"Good health for my family/friends/teachers, good grades, and for me to go to Jannah."
Allah		"I make dua to thank Allah (swt) for everything around me and all the blessings which I can't count!"

Note. Students responded to the statement: Fill in the Sentence: I make dua for...

CHAPTER FIVE

Discussion

In this study, I examined the role of religious practices and spirituality in the lives of Muslim children attending a private Islamic school in the US. Muslim children are a demographic previously underrepresented in research. While existing studies have predominantly focused on the role of religious practice on Christian adolescents (Horwitz, 2021; Jeynes, 2003, 2012, 2020) and Muslim adults (Albatnuni & Koszycki, 2020; Chamsi-Pasha & Chamsi-Pasha, 2021; Ijaz et al., 2017), this study is original in examining these relationships among Muslim school children.

I explored the connections between Muslim school children's religious practice (i.e., engagement in salat prayer and dua), academic functioning (i.e., GPA and academic engagement), social behaviors, and well-being (i.e., happiness, satisfaction with life). Student's religious practices were significantly associated with student-reported and teacher-rated academic engagement and prosocial behaviors. I delved into whether these relationships were mediated by students' spirituality (i.e., students' relationship with God or mindful salat). Between the two indicators of spirituality, only relationship with God mediated the association between religious practice and student reported academic engagement, happiness, and satisfaction with life. Moreover, I also examined students' motivations for engaging in salat prayer and the subjects of their duas through brief supplemental qualitative responses. The findings of this study contribute to an understanding of the associations between Muslim children's religious practices, spirituality, and their academic functioning, social behaviors, and I well-being.

Religious Practices and Academic Functioning

The relationship between religious practices (i.e., salat and prayer) and academic functioning (i.e., GPA and academic engagement) among Muslim students was significant for

academic achievement, but not for GPA. The hypothesis that religious practices would be positively associated with academic engagement was supported for both student-reported, and teacher-reported academic engagement and even after accounting for metacognition. However, the hypothesis that religious practices would be positively associated with GPA was not supported, despite a significant bivariate correlation ($r = .25, p < .05$). This nonsignificant association was attributed to metacognitive skills accounting for a significant amount of variance in academic achievement.

Religious Practices and GPA

One of the goals of this study was to examine the association between student's religious practices (i.e., salat prayer and dua) and their academic achievement (i.e., GPA). I hypothesized a positive association between religious practices and academic achievement. This hypothesis was not supported, as religious practice was not significantly associated with GPA in the regression model. The bivariate correlation was significant between salat prayer and dua and GPA ($r = .25, p < .05$), but it was not significant after controlling for metacognition. The nonsignificant relationship between religious practice and GPA can be understood as metacognition accounting for most of the variance in the relationship.

This is comparable with prior research that has established a relationship between metacognition and academic achievement (Ohtani & Hisasaka, 2018). Ohtani and Hisasaka (2018) established this relationship even when controlling for intelligence, although the strength of this relationship is moderated by the type of measures used for metacognition. Metacognitive skills, such as planning, monitoring, and evaluating one's own learning process, directly contribute to effective study habits and academic performance (Bakhtiar & Hadwin, 2022; Veenman et al., 2006; Xue et al., 2023). Consequently, in this sample and study, metacognitive

skills, rather than religious practices, were a key contributor to student's academic success as measured by GPA.

Religious Practices and Academic Engagement

Furthermore, another goal for this study was to examine the association between student's religious practices (i.e., salat prayer and dua) and their academic engagement. I hypothesized a positive association between religious practices and academic engagement. This hypothesis was supported. The significant relationship between student religious practices and academic engagement is compelling because it was significant for self-report and teacher-report. Moreover, it was significant even after controlling for metacognition in both situations, demonstrating a robust association. This is comparable with the findings of prior research indicating the positive influence of religious practices on academic functioning among adolescents (Horwitz, 2021; Jenyes, 2003, 2012, 2020).

The practices of salat prayer and dua in Islam might offer structured and reflective paths for students to enhance their academic engagement. Salat prayer is a disciplined practice, required five times a day with specific verses and rules that must be followed each time. Therefore, it is likely that salat prayer encourages time management, consistency, and attention. These skills are linked to school academic functioning with elementary school students (Su & Swank, 2018; Valle et al., 2016). Conversely, dua or supplication, is a semi-structured and sometimes unstructured type of prayer. Students can ask and talk to God about whatever they desire in whatever words they see best fit. This allows students to utilize dua to pray for academic success through setting personal goals. Personal goal-setting could help elementary school students be more engaged in learning (Froiland, 2021). Together, salat prayer and dua could provide Muslim students the opportunity to increase their academic engagement through

structured discipline, an increase in attention, and possibilities for goal setting (Froiland, 2021; Su & Swank, 2018; Valle et al., 2016).

Mediation of Spirituality: Academic Functioning

An objective of this study was to examine the mediation of student's spirituality (i.e., relationship with God and mindful salat) in the association between religious practices (i.e., salat prayer and dua) and student's academic functioning (i.e., GPA and engagement). I hypothesized that the association between student religious practices and academic functioning would be mediated by student's relationship with God and mindful salat. This hypothesis was partially supported. The indirect effect of student's engagement in salat prayer and dua on student-reported academic engagement was mediated by relationship with God.

Student's Relationship with God and Academic Engagement

Student's relationship with God mediated the association between religious practice (i.e., salat prayer and dua) and academic engagement. Some students may use salat prayer and dua as an opportunity to talk to God and/or reflect on their perception and relationship with God. Therefore, student's relationship with God is likely fostered in student's religious practices. During these talks and reflections on their relationship with God, students may be articulating their desires and goals and cultivating a sense of personal agency by actively seeking God's support. Their relationship with God may empower them to believe in their ability to influence their life outcomes by having the choice to turn to God and having a positive perception of God's support. Therefore, I argue that it may be possible that, for the Muslim children in this sample, their relationship with God is not only a spiritual connection but may also foster their sense of internal control.

For example, a potential way that student's relationship with God is fostered through student's religious practices, is especially notable in dua. Within Islam, dua is presented as a way for individuals to alter their life trajectory (Al-Ghazali, 1990). Muslims are encouraged to make dua for their goals and work towards those goals. Specifically, a well-known hadith mentions the importance of action to achieve one's goals, "a man asked the Prophet if "[he] should tie [the camel and rely on Allah] or leave it loose and rely [upon Allah]?" The Prophet responded, "Tie it and rely [upon Allah]" (At-Tirmidhi, n.d.,11:2517). This hadith implies that dua should co-occur with action. Therefore, students who make dua more frequently may feel they have a greater sense of control over their lives, otherwise known as a strong sense of internal locus of control. Those with an internal locus of control may be more likely to set personal goals which can help them be more engaged in the classroom (Froiland, 2021).

The concept of locus of control, as introduced by Julian Rotter (1990), provides a framework for understanding relationship with God as a mediator. Locus of control is used to explain the variations in how individuals perceive their ability to influence their own lives. Individuals who lean towards an external locus of control believe that their life outcomes are determined by external forces (i.e., luck). Those with an internal locus of control see themselves as being in control of their lives. Furthermore, research has demonstrated that an internal locus of control contributes positively to academic functioning among Turkish pre-adolescents (Çelik et al., 2015). A recent study found that children's internal locus of control mediated the association between parental involvement and students' academic performance (Drago et al., 2018). A meta-analysis involving over 9,000 adult participants revealed a modest but significant positive relationship between religiosity and internal locus of control (Coursey et al., 2013). Moreover, existing research has underscored a beneficial link between locus of control and academic

engagement within the context of university students (Chukwuorji et al., 2018). Specifically, Chukwuorji et al., (2018) demonstrated that intrapersonal religious commitment positively relates to university students' academic engagement (Chukwuorji et al., 2018). Furthermore, religious commitment was found to be a mediating factor in the relationship between locus of control and academic engagement among university students (Chukwuorji et al., 2018). This implies that religious practices might foster an internal locus of control which helps academic engagement (Chukwuorji et al., 2018).

Summary. The association between religious practice (i.e., salat prayer and dua) and academic engagement highlights how salat prayer and dua may contribute to helping students develop academic engagement. Specifically, through salat prayer and dua, students may engage in time management, attention, and goal-setting skills which are linked to student's academic engagement (Froiland, 2021; Su & Swank, 2018, Valle et al., 2016). Moreover, the mediating role of a student's relationship with God can be understood as fostering students' sense of internal locus of control, which has been associated to elementary school students academic functioning (Çelik et al., 2015; Drago et al., 2018). This understanding helps bridge our understanding between relationship with God and academic engagement. Conversely, the association of religious practices on students' GPA was not evident; instead, metacognition accounted for a significant variance in GPA.

Religious Practices and Social Behaviors and Well-Being

This study also examined the association between religious practices (i.e., salat prayer and dua) and social behaviors and well-being (i.e., happiness and satisfaction with life). The hypothesis that religious practices would be positively associated with social behaviors was supported. However, the hypothesis that religious practices would be positively associated with

well-being was not supported. However, relationship with God was significantly associated with both well-being measures.

Religious Practices and Social Behaviors

An objective one of this study was to examine the association between student's religious practices (i.e., salat prayer and dua) and their social behaviors. I hypothesized a positive association between religious practices and social behaviors, and this hypothesis was supported. The significant relationship between student religious practices and prosocial behaviors aligns with the findings of previous research. Specifically, researchers have established a positive influence of religious practices on prosocial functioning for adolescents and children (Jeynes, 2020; Michaelson et al., 2014; Pandya, 2017; Schottenbauer et al., 2007).

The practices of salat prayer and dua in Islam might foster the development of students' prosocial behaviors. The students in this sample all engaged in school-wide salat prayer and dua with their peers. This communal engagement of religious practices may create opportunities for students to demonstrate prosocial behaviors. Furthermore, findings in prior research have revealed that students who participate in socially acceptable behaviors are more likely to gain acceptance from their peers and, consequently, are more motivated to adopt normative prosocial behaviors (Layous et al., 2012). This dynamic offers valuable opportunities for social learning and the reinforcement of prosocial norms, underscoring the importance of communal religious practices in potentially fostering prosocial behavior.

Prosocial behaviors in Islam are congruent to the prosocial behaviors measured by teachers. These social behaviors include students' expressions of kindness, cooperativeness, and concern for fairness among their peers. These prosocial behaviors are compatible to the Islamic

tradition of a culture of goodwill, demonstrated in everyday interactions (Anjum, 2022; Parrott 2017, 2018).

Religious Practices and Well-Being

Furthermore, the goals of this study were to examine the association between student's religious practices (i.e., salat prayer and dua) and their well-being (i.e., happiness and satisfaction with life). I hypothesized a positive association between religious practices and both well-being measures. However, religious practice was not significantly associated with either well-being measure.

The bivariate correlation was not significant for student's religious practice for either well-being measure. However, student's relationship with God was significantly correlated to their happiness ($r = .44, p < .01$) and satisfaction with life ($r = .45, p < .01$). Furthermore, the nonsignificant association between student religious practices and well-being can be understood as student's relationship with God accounting for most of the variance in this relationship. This is comparable to prior research that has found greater significance among children and adolescents' spirituality and well-being compared to their religiosity and well-being (Holder et al., 2010, 2016; Marques et al., 2013).

Mediation of Spirituality: Social Behaviors and Well-Being

An objective of this study was to examine the mediation of student's spirituality (i.e., relationship with God and mindful salat) in the association between religious practices (i.e., salat prayer and dua) and student's social behaviors and well-being (i.e., happiness and satisfaction with life). I hypothesized that the association between student religious practices and student's social behaviors and well-being would be mediated by student's relationship with God and mindful salat. This hypothesis was partially supported. The indirect effect of student's religious

practice on student's social behaviors was not mediated by either spirituality measure. However, the indirect effect of student's religious practices on student's well-being was distally mediated by relationship with God.

Spirituality and Social Behaviors

A goal of this study was to examine the mediation of student's relationship with God and mindful salat. I hypothesized that student religious practice (i.e., engagement in salat prayer and dua) would be associated with student's prosocial behaviors and this would be mediated by student's relationship with God and mindful salat. This hypothesis was not supported. Specifically, neither measure of spirituality (i.e., relationship with God and mindful salat) mediated this association. This may suggest that while spirituality may focus more on the interpersonal (Koeing et al., 2001), religious rituals promote a broader community focus (Callender et al., 2022), as seen in the communal aspect of salat prayer and dua in this sample. These religious practices provide structured opportunities for students to come together and engage in acts of worship that may reinforce shared values and norms. This communal aspect of religious rituals may play a more significant role, than spirituality, in promoting prosocial behaviors.

Spirituality and Well-Being

Additionally, an objective of this study was also to examine the mediation of student's relationship with God and mindful salat on well-being (i.e., happiness and satisfaction with life). I hypothesized that student religious practices (i.e., salat prayer and dua) would be associated with student's well-being, and that this would be mediated by students' relationship with God and mindful salat. This hypothesis was partially supported. The indirect effect of student's

religious practices on student's well-being was mediated by relationship with God, for both well-being measures (i.e., happiness and satisfaction with life).

Despite no direct effects, I still ran mediation analyses. I based this decision on prior research which has provided support for the relevance of examining spirituality as a mediator in this context (Albatuni & Koszycki, 2020). Additionally, other researchers have found that spirituality tends to be more strongly associated with children's happiness than religiosity (Holder et al., 2010, 2016; Marques et al., 2013). Some researchers support using a mediation model despite no significant direct effects in certain situations, including testing known mediators and conceptual theories (O'Rourke & MacKinnon, 2018). Therefore, I conducted a mediation analysis despite no significant direct effects between religious practices and well-being. This approach is grounded in the understanding that spirituality, rather than religious practice, has been consistently linked to enhanced well-being. This nuanced examination aligns with prior research and reinforces the importance of examining indirect pathways to fully understand the dynamics between religious practices, relationship with God, and well-being.

It was notable that mindful salat was not associated with well-being; only the student's relationship with God exhibited a significant association. The distal relationship between religious practices and students' well-being can be understood through the lens of Islamic tradition, which posits that one's perception of and relationship with God can promote an individual's well-being (Mohamed, 2019). It might be that student's relationship with God may foster skills such as emotional regulation (Vishkin et al., 2016), gratitude (Göcen , 2016; Mohamed, 2019), and sense of purpose (Stroope et al., 2013) in student's, which are closely associated with well-being.

A positive relationship with God can foster student's emotional regulation, an important component of well-being. Cognitive reappraisal, a strategy for regulating emotions, involves altering the interpretation of emotional stimuli to manage responses more effectively (Vishkin et al., 2016). Dua, talking and asking God directly, is a potential way for individuals to use their relationship with God to cope by potentially utilizing cognitive reappraisal. Specifically, research has established a positive relationship between religious practices and cognitive reappraisal across Islam, Christianity, and Judaism with adults (Vishkin et al., 2016). Furthermore, children as young as 10 can successfully use cognitive reappraisal for emotional regulation (Nook et al., 2020). For the Muslim children in this sample, their relationship with God may assist them in reframing their challenges. They have the potential to view them as opportunities for growth and learning rather than obstacles through cognitive reappraisal. Their relationship with God might help them regulate their emotional responses to stressors, potentially promoting a more positive emotional state.

Moreover, student's relationship with God can foster a sense of gratitude in students, which is related to well-being. Islamic tradition emphasizes thanking God and reflecting on the blessings bestowed upon individuals. Such practices are not only spiritual but could contribute to well-being. The Yaqeen Institute for Islamic Research discusses these concepts extensively, highlighting the Quranic themes on gratitude (*shukr*), and describes it as a gift that is central to one's happiness (Desouky, 2023; Tahir, 2022). Nguyen and Gordon (2020) highlight that gratitude transcends age, significantly affecting the emotional well-being of children as young as five years old. Extending this understanding, Tian et al. (2015) examined gratitude's relationship with subjective well-being within an educational context. Their findings indicate a strong link between expressive gratitude and an enhanced sense of well-being in school environments for

children. The benefit of gratitude extends into pre-adolescence, a period marked by significant emotional and social development, such as the 6th-grade students in this sample. Froh et al. (2009) discovered that in pre-adolescents, gratitude positively related to life satisfaction and optimism. Furthermore, a longitudinal study by Froh et al. (2010) evidenced the long-term benefits of gratitude, suggesting that it may initiate a positive feedback loop, leading to greater emotional and social well-being among youth. Collectively, these studies underscore gratitude's multifaceted role in promoting well-being from childhood through adolescence. It is possible that students' relationship with God might be understood through student's expressing gratitude to God. In that case, this expression of gratitude may help explain the association between students' relationship with God and well-being.

Lastly, another compelling argument is that student's relationship with God provides them with a sense of purpose and meaning in life (Stroope et al., 2013), which is closely tied to life satisfaction (Culver, 2021). For example, adolescents with a clear purpose in life tend to experience more positive emotions and focus more on their goals than their counterparts with a less defined sense of purpose (Burrow et al., 2010). In Islam, teachings and practices underscore the importance of intention (*niyyah*) and the belief in one's actions as a part of a broader, divinely orchestrated plan (Akhtar, 2022). For Muslim students, their relationship with God can provide a sense of direction and significance to their daily activities and long-term goals. Therefore, a student's relationship with God might provide a means through which students develop their sense of purpose and meaning in life. This relationship may have an impact on student's overall well-being.

Summary. In conclusion, student's religious practice (i.e., salat prayer and dua) was associated with student's prosocial behaviors and well-being. Moreover, the relationship with

God demonstrated a mediating role for both well-being measures (i.e., happiness and satisfaction with life). The association between religious practice and prosocial behaviors highlights how salat prayer and dua may foster student's prosocial behaviors through community engagement. However, this relationship was not mediated by either spirituality variable (i.e., neither relationship with God nor mindful salat). This might be because student's communal engagement in salat prayer and dua could promote greater opportunity for engagement in social behaviors than the more interpersonal practices and mindsets of relationship with God and mindful salat.

Furthermore, the distal association between student religious practice and well-being through the mediation of relationship with God, underscores the more important role that relationship with God may play in nurturing student's happiness and satisfaction with life. Specifically, student's relationship with God may encourage student's emotional regulation skills, practice of gratitude, and sense of purpose which have been linked to greater well-being (Burrow et al., 2010; Culver, 2021; Froh et al., 2009, 2010; King & dela Rosa, 2019; Riepenhausen et al., 2022).

Considerations of the Context of the Participating School

The private Islamic school from which the sample was drawn provided a balance between academic rigor and religious instruction. This unique setting integrates pre-college academic preparation with Islamic education to cultivate well-rounded Muslim American children.

The student body's diversity, marked by a large number of immigrant students, adds complexity to the study, with half of the participants born outside the US. A closer look at demographics showed distinct ethnic variations between US-born and immigrant students. The

Burmese group had the most immigrants, whereas the Pakistani/Indian and Palestinian/Syrian groups were mainly US-born. This diversity, especially the differences between US-born and non-US-born students in various measures, suggests that acculturation may play a key role in academic and well-being outcomes, which are further discussed below.

In addition, unexpected findings emerged about classroom differences for class-wide dua, particularly in academic functioning, social behaviors, well-being, and spirituality. These findings may best be attributed to the methods employed in measuring and analyzing class-wide dua, the small sample size, unmeasured variables, or a combination thereof.

Considerations of Acculturation

The demographic makeup of the student body, characterized by significant immigrant diversity, introduced unique considerations. About half of the sample reported not being born in the US, underscoring the school's diverse cultural backdrop. Further investigation into the school's demographic revealed significant ethnic distribution differences between US-born and non-US-born students. Specifically, the Burmese cohort had the highest number of non-US-born individuals, while the Pakistani/Indian and Palestinian/Syrian groups predominantly consisted of US-born students. This is notable because significant differences were observed between individuals born outside of the United States and those born within the United States on several dependent measures. Interpreting these differences within the acculturation framework may be most appropriate, particularly concerning academic functioning and well-being.

Acculturation and Academic Functioning. In the preliminary analyses, significant differences were observed between US-born students and their non-US born peers academic functioning. Teachers rated US-born students' metacognition and academic engagement higher than their non-US-born peers. Additionally, US-born students self-reported greater academic

engagement than those born outside the US. Furthermore, US-born students also had higher GPAs than their non-US-born counterparts. However, these differences did not hold in the regression model after the other predictors were included.

Some studies have proposed the immigrant paradox hypothesis, suggesting that first-generation immigrant students outperform their peers more integrated into the host culture (Greenman, 2013). However, a recent meta-analysis contradicts this hypothesis, indicating that more acculturated students, such as second-generation immigrants, typically achieve higher academic success than their less acculturated, first-generation counterparts. This trend is particularly pronounced among children and adolescents (Sirin & Sin, 2023). Sirin and Sin (2023) identified several factors that more effectively explain this relationship. Specifically, they observed that acculturation, as measured by length of residence or language proficiency, is associated with improved academic performance, with language acculturation having the most significant impact (Sirin & Sin, 2023).

Additionally, Sirin and Sin (2023) noted an increase in academic performance as students' duration of residence in the country extended. The disparity in academic achievement between immigrant students and their peers born in the host country may be attributed to the cultural biases inherent in tests, which disadvantage those unfamiliar with the dominant culture (Sirin & Sin, 2023). This helps explain potential reasons for the findings, which revealed significant differences in academic functioning between US-born and their non-US-born counterparts.

Acculturation and Well-Being. US-born individuals reported higher levels of satisfaction with life than non-US-born individuals, even in the regression and mediation models, after other predictors were included. Similar studies have found that immigrant children and

adolescents tend to report lower levels of well-being (Guerra et al., 2019; Metzner et al., 2022). The integrative risk and resilience model for adapting immigrant-origin children and youth (Suarez-Orozco et al., 2018) provides a framework for understanding this disparity. At the individual level, developmental factors are considered (Suarez-Orozco et al., 2018); for instance, difficulties in peer relationships or belongingness may emerge among children who do not speak the language of the host country, potentially impacting their well-being (von Grunigen et al., 2010; Perez, 2011).

The integrative risk and resilience model proposed by Suárez-Orozco et al. (2018) not only accounts for the individual and developmental factors affecting immigrant children and youth but also situates their experiences within the larger political and social context of their reception, including the reasons for immigration and the degree of acceptance by the host country. Within this broader level, these factors can result in immigrants perceiving discrimination, which is a significant factor that can adversely affect the well-being of immigrants. This is supported by findings from Guerra et al. (2019) and Metzner et al. (2022), who have identified perceived discrimination linked to lower levels of well-being among immigrant populations.

Although this study did not delve into language proficiency and perceived discrimination, these factors offer potential explanations for the observed variance in life satisfaction. They are important for understanding the full scope of immigrant student's well-being. The impact of these factors extends beyond individual experiences, encompassing broader societal impacts on immigrant populations.

Classroom Differences

In evaluating classroom environments, a binary variable representing the presence or absence of class-wide dua practices revealed unexpected patterns. Due to its simplistic yes/no nature, this variable was not a comprehensive measure and was excluded from the final analysis. Contrary to the findings in this study associated with student's engagement in salat and dua, class-wide dua was significantly negatively related to academic functioning, prosocial behaviors, well-being, and spirituality. This discrepancy suggests that while individual religious practices appear to support these areas positively, the implementation of class-wide dua did not align with these trends and, thus, was not considered a reliable indicator within the context of this study. This may have been due to the type of measure utilized or the small sample size for the number of classrooms. Further investigation is needed to explore these divergent findings, employing a more nuanced approach to measuring class-wide religious practices within educational settings by considering the sample size and measurements used.

Qualitative Data

The final objective of this study was to explore students' motivations for engaging in salat prayer and the subjects of their duas. Students were prompted to explain in a sentence their reason for praying salat and the subject of their duas. Student's reported intrinsic and extrinsic motivations for engaging in salat prayer. Additionally, students reported making dua for others, themselves, and God.

Student Motivations for Salat Prayer

Students reported engaging in salat prayer for intrinsic and extrinsic motivating factors. They completed the sentence, "I pray salat prayer because...". Many students reported both intrinsic and extrinsic reasons, while other students reported one or the other.

Regarding intrinsic motivation, some students reported praying salat due to a desire to connect to Allah. Other students reported engaging in salat prayer because they had positive feelings, such as a sense of calmness. Furthermore, some students reported praying because of their love for Allah or the Prophet. On the other hand, extrinsic reasons were when students prayed due to an external motivation. Some students reported praying because of Divine command or their parent's/teachers' command. Other students prayed in order to achieve a reward or avoid something undesirable.

Research indicates a complex relationship between motivation types and student outcomes that evolves with age. In younger elementary school students, intrinsic and extrinsic motivations have been associated with positive educational outcomes, such as improved academic functioning (Lemos & Veríssimo, 2014). This suggests that at an early age, children benefit from both the internal satisfaction derived from learning and the external rewards or encouragements provided by parents, teachers, or the educational system. However, as students' progress to later elementary grades, the dynamics appear to shift. While intrinsic motivation supports positive outcomes, reliance on extrinsic motivation alone can begin to show potentially negative effects on students' outcomes (Lemos & Verissimo, 2014). Therefore, future research could prove insightful by examining whether the underlying motivations for students' engagement in salat prayer and dua have differing impacts on positive outcomes, mainly when analyzed through grade-level moderation.

Subjects of Student's Dua's

Students reported making dua for various reasons, from seeking academic success to thanking God. They completed the sentence, "I make dua for...". The responses were categorized into three groups, (1) dua for others, (2) dua for self, and (3) dua for Allah. These

insights complement our understanding of the previously established quantitative relationships between religious practices, spirituality, and student's academic functioning, social behaviors, and well-being.

Students engaged in dua for others, also known as intercessory prayer, with the subjects of their prayers varying widely. These included seeking forgiveness on behalf of others, praying for those in need, and general well-being. Students prayed not only for family and friends but also for strangers. The potential benefits of making dua for others may relate to prosocial behaviors, as the literature suggests a link between intercessory prayer and prosocial behaviors in adults (Greenway, 2020) and a broader connection between prayer and positive social behaviors in adolescents (Jeynes, 2020).

The qualitative evidence suggests that students engaged in dua for various personal reasons, including seeking academic success. This behavior underscores the previously established association between religious practices and student academic engagement. Consequently, it supports the prior suggestion that dua may cultivate an internal locus of control as students set personal academic goals (Froiland, 2021).

In their sentences, students articulated the use of dua not only for academic purposes but also as a means of seeking forgiveness and engaging in dialogue with Allah. This qualitative dimension offers a nuanced view of how this religious practice may serve as emerging emotional regulation strategies. These personal accounts align with quantitative findings that underscore the positive association between a strong relationship with God and greater well-being. Specifically, previously I suggested that this relationship might be understood as the emotional regulation benefits of student's relationship with God. Specifically, it could be that the children in this

sample use their time to talk to God to help them reframe and process their challenges, which can help them engage in coping skills.

Students also made dua in order to thank Allah. This qualitative insight into students' gratitude practice through dua provides an understanding of the previously established quantitative association that student's relationship with God was strongly related to students' well-being. This suggests that students with high well-being may be engaging in gratitude through their dua, and these regular expressions of gratitude may relate to their well-being (Göcen, 2016).

Implications for Practice

In this section, I will explore the implications of the significant associations identified between Muslim students' engagement in religious practices and their relationship with God, and their academic, social, and well-being outcomes. These findings are particularly meaningful considering that Muslim students represent a marginalized group within the US educational landscape. By highlighting how these students draw strength from their religious practices, this study underscores the empowering potential of marginalized identities. It challenges prevailing narratives that often view such identities primarily through a lens of deficit and adversity. Instead, I suggest that religious engagement be positioned not just as a personal spiritual practice, but as a pivotal source of strength in cultivating Muslim students' functioning.

The present findings highlight significant associations between Muslim children's engagement in religious practices (i.e., salat prayer and dua) and their academic engagement and social behaviors. Furthermore, this study found significant associations for the indirect effect of student's engagement in salat prayer and dua and their academic engagement and well-being, though their relationship with God. These insights offer valuable opportunities for Islamic

elementary schools in the US to tailor educational programs that enhance academic excellence and foster their students' holistic development.

The findings of this study suggest a positive, robust association between student religious practice and academic engagement among Muslim students, as reported by both students and teachers. This relationship highlights the benefit of religious practices within Islamic elementary schools. In light of these results, it is recommended that Islamic schools encourage discussions about the value and significance of these practices in religious development and academic functioning. Teachers can do this by helping students understand how to integrate dua into their goal-setting processes and academic endeavors. Educators might consider workshops or sessions focused on goal-setting within an Islamic framework, where dua is a central component. Furthermore, considering the mediating role of relationship with God, Islamic schools may consider nurturing this positive relationship to encourage students to develop a proactive attitude towards their education. It is important to note, however, that while these findings are promising, they are context-specific and should be applied considering the unique dynamics and needs of each educational setting, for example the results might not be generalized to Muslim children attending non-religious schools. Further research is encouraged to explore how these practices influence academic engagement for Muslim students in public schools.

The findings of this study underscore the significant association that student religious practices play in fostering prosocial behaviors among Muslim students. For Islamic schools, this relationship suggests a compelling approach to nurturing prosocial behaviors by integrating these religious practices into evidence-based educational interventions. By embedding salat prayer and dua within Social and Emotional Learning (SEL) programs (Durlak et al., 2022), Positive Behavioral Interventions and Supports (PBIS) (Lee & Gage, 2020), or character education

(Jeynes, 2019), schools can offer students a holistic framework that not only aligns with Islamic virtues but also promotes a comprehensive development of ethical and prosocial conduct. For example, in the context of SEL programs, teachers can intentionally discuss the social aspects of these religious practices such as the Islamic tradition of goodwill. They can set aside time to discuss with students the communal aspects of salat prayer, such as praying in a group and the sense of community (*Ummah*) it fosters and how to integrate Islamic prosocial practices with peers.

In public school settings, schools and teachers can provide the space and time for their Muslim students to engage in their religious practices during school hours. This can be working with their Muslim students' and families in devising scheduled breaks throughout the day for student's to be able to engage in these practices while also making sure not to interfere with important classroom activities.

Lastly, an indirect effect of salat prayer and dua on both well-being measures (i.e., happiness and satisfaction with life) through relationship with God was significant. Recognizing the importance of God in the lives of their students, Islamic schools can integrate teachings about God that enrich the students' spiritual understanding and supports their overall well-being. The significant association between students' relationship with God and greater well-being in this study, may be partly attributed to using dua to express gratitude to God. This practice of thankfulness was reflected in some of the qualitative responses collected. Islamic school teachers might utilize gratitude-based interventions that are effective with younger children, such as the benefit-appraisal curriculum (Froh et al., 2014), and integrate it with dua to support students as young as eight years old utilize dua to foster a sense of gratitude. This curriculum trains students' for recognizing and appreciating help or benefits from others, leading to increased gratitude and

therefore increased subjective well-being (Froh et al., 2014). As a result, integrating dua with evidence-based gratitude interventions could be a helpful strategy in nurturing a grateful disposition among Muslim students as young as eight, in order to contribute to their well-being.

Currently, Muslims are a racially and ethnically diverse group in the US, with about three-quarters of Muslims either identifying as immigrants or whose parents are immigrants (Pew Research Center, 2017). Muslim schools may have a large population of immigrant students, and considerations should be made for these students' unique backgrounds. This may include providing them with additional English language learning support and social support (Adelman & Taylor, 2015) to help support their academic functioning and well-being.

Limitations

One significant limitation of the current study was the single school study design. This means that my ability to generalize these results is limited to the specific context of private Islamic elementary schools. With its unique sociocultural and religious environment, this setting may influence engagement in religious practices and their associations with academic and personal development in ways not fully representative of other school contexts. Thus, the findings of this study are primarily applicable to similar environments which limits their generalizability to broader populations.

Furthermore, the small sample size is notable. For the mediation models, the PROCESS Macro by Hayes (2023) was used, which utilized bias-correct bootstrap techniques. According to Fritz and MacKinnon (2007), around 150 participants are needed to achieve an 80% power for detecting indirect effects of .26 (Fritz and MacKinnon, 2007). However, this study gathered 103 participants, falling short of the ideal number for the mediation analysis, but sufficient for linear

regression analyses. This means that the results of the mediation analyses, specifically the mediating role of relationship with God, should be interpreted with caution.

Moreover, the data collected was cross-sectional. Since data was gathered at a single time point, it is not possible to establish causality between the variables examined. Additionally, the response rate for the study posed another limitation; the overall consent rate was approximately 40-50% per classroom. This limits the generalizability of the findings.

Regarding the supplemental, exploratory, and qualitative data, the inter-reliability was not as high as the researchers would have preferred. During the coding process, the primary researcher and a research assistant engaged in discussion to resolve the discrepancies and reach a consensus on coding disagreements. The data were coded, and the inter-rater reliability was .73. This agreement, while lower than anticipated, is considered by some researchers to represent good agreement, for example according to Landis and Koch (1977). Nonetheless, it is recommended that future studies achieve higher levels of inter-rater coder reliability to ensure greater confidence in the consistency of data coding.

In addition, the study faced limitations regarding the reliability of one measure and validation of two measures. Notably, the measure assessing the relationship with God (Sifers et al., 2012) demonstrated low reliability, suggesting a need for further refinement for Muslim children and caution for interpreting the associations with this measure. While other measures exhibited acceptable reliability, they were researcher-created and have not undergone extensive validation. These include the student engagement in salat prayer and dua measure and the mindful salat measure. The preliminary nature of these measures indicates that further validation testing is required.

Moreover, the study did not account for several covariates that could have significantly influenced the outcomes. Specifically, factors such as socioeconomic status (SES; Letourneau et al., 2013), the percentage of English Language Learner (ELL) students (von Grunigen et al., 2010; Perez, 2011), and parent religiosity (e.g., Bornstein et al., 2017), were not measured. While I attempted to include these measures, these variables were not included due to feasibility constraints. One challenge I encountered was the consideration of SES. Several attempts were made to acquire proxy data for this measure including student's financial scholarship status. However, the criterion for receiving funding to attend private schools in the respective state of the school has seen a significant increase. Therefore, the measure of students attending on a financial scholarship based on household income would not have been a reliable indicator of SES. Additionally, free lunch is provided to all student's, irrespective of their SES. Moreover, the school reported that they did not easily possess access to any proxy measures for student's SES. Regarding students who are English Language Learners, the school was unable to provide specific information. Similarly, attempts to measure parental religiosity was halted based on feedback by the school, as it was anticipated that obtaining responses to questionnaires on this subject would be challenging, as parents were likely to be hesitant to disclose personal beliefs. Additionally, some parents did not speak English and translation services were not utilized due to the expense and time. The influence of such unmeasured covariates could provide more comprehensive understanding of the associations observed in the study. Therefore, I suggest that future research should incorporate these factors to provide a more holistic understanding of the questions under investigation.

Future Directions

There are several areas of recommended exploration for future research. Specifically, it is recommended that future research explore Muslim student's religious practices (i.e., salat prayer and dua) and associations with academic functioning, social behaviors, and well-being in public school settings. Examining whether these same relationships exist for Muslim students that are not immersed in an Islamic school setting would be helpful in recognizing the value and potential benefit of these religious practice across a broader context. Moreover, future research should try to include measures such as socioeconomic status (SES; Letourneau et al., 2013), percentage of English Language Learner (ELL) students (von Grunigen et al., 2010; Perez, 2011), and parent religiosity (e.g., Bornstein et al., 2017). These factors will be helpful in disentangling the complex interplay between individual, family, and social influences on the associations between children's religious practices and academic, social, and well-being outcomes.

Additionally, further research can prioritize the development of a reliable and religiously sensitive measure for assessing the relationship with God among American Muslim children. This would address the limitation encountered with the measure used in this study, which demonstrated low reliability. Recognizing the unique Islamic construct of relationship with God, a more nuanced tool will be helpful in capturing the depth and breadth of student's relationship with God. In addition, while the measure for religious practices (i.e., student engagement in salat prayer and dua) and the mindful salat measure demonstrated acceptable reliability, they still require further testing and refinement. Validation of these measures with a larger and more diverse Muslim American children sample is important to establish their accuracy in assessing the impact of these practices on various aspects of students' development and functioning.

Furthermore, it is recommended that future research explore intrinsic and extrinsic motivations in students' religious engagement, in-depth qualitative exploration of the subjects of their duas, and development of intervention programs.

Future research should explore the distinction between intrinsic and extrinsic motivation in students' engagement with salat prayer and dua. Understanding how these differing motivations influence outcomes can offer deeper insights into how religious practices support children's development, especially over time. This is particularly relevant given that upper elementary school students benefit less from extrinsic motivation (Lemos & Veríssimo, 2014). Investigating the nuanced effects of motivation on religious engagement could uncover important mechanisms that facilitate or hinder the developmental benefits of such practices. A moderated mediation analysis might be particularly useful in this context, exploring how different types of motivation interact with other variables to influence outcomes, thus providing a more comprehensive understanding of Muslim school children's religious practices and outcomes.

Another promising direction for future research is examining the content of students' dua more comprehensively. Investigating whether prayers focus on self, others, or Allah and how this focus moderates the associated outcomes could offer a nuanced understanding of the spiritual lives of Muslim children. This exploration could reveal significant implications for academic functioning, social behavior, and well-being. Such studies could illuminate the complex interplay between the content of religious practices and developmental outcomes, offering valuable insights for educators and parents of Muslim children.

Lastly, based on the current study's findings, there is a clear opportunity for intervention studies incorporating Islamic practices into the educational curriculum to enhance students'

academic functioning, social behaviors, and well-being. Designing and testing such interventions could validate the current study's findings and offer practical strategies for educators in Islamic schools. These intervention studies could integrate practices of salat prayer and dua intentionally to promote students' academic engagement and prosocial behaviors, or students' perception of God to foster their well-being. Further research in this area would be helpful in demonstrating the tangible benefits of integrating religious practices into educational settings, potentially leading to the development of evidence-based practices that support Muslim children's holistic development in Islamic educational contexts.

Conclusion

In this study, I demonstrated the ways religious practices and the relationship with God plays a role in Muslim children's academic functioning, social behaviors, and well-being in a private Islamic school in the US. One of the main findings concerns the association between students' religious practices and academic engagement. This association remained significant even after considering metacognitive abilities and is consistently reported by teachers and students. The structured and consistent practice of salat prayer may potentially help students develop academic skills such as time management, consistency, and attention. Moreover, the unstructured and more personal practice of dua likely plays a role in student's academic engagement by encouraging internal goal setting. Although religious practices and spirituality were not directly related to GPA, the overriding influence of metacognition highlights the importance of self-awareness and strategic thinking in academic achievement.

In terms of social behaviors, the study underscores a significant association between religious practices and prosocial behaviors, as reported by teachers. This association can potentially be understood through how communal religious practices contribute to a nurturing environment

conducive to developing prosocial behaviors. The communal nature of these practices, an important daily part of this Islamic educational setting, might foster virtues of general goodwill, which are central to Islamic teachings and daily life applications (Anjum, 2022; Parrott 2017, 2018). Additionally, student's relationship with God was associated to student's well-being. Specifically, the indirect relationship of student's religious practices was distally associated to student's well-being, through the mediation of student's relationship with God. This association demonstrates the benefits of a positive perception of God in Islamic tradition. We may understand students' relationship with God as fostering students' ability to develop emotional regulation skills, gratitude, and a sense of purpose in life, all constructs that have been found to be related to well-being (Burrow et al., 2010; Culver, 2021; Froh et al., 2009, 2010; King & dela Rosa, 2019; Riepenhausen et al., 2022).

Furthermore, through supplemental qualitative responses, students reported both intrinsic and extrinsic reasons for engaging in salat prayer. Intrinsic reasons included seeking a connection to God, talking to God, emotional/psychological benefits, and love for God and the Prophet. Extrinsic reasons included perceiving salat prayer as a Divine command, a desire for a reward, and social/environmental influences. Moreover, they reported making dua for others, for themselves, and for God.

In conclusion, this exploratory study offers initial insights into the associations between religious practices, students' relationship with God, and Muslim student's academic functioning, social behaviors, and well-being. These associations offer potential pathways through which religious practices and spirituality may play a role in Muslim American children's functioning. Although these findings were significant, there is still further investigation needed to understand the depth and breadth of these relationships. I hope that these preliminary associations will

encourage further dialogue and research in the field. Specifically, I hope that Islamic schools will consider how they can intentionally integrate religious and spiritual practices and beliefs within educational practices in order to benefit their students' holistic development. For example, Islamic teachers can instruct students on how to make dua to establish an academic goal and then support them in developing steps to achieve that goal. Furthermore, teachers can implement intentional programming during the time allocated for salat prayer to promote specific prosocial behaviors. Therefore, I modestly propose that Islamic psychology researchers and Islamic educators view these findings as a starting point for deeper exploration into how religious practices and spirituality could influence Muslim children's lives, with the aspiration that future work will build upon these initial insights to develop more comprehensive understandings and practical applications.

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Appendix A

Principal recruitment: Timeline and brief description of proposal

Brief Summary of Research Activities

1. **Who:** 4th, 5th, and 6th grade children and their classroom teachers.
2. **What:** children will complete questionnaires on parent religiosity (e.g., parent engagement in religious/spiritual practices at home); children’s own religious/spiritual practices and beliefs (e.g., prayer, dua); motivation/engagement; happiness. Classroom teachers will complete questionnaires on their background information (e.g., religious background); religious/spiritual practices/beliefs; rating of their students’ prosocial behaviors. **School Data:** children demographic information (gender, grade, age, race/ethnicity)
3. **Recruitment:** UWM researchers will meet with the principal and teachers to discuss recruitment in the classrooms via consent home for students to take home to their parents.
4. **When and Where:** Researchers from UWM will visit classrooms at a mutually agreed time. Researchers will administer the child questionnaire, and teachers can complete theirs at their convenient time. Estimated time is approximately 1 hour for child questionnaire and 1 hour for teachers.
5. **Compensation:** Children will receive a small stationary gift (e.g., pencils, notebook) and teachers will receive \$20 for completing questionnaires for participating children.

Timeline

2nd and 3rd week of March	1st and 2nd week of April	Following school year
<ul style="list-style-type: none"> Consent forms for student participation will be sent out to 4th, 5th, and 6th grade classrooms. 	<ul style="list-style-type: none"> Administration of the student survey (approx. 1 hour) and teacher surveys (approx. 1 hour). Gathering of student information (i.e., attendance, free/reduced lunch status, ELL status, and academic performance). 	<ul style="list-style-type: none"> Presentation of results or distribution of results document to teachers.

Research Proposal

Purpose

The purpose of this study is to examine the role of Islamic spiritual belief, spiritual practice, and religious practices on student academic achievement, prosocial behaviors, and happiness. It will explore the following objectives:

Objective 1: Examination of the link between student engagement in Islamic religious practices (i.e., salat prayer and dua) and student outcomes after accounting for student-level differences.

Objective 2. Examination of whether students' engagement in mindful salat (i.e., khushoo) and/or their relationship with God mediates the link between Islamic religious practices (i.e., salat prayer and dua) and student outcomes of academic functioning (i.e., academic achievement and academic engagement), prosocial behaviors, and happiness.

Results from this study will assist school personnel in understanding how religious and spiritual factors, such as dua and prayer, influence Muslim students' academic, behavioral, and emotional functioning.

Participants

The participants will include up to 150 students that are enrolled in a private Islamic elementary school. Students from grades fourth, fifth, and sixth (50% female; 8-12 years of age) and their teachers will participate in this study. I will recruit participants by sending home letters to parents to gather consent for students.

Procedures

This study will be submitted for approval by the University's Institutional Review Board (IRB) prior to data collection. It will be an original data collection project which will occur in the April of 2023. The data collection will occur in late spring to ensure students spend sufficient time with their teachers to achieve reliable ratings of student prosocial behavior. Teachers will be informed of the study through a meeting and a consent form. In addition, parents will be informed of the study through a letter and consent form sent home by the teacher. Students with parent permission to participate will complete the survey, and students without permission will not complete the survey. I and my research assistants will be present in the classroom and administer the survey by reading aloud each item to account for reading differences. In addition, my presence in the classroom during the survey means I can answer any clarifying questions and confirm that students answer all items. The estimated total time of completion for the student survey is to be a maximum of one hour.

Teachers for the participating classrooms will complete the teacher report on student prosocial behaviors and the items relating to the teacher's religious background. They will be provided with a packet with a list of the participating students, along with the number of necessary surveys for them to complete per student. The estimated total time commitment for the teacher survey is a maximum of one hour.

Appendix B

Teacher recruitment

Dear [teacher],

My name is Isha Hammad, and I am a doctoral student at UWM in the Educational Psychology program. You have likely already been informed of my study on religiosity and spirituality in your school by your principal. As part of this study, I will be visiting your classrooms and speaking to your students about the research project for a brief period of 5-10 minutes during one of your class periods. I will also be providing consent forms to your students, which they can take home to share with their parents and return with a signature. As a token of appreciation, students will receive a small gift as compensation for their participation in the study.

Additionally, as part of the study, we will be asking you to report on your religious background, religious engagement in the classroom, your students' prosocial behaviors, and academic engagement. To compensate for your time, you will receive a \$20 gift card.

The survey will take 45 minutes to 1 hour for students to complete and one hour for teachers to complete. If you have any questions prior to my visit, please do not hesitate to contact me: hammad@uwm.edu or 414-207-4198. I am happy to arrange a meeting or answer any questions via email.

I am excited to collaborate with your school on this important study, and I plan to return in a year to share the data in a way that is applicable and helpful to enhance your understanding of your students' religiosity and spirituality in the classroom.

Thank you for your cooperation and support.

Best,

Isha Hammad

Appendix C

Consent form for teachers



Informed Consent for Research Participation

IRB #: 23.186

IRB Approval Date: March, 15, 2023

Study title	Muslim Children’s Engagement in Religion and Spirituality and Associations with Academic Functioning, Prosocial Behaviors, and Happiness
Researchers	Isha Hammad, MS; Kyongboon Kwon, PhD

We study school psychology at the University of Wisconsin-Milwaukee and we’re inviting you to participate in a research study.

What is the purpose of this study?

We want to understand how religion and spirituality are linked to Muslim students' academic functioning, prosocial behaviors, and happiness.

What will I do?

You will answer some questions about yourself and your students in a survey at your school on your laptop. The total time for survey completion will be about 45 minutes to an hour. The questions will ask about:

- Your religious background
- Your engagement in class-wide dua
- Your students’ prosocial behaviors
- Your students’ academic engagement
- Your students’ meta-cognitive abilities

Risks

Possible risks	How we’re minimizing these risks
Some questions may be personal	You can skip the first question that asks about your religious background.

There may be risks we don’t know about yet. Throughout the study, we’ll tell you if we learn anything that might affect your decision to participate.

Other Study Information

Possible benefits	Your participation will help us understand how students’ engagement in religious and spiritual practices are linked to their academic functioning, prosocial behaviors, and happiness
Estimated number of participants	11 teachers and 252 students
How long will it take?	45 minutes to 1 hour
Costs	None
Compensation	20\$ Amazon gift card
Future research	De-identified data might be used for future research

Data Security

What identifying information will be collected and why?	The data will be aggregated and used to make group-level comparisons
How long will my data be kept?	Your data will be kept for up to five years from time of collection

How is data kept secure?	<ul style="list-style-type: none"> • All identifying information is removed and replaced with a study ID • We'll store all electronic data on a password-protected, encrypted computer and UWM OneDrive • We'll store any paper data (i.e., consent forms) in a locked filing cabinet in a locked office • We'll keep your identifying information separate from your research data, but we'll be able to link it to you by using a study ID. We will destroy this link after we de-identify the data • As with any data collected online, there is always a risk of data being hacked or intercepted. We're using a secure system to collect this data, but we can't completely eliminate this risk
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Who might see my data and why?

The researchers	To conduct the study and analyze the data
The IRB (Institutional Review Board) at UWM The Office for Human Research Protections (OHRP) or other federal agencies	To ensure we're following laws and ethical guidelines

Mandated Reporting

We are mandated reporters. This means that if we learn or suspect that a child is being abused or neglected, we're required to report this to the authorities.

Contact information:

For questions about the research, problems, or complaints	Isha Hammad Or Kyongboon Kwon	414-207-4198; hammadi@uwm.edu 414-251-8029; kwonk@uwm.edu
For questions about your rights as a research participant, problems, or complaints	IRB (Institutional Review Board; provides ethics oversight)	414-662-3544; irbinfo@uwm.edu

Signatures

If you have had all your questions answered and would like to participate in this study, sign on the lines below. Remember, your participation is completely voluntary, and you're free to withdraw from the study at any time.

Name of Participant (print)

Signature of Participant

Date

Appendix D

Consent form for parents



Parental Permission for Research Participation

IRB #: 23.186

IRB Approval Date: March 15, 2023

Study title	Muslim Children’s Engagement in Religion and Spirituality and Associations with Academic Functioning, Prosocial Behaviors, and Happiness
Researcher	Isha Hammad, MS; Kyongboon Kwon, PhD

We study school psychology at the University of Wisconsin-Milwaukee and we’re inviting your child to participate in a research study. Participation is completely voluntary. If you agree to let your child participate now, you can always change your mind later. There are no negative consequences, whatever you decide. Your decision won’t affect your relationship with your child’s teachers or school in any way.

What is the purpose of this study?

We want to understand how religion and spirituality are linked to Muslim students’ academic functioning, prosocial behaviors, and happiness.

What will my child do?

Your child will answer some questions about themselves in a survey at their school on their Chromebook. Researchers from UWM will visit your child’s classroom and read aloud the questions as your child completes the survey on their Chromebook. The total time for survey completion will be about 45 minutes. The questions will ask about:

- Child’s religious and spiritual practices and beliefs
- Child’s perception of their parents religious and spiritual practices and beliefs
- Child’s academic engagement
- Child’s happiness
- Whether your child was born in the United States

In addition, data will be collected from the school database regarding your child’s demographic information (i.e., gender, age, race/ethnicity, English Language Learner status, free/reduced lunch status), attendance, and academic performance.

Risks

Possible risks	How we’re minimizing these risks
Some questions may be personal	Your child can skip any questions they don’t want to answer

There may be risks we don’t know about yet. Throughout the study, we’ll tell you if we learn anything that might affect your decision to let your child participate.

Other Study Information

Possible benefits	Your child’s participation will help us understand how students’ engagement in religious and spiritual practices are linked to their academic functioning, prosocial behaviors, and happiness
Estimated number of participants	11 teachers and 252 students
How long will it take?	45 minutes
Costs	None
Compensation	Stationary items (e.g., pencil, notebook)
If I don’t want my child to be in this study, are there other options?	Instead of participating, your child can complete an alternative activity at their desk quietly while their peers complete the survey
Future research	De-identified data might be used for future research

Data Security

What identifying information will be collected and why?	We will collect your child’s gender, age, and race/ethnicity. The data will be aggregated and used to make group-level comparisons (e.g., gender differences).
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How long will my child’s data be kept?	Your child’s data will be kept for up to five years from time of collection.
How is data kept secure?	<ul style="list-style-type: none"> • All identifying information is removed and replaced with a study ID • We’ll store all electronic data on a password-protected, encrypted computer and UWM OneDrive • We’ll store any paper data (i.e., consent forms) in a locked filing cabinet in a locked office • We’ll keep your identifying information separate from your research data, but we’ll be able to link it to you by using a study ID. We will destroy this link after we de-identify the data • As with any data collected online, there is always a risk of data being hacked or intercepted. We’re using a secure system to collect this data, but we can’t completely eliminate this risk

Who might see my data and why?

The researchers	To conduct the study and analyze the data
The IRB (Institutional Review Board) at UWM The Office for Human Research Protections (OHRP) or other federal agencies	To ensure we’re following laws and ethical guidelines

Mandated Reporting

We are mandated reporters. This means that if we learn or suspect that a child is being abused or neglected, we’re required to report this to the authorities.

Contact information:

For questions about the research, problems, or complaints	Isha Hammad Or Kyongboon Kwon	414-207-4198; hammad@uwm.edu 414-251-8029; kwonk@uwm.edu
For questions about your child’s rights as a research participant, problems, or complaints	IRB (Institutional Review Board; provides ethics oversight)	414-662-3544; irbinfo@uwm.edu

Signatures

If you have had all your questions answered and give permission for your child to participate in this study, sign on the lines below. Remember, your child’s participation is completely voluntary, and you’re free to remove them from the study at any time.

Name of Child (print)

Name of Parent or Guardian (print)

Signature of Parent or Guardian

Date

Appendix E

Assent form for students



Informed Consent for Research Participation
IRB #: 23.186
IRB Approval Date: March 15, 2023

Study title	Muslim Children’s Engagement in Religion and Spirituality and Associations with Academic Functioning, Prosocial Behaviors, and Happiness
Researcher	Isha Hammad, MS; Kyongboon Kwon, PhD

We’re inviting you to participate in a research study! A research study is a way to learn new things. We are trying to learn more about how religion and spirituality are related to how well students do in school, how much they help other people and make them feel good, and students’ happiness. We will ask you some questions about your parents and yourself. Your answers will help us understand how we can make things better for you and your classmates.

You will not have to worry about telling us what you think we want to hear – we really want to know how you really think and feel. The best part is that it's all private. Your classmates, teachers, or parents will not know how you respond. So, you can be completely honest.

If you agree to be in the study, we will ask you to complete a survey on your Chromebook. I will read the questions aloud so that we do the survey together with others who will be in the study. The survey will take about 45 minutes and the following types of questions will be in the survey.

- Your religious and spiritual practices and beliefs
- Your perception of your parent’s religious and spiritual practices and beliefs
- Your academic engagement
- Your happiness

A risk is something bad that could happen to you. Being in this study might have some risk. Some of the things we ask could be personal questions you do not want to answer. You don’t have answer any questions you don’t want to. You may also talk to your teacher or other adults in the school to discuss your feelings.

A benefit is something good that happens. Being in this study won’t have direct benefits for you, but the findings could help other kids someday.

It’s up to you whether or not you want to be in the study. If you say yes now, but change your mind later, that’s okay too. No one will be mad, no matter what you decide.

Your answer are private. You may discuss the survey with your parents and/or teachers, but please do NOT talk to your classmates about the survey. We will not tell your parents or teachers about your answers.

When we are finished with this study, we will write a report about what we learned. This report won’t have your name in it, or that you were in the study.

Signatures

If you decide you want to be in this study, write your name on the line below.

Name of Participant

Date

Appendix F

Student survey and self-report measures

Student Survey: Muslim Children's Engagement in Religion and Spirituality

Name Your first and last name:

Grade What is your grade level? (select one):

1. 4th Grade
 2. 5th Grade
 3. 6th Grade
-

Your homeroom

4. 4A
 5. 4B
 6. 4C
 7. 4D
-

Your homeroom

8. 5A
 9. 5B
 10. 5C
-

Your homeroom

11. 6A
 12. 6B
 13. 6C
 14. 6D
-

Page Break

Were you born in the United States?

- 15. Yes
- 16. No
- 17. Unsure

End of Block: Demographic Information

Start of Block: Religious Practices and Beliefs Scale

How often do you pray or meditate privately outside of church or other places of worship?

- 18. Never
 - 19. Rarely
 - 20. Sometimes
 - 21. Often
 - 22. Very Often
-

I read religious or spiritual books or magazines.

- 23. Never
 - 24. Rarely
 - 25. Sometimes
 - 26. Often
 - 27. Very Often
-

How often do you go to a place of worship such as a church?

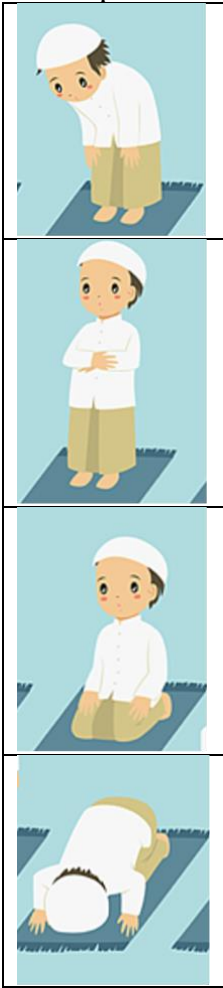
- 28. Never
- 29. Rarely
- 30. Sometimes
- 31. Often
- 32. Very Often

End of Block: Religious Practices and Beliefs Scale

Start of Block: Student Engagement in Salat Prayer and Dua

Salat is a prayer that all Muslims try their best to do every day. During salat, you recite Quran that you have memorized, and you follow the same steps every time. Sometimes you pray at school with your classmates, and other times you pray salat at the mosque with other people, and sometimes you pray salat at home by yourself or with your family.

Put the pictures in the correct order of salat prayer.



Page Break

Salat is a prayer that all Muslims try their best to do every day. During salat, you recite Quran that you have memorized, and you follow the same steps every time. Sometimes you pray at school with your classmates, and other times you pray salat at the mosque with other people, and sometimes you pray salat at home by yourself or with your family.

Salat looks like this:



In the past week, how often did you pray salat prayer at home, on your own?

- 33. Never during the week
- 34. 1 or 2 times during the week
- 35. 3 or 4 times during the week
- 36. 5 or 6 times during the week
- 37. Every day during the week

In the past week, how often did you pray salat prayer at home, without being reminded?

- 38. Never during the week
- 39. 1 or 2 times during the week
- 40. 3 or 4 times during the week
- 41. 5 or 6 times during the week
- 42. Every day during the week

Page Break

Dua is when we talk to Allah. Dua can be asking Allah questions, thanking Allah, or asking Allah for things. When we ask Allah for things, we can ask Allah for things to happen for ourselves or for other people. You can make Dua by thinking about it or by saying it out loud. You can make Dua at any time of the day.



In the past week, how often did you make dua on your own, without being reminded?

- 43. Never during the week
- 44. 1 or 2 times during the week
- 45. 3 or 4 times during the week
- 46. 5 or 6 times during the week
- 47. Every day during the week

In the past week, how often did you make dua at school, on your own, without being reminded?

- 48. Never during the week
- 49. 1 or 2 times during the week
- 50. 3 or 4 times during the week
- 51. 5 or 6 times during the week
- 52. Every day during the week

In the past week, how often do you make dua at home, on your own, without being reminded?

- 53. Never during the week
- 54. 1 or 2 times during the week
- 55. 3 or 4 times during the week
- 56. 5 or 6 times during the week
- 57. Every day during the week

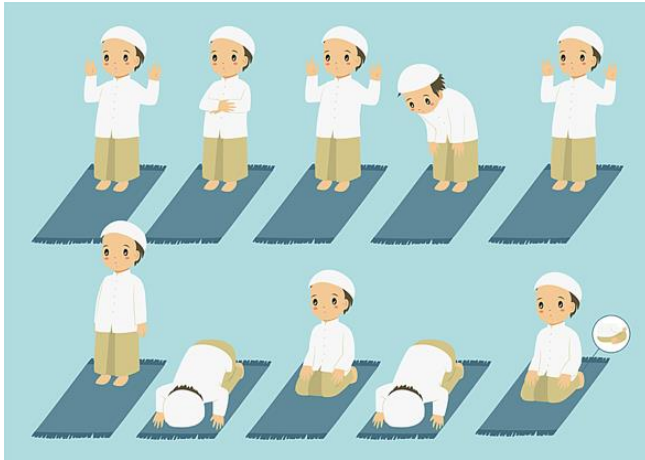
End of Block: Student Engagement in Salat Prayer and Dua

Start of Block: Mindful Salat

Page Break

Salat is a prayer that all Muslims try their best to do every day. During salat, you recite Quran that you have memorized, and you follow the same steps every time. Sometimes you pray at school with your classmates, and other times you pray salat at the mosque with other people, and sometimes you pray salat at home by yourself or with your family.

Salat looks like this:



How focused are you during salat prayer?

- 58. Never
- 59. Sometimes
- 60. Often
- 61. Almost Always

How often do you pay attention during salat prayer?

- 62. Never
- 63. Sometimes
- 64. Often
- 65. Almost Always

How often do you think about the words you recite during prayer?

- 66. Never
- 67. Sometimes
- 68. Often
- 69. Almost Always

End of Block: Mindful Salat

Start of Block: Children's Perception of Parents' Religious Practices

A family is a group of people who take care of each other. Usually, a grown-up called a parent or guardian takes care of you. Some families have only one parent or guardian, while others have two. But some families have more than two parents. This can happen when parents get divorced and re-married. So, a person can have more than two parents, like three or more.

When I ask about your parents or parent, I mean the grown-up or grown-ups who take care of you. This could be one person like your mom or your dad, or any other adult who looks after you or it can be more than one person like two or more parents.

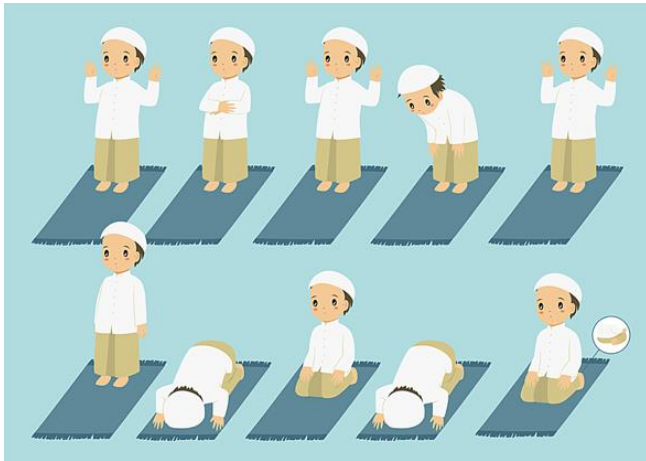
Are any of your parents Muslim?

- 70. None of my parents
- 71. One parent
- 72. Two parents
- 73. More than two parents

Page Break

Salat is a prayer that all Muslims try their best to do every day. During salat, you recite Quran that you have memorized, and you follow the same steps every time. Sometimes you pray at school with your classmates, and other times you pray salat at the mosque with other people, and sometimes you pray salat at home by yourself or with your family.

Salat looks like this:



Now, I want you to think about one parent that you are closest to. It can be your mom, your dad, or another adult who takes care of you. When you answer these questions, think about that one parent. If your parent has reminded you to pray salat prayer before going to bed, think about how many times they reminded you in the past week.

In the past week, I saw my parent pray at home:

- 74. Never during the week
- 75. 1 or 2 times during the week
- 76. 3 or 4 times during the week
- 77. 5 or 6 times during the week
- 78. Every day during the week

In the past week, my parent asked me to pray at home:

- 79. Never during the week
- 80. 1 or 2 times during the week
- 81. 3 or 4 times during the week
- 82. 5 or 6 times during the week
- 83. Every day during the week

Page Break

Dua means talking to Allah. We can talk to Allah by asking questions, saying thank you, or asking for help. We can ask Allah to help ourselves or other people. We can make Dua by thinking about it or saying it out loud, anytime we want.



I want you to think about one parent that you are closest to. It can be your mom, your dad, or another adult who takes care of you. When you answer these questions, think about that one parent. If your parent has reminded you to make dua before going to bed, think about how many times they reminded you in the past week.

In the past week, my parent asked me to make dua at home:

- 84. Never during the week
 - 85. 1 or 2 times during the week
 - 86. 3 or 4 times during the week
 - 87. 5 or 6 times during the week
 - 88. Every day during the week
-

In the past week, I saw my parent ask Allah for help at home:

- 89. Never during the week
 - 90. 1 or 2 times during the week
 - 91. 3 or 4 times during the week
 - 92. 5 or 6 times during the week
 - 93. Every day during the week
-

In the past week, my parent told me to ask Allah for help at home:

- 94. Never during the week
 - 95. 1 or 2 times during the week
 - 96. 3 or 4 times during the week
 - 97. 5 or 6 times during the week
 - 98. Every day during the week
-

In the past week, I saw my parent thank Allah at home:

- 99. Never during the week
 - 100. 1 or 2 times during the week
 - 101. 3 or 4 times during the week
 - 102. 5 or 6 times during the week
 - 103. Every day during the week
-

In the past week, my parent told me to thank Allah at home:

- 104. Never during the week
- 105. 1 or 2 times during the week
- 106. 3 or 4 times during the week
- 107. 5 or 6 times during the week
- 108. Every day during the week

End of Block: Children's Perception of Parents' Religious Practices

Start of Block: Relationship with God Subscale

Page Break

How sure are you that Allah exists?

- 109. Not at all
 - 110. A little bit
 - 111. Some
 - 112. A lot
 - 113. Very much
-

How much do you trust Allah?

- 114. Not at all
 - 115. A little bit
 - 116. some
 - 117. A lot
 - 118. Very much
-

How sure are you that good things will happen in your life?

- 119. Not at all
 - 120. A little bit
 - 121. Some
 - 122. A lot
 - 123. Very much
-

How sure are you that Allah loves you?

- 124. Not at all
 - 125. A little bit
 - 126. Some
 - 127. A lot
 - 128. Very much
-

How sure are you that Allah is a part of your life?

- 129. Not at all
 - 130. A little bit
 - 131. Some
 - 132. A lot
 - 133. Very much
-

How sure are you that things happen for a reason?

- 134. Not at all
- 135. A little bit
- 136. Some
- 137. A lot
- 138. Very much

Page Break

How often does someone teach you about Allah?

- 139. Never
- 140. Few times
- 141. Sometimes
- 142. Lots of times
- 143. Always

How often do you read or listen to books or stories about Allah?

- 144. Never
- 145. Few times
- 146. Sometimes
- 147. Lots of times
- 148. Always

End of Block: Relationship with God Subscale

Start of Block: Happiness

In general, I consider myself:

- 149. Not a very happy person
- 150. Slightly unhappy person
- 151. Neither happy nor unhappy person
- 152. Somewhat happy person
- 153. A very happy person

Page Break

Compared to most of my peers, I consider myself:

- 154. Less happy
- 155. Slightly less happy
- 156. Neither happy nor unhappy
- 157. Slightly more happy
- 158. More happy

Page Break

Some people are generally very happy. They enjoy life no matter what is going on, getting the most out of everything. How much does this sentence describe you?

- 159. Not at all
- 160. A little bit
- 161. Somewhat
- 162. Quite a bit
- 163. A great deal

Page Break

Overall, how do you usually feel?



Very Unhappy

Very Happy

Select the face that represents how you feel most of the time:

164.

165.

166.

167.

168.

End of Block: Happiness

Start of Block: Life Satisfaction

In most ways my life is close to the way I would want it to be:

- 169. Disagree a lot
 - 170. Disagree a little
 - 171. Do not agree or disagree
 - 172. Agree a little
 - 173. Agree a lot
-

The things in my life are excellent:

- 174. Disagree a lot
 - 175. Disagree a little
 - 176. Do not agree or disagree
 - 177. Agree a little
 - 178. Agree a lot
-

I am happy with my life:

- 179. Disagree a lot
 - 180. Disagree a little
 - 181. Do not agree or disagree
 - 182. Agree a little
 - 183. Agree a lot
-

So far, I have gotten the important things I want in life

- 184. Disagree a lot
 - 185. Disagree a little
 - 186. Do not agree or disagree
 - 187. Agree a little
 - 188. Agree a lot
-

If I could live my life over, I would have it the same way.

- 189. Disagree a lot
- 190. Disagree a little
- 191. Do not agree or disagree
- 192. Agree a little
- 193. Agree a lot

End of Block: Life Satisfaction

Start of Block: Academic Engagement

I try hard to do well in school.

- 194. Not at all true
 - 195. Not very true
 - 196. Sort of true
 - 197. Very true
-

In class, I work as hard as I can.

- 198. Not at all true
 - 199. Not very true
 - 200. Sort of true
 - 201. Very true
-

When I'm in class, I participate in class discussions.

- 202. Not at all true
 - 203. Not very true
 - 204. Sort of true
 - 205. Very true
-

I pay attention in class.

- 206. Not at all true
 - 207. Not very true
 - 208. Sort of true
 - 209. Very true
-

When I'm in class, I listen very carefully.

- 210. Not at all true
- 211. Not very true
- 212. Sort of true
- 213. Very true

End of Block: Academic Engagement

Start of Block: Social Desirability Questions

I tell the truth every single time

- 214. False
 - 215. True
-

I have some bad habits

- 216. False
 - 217. True
-

I never get angry

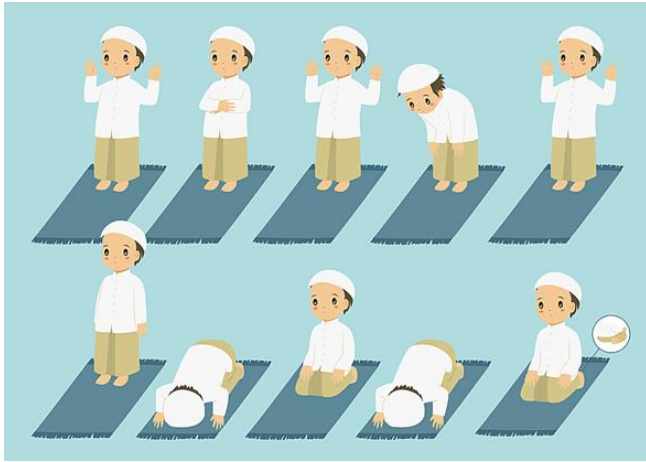
- 218. False
- 219. True

End of Block: Social Desirability Questions

Start of Block: Fill in the sentences

Salat is a prayer that all Muslims try their best to do every day. During salat, you recite Quran that you have memorized, and you follow the same steps every time. Sometimes you pray at school with your classmates, and other times you pray salat at the mosque with other people, and

sometimes you pray salat at home by yourself or with your family.
Salat looks like this:



I pray salat because:

Page Break

Dua is when we talk to Allah. Dua can be asking Allah questions, thanking Allah, or asking Allah for things. When we ask Allah for things, we can ask Allah for things to happen for ourselves or for other people. You can make Dua by thinking about it or by saying it out loud. You can make Dua at any time of the day.



I make dua for:

End of Block: Fill in the sentences

Appendix G

Teacher survey and teacher-report measures

Teacher Survey

Instructions: Please answer the following questions. Your responses are confidential and will not be shared with your employer.

1. Classroom:

2. What is your religious background?
 1. Islam
 2. Other (please specify):
 3. None/NA
 4. Prefer not to answer

3. Do you currently engage your students in class-wide Dua (supplication)?
 1. Yes
 2. No

Instructions: Please rate each of your student's behavior. If you are unsure, just give your best guess.

Student:

First Name

Last Name

	Not true	Sometimes true	Often true
1. Seems concerned when classmates are distressed.			
2. Is kind toward classmates.			
3. Listens to classmates.			
4. Compromises in conflicts with classmates.			
5. Is cooperative with classmates.			
6. Is friendly toward classmates.			
7. Shows concern for moral issues (e.g., fairness, welfare of others).			
8. Offers help of comfort when classmates are upset.			

	Not at all true	Not very true	Sort of true	Very true
1. In my class, this student works as hard as he/she can.				
2. When working on classwork in my class, this student appears involved.				
3. When I explain new material, this student listens carefully.				
4. In my class, this student does more than required.				

5. When this student doesn't do well, he/she works harder.				
--	--	--	--	--

	1 (Low)	2 (Below average)	3 (Average)	4 (Above average)	5 (High)
1. How strategic (tricks, special techniques) does this child appear to be?					
2. How careful is this child in his or her completion of work?					
3. How thoughtfully does this child choose math strategies?					
4. How effortfully does this child appropriately apply each strategy?					
5. How aware is this child of alternative strategies?					
6. How much does this child like to explore new strategies?					
7. How aware is this child of the reason for the use of different strategies?					
8. How aware is this child of how different strategies can be used?					
9. How aware is the child of when and where different math strategies should be used?					

Appendix H

Codebook for Sentences

Created July 12, 2023

Part 1: Salat Sentences

- **Intrinsic Motivation:** *This includes motivations that arise from within the individual, such as personal satisfaction or a desire to fulfill personal beliefs or values.*
 - **Connection with Allah:** *These are personal, internal experiences of feeling connected or close to Allah during prayer. Examples include "I feel a connection with Allah", "To get closer to Allah", "I want to talk to Allah and sometimes ask for help", "It brings me closer to Allah".*
 - **Connection/closeness to Allah**
 - **Opportunity for dua/talking to Allah**
 - **Emotional and Psychological Benefits:** *These sentences express an internal desire for peace, personal betterment, and self-improvement. This includes feelings of calmness, relief from pressure, better attitudes, protection from harm, and motivation. Examples include "it feels good I have peace in my heart", "It generally gives me a better attitude and puts less pressure on me", "Salat is part of my faith and when I pray Salat, it makes me feel more relaxed and motivated".*
 - **Emotions (e.g., calm)**
 - **Psychological (e.g., virtues, behavior)**
 - **Love for Allah and/or Prophet:** *These are feelings that arise from the personal love and affection for Allah, and a desire to please Him. It's about expressing gratitude and love for Allah from a personal perspective. Examples include "I love Allah", "I want to please Allah (swt)", "I Love Allah and he told us to pray", "I want to make Allah happy, and I want to be a good Muslim!!".*
 - **Love for Allah**
 - **Love for Prophet**
- **Extrinsic Motivation:** *This includes motivations that arise from external factors, such as desire for rewards, fear of punishment, or pressures from others.*
 - **Divine Command:** *These sentences highlight the extrinsic motivation of obeying a divine command or religious obligation. It's driven by the external religious law or commandment. Examples include "Allah told me to pray", "In the Quran Allah(SWT) asked me to", "Allah ordered us to pray", "it's a command from Allah (swt)".*
 - **Desire for Reward:** *This motivation is driven by the external rewards that come from praying, both in this life and the afterlife. This includes wanting to attain good deeds (also called hassanat), wanting to go to Jannah (Paradise/Heaven), and avoiding Jahannam (Hell). Examples include "I want to achieve the ultimate reward of Jannah", "I get good deeds and go to Jannah", "to get good deeds and to get more imam in my life", "I want get more hassanat".*
 - **Gaining Positive Outcome**
 - **Jannah/Heaven**
 - **Other desires**

- **Avoiding negative outcomes**
 - Hell
 - Other
- **Social and Environmental Influences:** *These sentences highlight the external influence or pressure from parents or elders to pray. It could be due to direct instructions or encouragement or following their example. Examples include "My teacher/parents make me do it", "my parents told me to, and Allah is happy when I do pray so I pray", "Also because my parents want me to", "my parent tell me to".*
 - **Family (e.g., Parents)**
 - **School (e.g., teachers)**

Part 2: Dua Sentences

- **Dua for Others**
 - **Dua for health/wellbeing (others)**
 - **Dua for forgiveness (others)**
 - **Dua for Spiritual Rewards (i.e., Jannah, good deeds)**
 - **Dua for decease relatives or people**
 - **Dua for family**
 - **Dua for friends**
 - **Dua for general good in the world and safety**
 - **Dua for teachers**
 - **Dua for poor and needy**
- **Dua for Self**
 - **Dua for Academic Success**
 - **Dua for Communication with Allah**
 - **Dua for Forgiveness (self)**
 - **Dua for health/wellbeing (self)**
 - **Dua for personal possessions or desires (i.e., can include future goals)**
 - **Dua for self (i.e., when not otherwise specified)**
 - **Dua for Spiritual Rewards (i.e., Jannah, good deeds)**
- **Dua for thanking Allah**

Appendix I

Supplemental Tables

Table 11

Item-Total Correlation: Religious Practices (i.e., Student Engagement in Salat and Dua)

Student Engagement in Salat Prayer and Dua	Corrected Item-Total Correlation
1: In the past week, how often did you pray salat prayer at home, on your own?	.43
2: In the past week, how often did you make dua on your own, without being reminded?	.74
3: In the past week, how often did you make dua at school, on your own, without being reminded?	.56
4: In the past week, how often did you make dua at home, on your own, without being reminded?	.75

Table 12

Item-Total Correlation: Mindful Salat

Mindful Salat (i.e., Practice of Khushoo)	Corrected Item-Total Correlation
1: How focused are you during salat prayer?	.57
2: How often do you pay attention during salat prayer?	.57

Table 13

Item-Total Correlation: Relationship with God

Relationship with God	Corrected Item Total Correlation
1: How sure are you that good things will happen in your life?	.32
2: How sure are you that Allah loves you?	.38
3: How sure are you that Allah is a part of your life?	.47

4: How often does someone teach you about Allah?

.30

Table 14

Normality Shapiro-Wilk for Independent and Dependent Variables

Scale	Shapiro-Wilk		
	Statistic	df	Sig.
Engagement in Salat Prayer and Dua	.95	100	<.001
Mindful Salat	.88	100	<.001
Relationship with God	.91	100	<.001
Happiness	.97	100	.04
Satisfaction with Life	.96	100	.00
Student-Report Academic Engagement	.95	100	.00
Teacher-Report Academic Engagement	.94	100	<.001
Prosocial Behaviors	.86	100	<.001
Metacognition	.96	100	.01
GPA	.92	100	<.001

Table 15

Skewness and Kurtosis

Scale	M	SD	Skewness	Kurtosis
Engagement in Salat Prayer and Dua	2.48	1.06	-.16	-1.05
Mindful Salat	2.26	.67	-.47	-.77
Relationship with God	3.25	.53	-1.17	2.66
Happiness	2.50	.79	-.15	-.57
Satisfaction with Life	2.59	.86	-.36	-.87
Student-Report Academic Engagement	2.23	.46	-.55	-.10

Teacher-Report Academic Engagement	1.99	.77	-.38	-.68
Prosocial Behaviors	1.55	.45	-.62	-.84
Metacognition	1.73	.75	.31	-.27
GPA	3.23	.65	-.93	.47

Table 16
Tests of Homogeneity of Variances of All Variables

	Levene Statistic based on mean	df1	df2	<i>P</i>
Engagement in Salat Prayer and Dua	.33	1	98	.57
Mindful Salat	.00	1	98	.98
Relationship with God	.00	1	98	.98
Happiness	3.96	1	98	.05
Satisfaction with Life	1.42	1	98	.24
Student-Report Academic Engagement	.16	1	98	.69
Teacher-Report Academic Engagement	.70	1	98	.40
Prosocial Behaviors	.23	1	98	.63
Metacognition	.21	1	98	.65
GPA	1.56	1	98	.21