Exploring the Link between Social Exclusion, Spirituality and Well-being of Undergraduate University Students

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Authors' contributions

This work was carried out in collaboration among all authors. Authors DNB, TO, BSOP, ST and CA did data analysis. Author DNB did conceptualization. Authors TO, EE and CA performed methodology. Author BSOP did ethics and proofreading. Author ST did the ethics and literature review. Author EE arrange discussion. Author MA collected the data, wrote and reviewed the manuscript. All authors read and approved the final manuscript.

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ABSTRACT

Some students may become withdrawn or experience psychological difficulties that influence their spiritual well-being and other dimensions of their lives. This study investigates the impact of social exclusion and spirituality on the well-being of tertiary students, with a focus on students at the University of Cape Coast. Using a cross-sectional descriptive survey design, 200 undergraduate students from diverse religious backgrounds were surveyed. Two distinct questionnaires were employed as data collection instruments. The data was analysed using the Haye's Mediation Analysis. The findings revealed high levels of spirituality among the participants. There was no statistically significant relationship found between social exclusion and well-being ($r = -0.055$, $p = 0.437$), However, a strong positive relationship was found between spirituality and well-being ($r = 0.641$, $p < 0.001$). A weak but statistically significant positive correlation was found between social exclusion and spirituality ($r = 0.168$, $p = 0.017$). Mediation analysis showed that spirituality significantly mediates the relationship between social exclusion and well-being. The findings highlight the importance of fostering spiritual practices and addressing social exclusion to improve student well-being. Among other recommendations, it was suggested that universities incorporate spiritual development initiatives into their curricula and that counsellors organise programmes to address students' emotional needs. It is therefore concluded that the discovery that spirituality mediates the association between well-being and social exclusion contributes to research indicating that spirituality serves as a buffer for students who are subjected to social exclusion.

1. INTRODUCTION

The well-being of tertiary students is an increasingly important issue that warrants increased scholarly attention. Research has highlighted trends in the well-being of college and university students worldwide (Twenge, 2017). Various factors may influence the well-being of students, such as social connections, spirituality, and experiences of social exclusion (Arslan, 2018). Many students encounter challenges during their higher education, including academic stress, financial difficulties, and adjusting to a new social environment. These challenges may significantly impact well-being, often resulting in heightened stress, anxiety, or depression (Arslan, 2018). The well-being of tertiary students has become a critical concern, with rising rates of mental health issues like anxiety, depression, stress, and suicidal ideation among college and university students globally (Mortier et al., 2018; Said et al., 2013).

Research indicated that social exclusion could be a key factor contributing to mental health challenges among tertiary students. Social exclusion refers to the feeling of being rejected or ostracized from desired social groups or relationships (Wesselmann et al., 2019). Many first-year students, in particular, experience a diminished sense of belonging, a lack of meaningful connections, and difficulties in socially integrating (Martinot et al., 2022). students who report higher levels of social exclusion tend to report worse well-being across various areas, such as depression, anxiety, stress, and overall life satisfaction (Stillman et al., 2009).

Spirituality may also influence student well-being. However, research findings in this area remain inconsistent. Some studies suggest that religious beliefs and spiritual practices, such as prayer or meditation, are linked to better well-being and life satisfaction among students (Abdel-Khalek, 2012; Alorani et al., 2018). Spirituality may offer meaning, purpose, and emotional comfort, all of which can contribute to well-being (Kaur et al., 2025). However, other studies find no significant relationship between spirituality and well-being in students (Turner-Musa & Lipscomb, 2007).

The well-being of tertiary students is a growing concern, with high rates of anxiety, depression, and self-harm. Social exclusion and marginalisation appear to have a negative impact on student well-being, although the empirical relationship between spirituality and well-being remains inconclusive. Emerging evidence suggests that experiences of social exclusion may diminish individuals' sense of spirituality (Kaur et al., 2025).

1.1 Statement of the Problem

The growing wellbeing crisis among tertiary education students demands urgent scholarly and institutional attention yet the understanding of contributing factors remains limited. Although research indicates that social exclusion negatively impacts student wellbeing, the role of spirituality remains unclear (Stillman et al., 2009; Hales et al., 2021). There is a pressing need to clarify the relationships between these factors to guide supportive policies and interventions. The incidence of wellbeing issues, such as anxiety, depression, and suicidal ideation, is steadily increasing among university and college populations worldwide (Mortier et al., 2018; Said et al., 2013). This rising trend underscores the severity of the issue, which brings personal, academic, institutional, social, and economic consequences (Bruffaerts et al., 2018; Ibrahim et al., 2013).

Preliminary evidence suggests that social exclusion is a major threat to psychological wellbeing, while the empirical relationship between spirituality and wellbeing remains inconsistent (Pearce et al., 2024; Stillman et al., 2009; Turner-Musa & Lipscomb, 2007). However, few studies have directly explored how social exclusion, spirituality, and wellbeing interact in tertiary students (Arslan, 2018; Leung & Pong, 2021; Luccheti et al., 2021; Hashemi et al., 2020). This gap in knowledge impede the formulation of evidence-based policies and interventions. The consequences of poor wellbeing among tertiary students are widespread, results in individual distress, impaired psychosocial functioning, and diminished academic performance. Poor wellbeing also affects retention and graduation rates (Bruffaerts et al., 2018). There are significant financial implications for students, families, and institutions, and more alarmingly, mental health disorders significantly increase the risk of self-harm and suicide, which is the second leading cause of death among tertiary students (Mortier et al., 2018).

Students who experience social exclusion or marginalisation from campus life tend to report lower levels of spirituality (Sandage & Jankowski, 2013). A daily diary study revealed that students reported decreased wellbeing on days marked by perceived social exclusion, but their wellbeing improved on days when they engaged in spiritual practices like prayer (Hales et al., 2021). These findings suggest a nuanced interplay between social connection, spirituality, and wellbeing among tertiary students that warrants further investigation.

On a societal level, student wellbeing problems affect the supply of skilled, mentally healthy graduates, potentially undermining national productivity and broader societal wellbeing. Additionally, the population-level burden and healthcare costs increase (Ibrahim et al., 2013). Research shows that social exclusion and lack of social connectedness contribute strongly to poor wellbeing outcomes in students (Stillman et al., 2009). Many students, especially during their first year, struggle with loneliness, isolation, and a sense of not belonging (Costello et al., 2018). While social exclusion is known to negatively affect student wellbeing, there is limited clarity on whether spirituality functions as a protective or risk factor for wellbeing in this population. The tentative links among spirituality, social exclusion, and student wellbeing warrant further empirical investigation (Hales et al., 2021). This study investigates how social exclusion and spirituality relate to the wellbeing of tertiary students, and how spirituality might mediate the relationship between social exclusion and wellbeing. The findings could expand the understanding of risk and protective factors influencing student wellbeing. They may also guide practical responses to the growing problem of student distress. At the societal and policy levels, demonstrating the scale of this issue could drive systemic changes to better monitor and safeguard student wellbeing. Tertiary institutions may need to adopt new protocols to identify and support students in distress, and healthcare policies could be updated to enhance access to wellbeing resources for this population. Ultimately, this study aims to contribute to the growing evidence base, promoting broader action to address student mental health.

1.2 Research Questions

1. What are the levels of spirituality of students?
2. What is the relationship between social exclusion, spirituality and wellbeing of students?
3. What is the mediation role of spirituality on the relationship between social exclusion and well-being of students?

2. THEORETICAL FRAMEWORK

2.1 Belongingness Theory

Belongingness theory posits that humans possess a fundamental, pervasive need to form

and maintain lasting positive interpersonal relationships (Baumeister & Leary, 1995). The need to belong is universal across cultures and innately drives behaviours to seek acceptance and avoid rejection. Belongingness is satisfied by frequent, stable interactions in the context of an enduring caring relationship. When the need to belong is unmet or thwarted through social exclusion, wellbeing suffers. Perceived social isolation causes a range of ill effects including increased negative emotions, cognitive impairments, and mental and physical health problems. Even subtle cues indicating low relational value or tenuous group membership threaten wellbeing. Thus, belongingness theory holds that perceived social exclusion inherently jeopardises mental health. This study applies belongingness theory in proposing social exclusion will negatively relate to wellbeing among tertiary students. The transition to college or university disrupts students' belongingness networks (Smith et al., 2023). Those who struggle to integrate and form new social bonds on campus are at risk of perceiving social exclusion. Drawing from belongingness theory, the study predicts perceived social exclusion will associate with poorer subjective wellbeing outcomes reflecting disrupted belonging needs.

2.2 Attachment Theory

Attachment theory proposes that humans have an innate psychosocial tendency to seek proximity to significant others in times of distress (Bowlby, 1969). Infants form attachment bonds to primary caregivers who provide comfort and security. Early attachment experiences influence mental representations of self, others, and relationships throughout life (Riggs, 2019). Secure infant attachment promotes exploratory behaviour and positive development. However, insecure attachment from unresponsive or inconsistent caregivers leads to anxiety, avoidance, and poor coping strategies that undermine wellbeing. Attachment theory thus holds that social bonds fostering security are foundational to mental health across the lifespan. This framework suggests spiritual modelling figures like God or a higher power may represent attachment bonds when earthly social supports are lacking. Spiritual engagement could indicate secure attachment soothing distress when social relationships are disrupted (Counted et al., 2020). However, spiritual struggles may also reflect insecure attachment interfering with wellbeing and coping. This study applies belongingness and attachment theories in

proposing social exclusion threatens fundamental needs for belonging and security, undermining tertiary student mental health. Spirituality may compensate but could also represent insecure attachment. Findings would expand conceptual models guiding efforts to address the escalating wellbeing crisis faced by university and college students worldwide.

2.3 Levels of Spirituality of Students

Across multiple studies, a significant portion of students exhibit moderate levels of spirituality. For instance, in a study of medical and nonmedical students in Kerman, 84% of medical students and 67.7% of nonmedical students reported moderate spiritual well-being. The results further revealed 31.3% of nonmedical students and 15.7% of medical students with high spiritual well-being (Maazallahi et al., 2021). Similarly, in a study at Muhammadiyah Islamic Boarding School, 42% of students were found to have a moderate level of spiritual well-being (Hilmi et al., 2020). In the Philippines, students also demonstrated moderate spiritual well-being (Aramideh et al., 2018). In Mazandaran University, 0.8% of students had low spiritual health (Aramideh et al., 2018). Students with higher levels of spirituality tend to experience better health outcomes and make healthier decisions, which can mitigate health risks (Bożek et al., 2020).

2.4 Relationship between Social Exclusion, Spirituality and Wellbeing of Students

Spirituality is positively associated with psychological wellbeing and life satisfaction. It can act as a moderator, enhancing the positive effects of other factors like actively open-minded thinking on psychological wellbeing (Nonis et al., 2024). Spiritual wellbeing is negatively associated with psychological distress, such as depression, anxiety, and stress. The personal and communal domains of spiritual wellbeing are particularly strong predictors of reduced psychological distress among students (Leung & Pong, 2021). Spirituality also positively influences psychological mood states, reducing negative moods and enhancing psychological wellbeing (Nonis et al., 2024). Closeness to spiritual beliefs, such as a connection to God, is associated with greater feelings of belonging and wellbeing, while spiritual struggles can have the opposite effect (Gilbertson et al., 2022).

Social exclusion has a detrimental effect on students' mental health and wellbeing. However, social support from family, peers, and schools can mediate and moderate this relationship, helping to buffer the negative effects of social exclusion (Arslan, 2018). Social exclusion is strongly associated with poor mental health outcomes, including increased psychological distress, loneliness, and a negative outlook on life (Filia et al., 2025). Youths who perceive themselves as socially excluded at school tend to report lower social support and psychological wellbeing. The impact is generally greater among female students, while school support plays a more significant role for male students (Arslan, 2018).

2.5 The Mediation Role of Spirituality on the Relationship between Social Exclusion and Well-being of Students

Spirituality can mediate the relationship between social support and wellbeing, suggesting that students with higher spiritual wellbeing may better utilise social support to improve their mental health (Qi et al., 2021). Most studies have focused on adult and adolescent students, showing that their spirituality is positively associated with well-being (Karakus et al., 2021). Spirituality improves mood through increased self-esteem, meaning in life, and social support, while negative affect is mediated by social support and negative religious coping (Craig et al., 2021).

3. METHODOLOGY

The descriptive survey design was used for the study. The design was selected because it enables the researcher to describe, observe and document aspects of a situation as it naturally occurs rather than explaining it. The target population was regular undergraduate students of University of Cape Coast. With this, the accessible population was University of Cape Coast undergraduate Psychology level 100 – 400 students from different religious backgrounds. The sample of the study was specifically Psychology undergraduate regular students who were 420 in total (Directorate of Academic Affairs, 2021). Psychology undergraduate students were used because students have different religious backgrounds and *and were the most accessible for the researchers*. Psychology students were also used as the sample for the study due to geographical proximity, their availability and willingness to participate in the

research. With this, a sample size of 200 respondents was employed in line with Krejcie and Morgan's (1970) table for choosing sample size. The purpose of the research was thoroughly explained to the participants. They were provided with clear instructions and assured that their responses would remain confidential and anonymous. Ample time was given to complete the questionnaires, and participants were informed of their right to withdraw from the study at any point without any consequences. There were more female respondents 123(61.5%) than males 77(38%). The average age of students was 21 years (63.5%). Regarding religious affiliation, most students identified as Christian 150(75%), with smaller proportions being Muslim 42(21%) and Traditionalist 8 (4%).

3.1 Measures

Social Exclusion Questionnaire: Social Exclusion Questionnaire developed by Stillman et al. (2009) was adopted for the study. It is a psychological assessment tool designed to measure individuals' subjective feelings and experiences of social exclusion or ostracism. The questionnaire comprises 15 items, rated on a 6-point Likert scale, which ranges from 1 (strongly disagree) to 6 (strongly agree). Example of the item include "*I feel cut off from other people".* The scale has a reliability coefficient of .80.

Spirituality Scale: The Spirituality Scale developed by Delaney (2003) was employed. It aims to capture how individuals perceive and integrate spirituality into their daily lives, with a particular emphasis on meaning, connection, and purpose, rather than religious affiliation alone. The scale consists of 20 items, rated using a 6-point Likert scale, where responses range from 1 (strongly disagree) to 6 (strongly agree). Examples include, *"I find meaning in my life experience",* and *"I have a sense of purpose".* It has a reliability coefficient of .92.

Wellbeing Scale: The Well-Being Scale developed by Kinderman et al. (2011) was used. It is a reliable self-report instrument designed to assess an individual's psychological and emotional well-being. The scale contains 24 items, each rated using a 5-point Likert scale, where responses range from 1 (not at all) to 5 (very much or all of the time). Examples include; *"Are you able to ask someone for help with a problem?"* and *"Are you comfortable about the way you relate or connect with others?* It has a reliability coefficient of .91.

4. RESULTS

4.1 Research Question One: Levels of Spirituality and Social Exclusion of Students

Table 1. Descriptive Statistics on the Levels of Spirituality

Levels	Frequency	Percent
Low	2	1.0
Moderate	49	24.5
High	149	74.5
Total	**200**	**100.0**

The results in Table 1 indicate that the majority of the respondents 149 (74.5%) have high level of spirituality.

4.2 Research Question Two: Relationship between Social Exclusion, Spirituality and Wellbeing of Students

The results in Table 2 indicate no significant relationship between social exclusion and well-being (r = -0.055, p = 0.437), but a strong positive relationship between spirituality and well-being (r = 0.641, p < 0.001). Furthermore, a weak positive correlation was found between social exclusion and spirituality (r = 0.168, p = 0.017).

4.3 Research Question Three: Mediation Role of Spirituality on the Relationship between Social Exclusion and Well-being of Students

This study examined whether spirituality mediates the relationship between social exclusion and wellbeing among university students. A mediation analysis was conducted to test this effect. Hayes' mediation PROCESS analysis in SPSS was used for analysing the data.

Table 2. Pearson Product Moment Correlation between social exclusion, spirituality and wellbeing of students

		Social Exclusion	Spirituality	Wellbeing
Social Exclusion	Pearson Correlation	1	.168*	-.055
	Sig. (2-tailed)		.017	.437
	N	200	200	200
Spirituality	Pearson Correlation	.168*	1	.641**
	Sig. (2-tailed)	.017		.000
	N	200	200	200
Wellbeing	Pearson Correlation	-.055	.641**	1
	Sig. (2-tailed)	.437	.000	
	N	200	200	200

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).*

Chart 1:

Effect of Social Exclusion on Wellbeing

Model Summary

R	R-sq	MSE	F	df1	df2	p
.0552	.0031	252.2303	.6058	1.0000	198.0000	.4373

Model

	coeff	se	t	p	LLCI	ULCI

```
constant   99.5600   12.4044    8.0262    .0000   75.0983  124.0216
SE          -.1764     .2266     -.7783    .4373    -.6232    .2705
```

Chart 2:

Effect of Social Exclusion on Spirituality

OUTCOME VARIABLE:
SP

```
Model Summary
      R      R-sq      MSE       F      df1       df2        p
   .1684    .0284   228.4649   5.7774   1.0000   198.0000    .0172
```

```
Model
        coeff      se       t       p      LLCI      ULCI
constant  67.4855  11.8055   5.7164    .0000   44.2047   90.7662
SE         .5184    .2157   2.4036    .0172    .0931     .9437
```

Chart 3:

Effect of Spirituality on the Relationship Between Social Exclusion and Wellbeing

OUTCOME VARIABLE:
 WB

```
Model Summary
      R      R-sq      MSE       F      df1       df2        p
   .6619    .4382   142.8696  76.8151   2.0000   197.0000    .0000
```

```
Model
        coeff      se       t       p      LLCI      ULCI
constant  52.7154  10.0766   5.2314    .0000   32.8435   72.5874
SE        -.5362    .1730   -3.0991    .0022   -.8774    -.1950
SP         .6941    .0562   12.3515    .0000    .5833     .8050
```

Chart 4:

Direct, Indirect, and the Total Effects of the Independent Variable on the Dependent Variable

```
Total effect of X on Y
   Effect      se       t       p      LLCI      ULCI
   -.1764    .2266    -.7783    .4373    -.6232    .2705
```

```
Direct effect of X on Y
   Effect      se       t       p      LLCI      ULCI
   -.5362    .1730    -3.0991    .0022    -.8774   -.1950
```

```
Indirect effect(s) of X on Y:
    Effect   BootSE   BootLLCI   BootULCI
SP   .3598    .1538     .0713      .6736
```

Direct Effect: If the relationship between social exclusion and wellbeing is direct and mediated by spirituality, the term "direct effect" is used. Chart 4 shows that the direct effect was -.5362 (t = -3.089, p =.0022). As a result, there is direct relationship between social exclusion and wellbeing.

Table 3. Mediation Analysis

Variable/effect	B	SE	t	p	95% Confidence Interval	
SE → WB	-.1764	.2276	-.7783	>.05	-.6232	.2705
SE → SP	.9437	-.2157	-2.40	<.05	90.76	44.20
SE → SP → WB	-.5362	.1730	-3.099	<.05	-.8774	-.1950
Effects						
Direct	-.5362	.1730	-3.099	.0022	-.8774	-.1950
Indirect	.3598	.1538			.0713	-.6736
Total	**-.1764**	**.2266**	**-.7783**	**.4373**	**-.6232**	**.2705**

Indirect Effect: Chart 4 indicates that the indirect effect is equal to ".3598," with a 95% bootstrap confidence interval of .0713 (lower limit) to .6736 (upper limit).

Total Effect: This is the total effect of the model, including both indirect and direct effects. It is the product of indirect (a*b) and direct (c) effects. The total effect was-.1764 (t =-.7783, p =.4373), according to the results in Chart 4.

Table 1 shows the results of the Hayes Process Model. The independent variable (social exclusion) was not a significant predictor of well-being, according to regression analysis (b =-.1764, t =-.7783, p >.05). Based on 5000 bootstrap samples, there is a significant direct positive relationship between social exclusion and well-being, which is mediated by spirituality (a*b = .0022), with a Bootstrap confidence interval ranging from -.8774 to -.1950).

5. DISCUSSION

5.1 Levels of Spirituality of Students

The findings revealed that 74.5% of the respondents had high levels of spirituality, while 24.5% had a moderate level, and only 1% were categorised as having low spirituality. This data indicates a strong inclination toward high spiritual awareness among the respondents.

In contrast, Maazallahi et al. (2021) reported that in a study of medical and nonmedical students in Kerman, moderate spiritual well-being was far more common. Specifically, 84% of medical students and 67.7% of nonmedical students reported moderate spirituality, while only 15.7% and 31.3%, respectively, demonstrated high spiritual well-being. This marks a clear contrast to the findings, where high spirituality is the dominant category. The sharp difference may reflect contextual and cultural variations, as well as differences in educational or religious frameworks that shape students' spiritual orientation.

A similar pattern is seen in the research by Hilmi et al. (2020) at Muhammadiyah Islamic Boarding School, where 42% of students exhibited a moderate level of spirituality, again suggesting that moderate spirituality is often the normative pattern in student populations. Moreover, in a cross-sectional study conducted in the Philippines, Aramideh et al. (2018) also found that senior high school students generally had moderate spiritual well-being, reinforcing the pattern of moderate spirituality being predominant in student groups across diverse regions.

Furthermore, in terms of low spirituality, the results align with previous literature in showing that this group is consistently the smallest across studies. The study found 1% (2 students) with low spirituality, which is comparable to the 0.8% reported at Mazandaran University (Aramideh et al., 2018). This suggests that while low spirituality exists among students, it is relatively rare, regardless of geography or discipline.

In synthesising these comparisons, it becomes evident that the current study stands out for its high proportion of students reporting high levels of spirituality, which may be indicative of specific cultural, institutional, or religious influences present in your population. These influences may cultivate and reinforce a strong spiritual identity among students. Contrastingly, most other studies have found moderate spirituality to be more prevalent, potentially reflecting environments where spirituality is present but less emphasised or formally integrated into students' education and daily lives.

5.2 Relationship between Social Exclusion, Spirituality and Wellbeing of Students

The results showed a non-significant negative correlation between social exclusion and well-

being. This suggests that, social exclusion does not have a direct, significant impact on students' well-being. The weak negative relationship indicates that there is no substantial evidence supporting the idea that social exclusion directly undermines well-being among respondents. However, existing literature suggests otherwise. Arslan (2018) highlights that social exclusion tends to negatively impact mental health and well-being. According to his research, social exclusion is associated with higher levels of psychological distress, loneliness, and negative emotional outcomes, particularly among students who perceive themselves as socially marginalised. Furthermore, Filia et al. (2025) find that youths who feel socially excluded experience poor mental health outcomes, which could manifest as depression, anxiety, or lower life satisfaction. The apparent discrepancy between the findings and these prior studies may be due to moderating variables such as social support, which could buffer the effects of social exclusion. This idea is supported by Arslan's (2018) suggestion that family, peer, and school support can reduce the negative effects of exclusion, and this may explain why the current study did not observe a stronger link between social exclusion and well-being.

There was a strong positive correlation. This result aligns well with a substantial body of research that supports a positive relationship between spiritual well-being and psychological well-being. For instance, Nonis et al. (2024) and Tetteh et al (2024) argue that spirituality is positively associated with psychological well-being and life satisfaction, providing a stabilising effect against emotional challenges. Moreover, spirituality can enhance the positive effects of other psychological factors, such as open-minded thinking, thereby fostering greater mental well-being.

Additionally, Leung and Pong (2021) emphasise that spiritual well-being, particularly in its personal and communal domains, can act as a protective factor against psychological distress, reducing symptoms of anxiety, depression, and stress. The strong correlation in the study between spirituality and well-being supports these findings, indicating that students with higher spiritual well-being experience significantly better psychological outcomes. This relationship is further supported by the work of Gilbertson et al. (2022), who found that closeness to spiritual beliefs, such as a

connection to God, is associated with greater feelings of belonging and well-being, while spiritual struggles have the opposite effect. This suggests that the strength and nature of a student's spiritual beliefs may enhance or undermine their overall well-being, reinforcing the importance of positive spiritual engagement.

The results indicated a weak positive correlation between social exclusion and spirituality. While the relationship is weak, it is statistically significant, suggesting that, students who experience social exclusion tend to report slightly higher levels of spirituality. This result contrasts with the common narrative in existing literature, which tends to focus on how spirituality can mitigate the negative effects of social exclusion rather than be correlated with exclusion itself. However, this finding may be interpreted through a coping framework, where students who face social exclusion may turn to spirituality as a coping mechanism to deal with feelings of alienation or loneliness. The idea that spirituality can serve as a source of comfort and resilience during times of distress is widely discussed in psychological research. According to Arslan (2018), individuals who perceive themselves as excluded may rely on spiritual or religious practices to foster a sense of belonging and emotional stability. This coping mechanism might explain why a weak positive correlation exists between social exclusion and spirituality in your study.

Moreover, spirituality can provide a sense of purpose and connection, which may be particularly important for those experiencing social exclusion. The communal and personal domains of spirituality mentioned by Leung and Pong (2021) Asamoah-Gyawu et al. (2023) could help foster a sense of inclusion within a broader spiritual community, offering an emotional and psychological buffer against the isolating effects of exclusion. The findings suggest that spirituality plays a significant role in enhancing well-being, consistent with prior research, while the effects of social exclusion on well-being appear to be less pronounced, likely due to the buffering effects of social support. The weak positive correlation between social exclusion and spirituality in the study could indicate that spirituality serves as a coping mechanism for students who feel socially excluded. This aligns with existing theories suggesting that spirituality can foster resilience and well-being, even in the face of social challenges.

These findings underscore the importance of fostering spiritual well-being as a way to improve students' mental health and overall life satisfaction, while also highlighting the potential role of social support in mitigating the negative effects of exclusion. Further research could explore the interaction between social support and spirituality, particularly in educational settings where students face varying levels of exclusion and marginalisation.

5.3 The Mediation Role of Spirituality on the Relationship between Social Exclusion and Well-being of Students

The findings revealed that the direct effect of social exclusion on well-being shows a non-significant negative relationship, *suggesting* that social exclusion may not have a *direct* impact on students' well-being. This finding is consistent with previous research suggesting that while social exclusion is generally harmful to mental health, its impact may be buffered by other variables, such as social support or personal coping mechanisms. As Arslan (2018) notes, social support from family, peers, and schools can mediate the relationship between exclusion and mental well-being. The lack of significance may be due to the presence of moderating factors, such as social support, which could buffer the impact of social exclusion.

The study further showed a significant positive relationship between social exclusion and spirituality. This suggests that students experiencing social exclusion might *increasingly rely on* spirituality as a coping mechanism. This finding is in line with previous studies, such as Qi et al. (2021), who argue that spirituality mediates the relationship between social support and well-being, with students who have higher levels of spiritual well-being being better able to utilise social support to improve their mental health. Students who face exclusion may find spiritual practices *a way* to foster belonging and emotional resilience helping them cope with feelings of alienation.

The mediation analysis revealed that spirituality significantly mediates the relationship between social exclusion and well-being. The results indicated that spirituality significantly influences the relationship between social exclusion and well-being. Specifically, spirituality enhances the well-being of students who experience social exclusion. This result aligns with Craig et al. (2021), who note that spirituality improves mood

through increased self-esteem, meaning in life, and social support, and reduces negative affect by buffering distress through positive spiritual coping mechanisms.

Additionally, the study examined the direct, indirect, and total effects of social exclusion on well-being of social exclusion on well-being. The direct effect remained non-significant, consistent with earlier findings. However, the indirect effect through spirituality was also significant, indicating that the negative impact of social exclusion on well-being is partially mediated by spirituality. The total effect was not significant, suggesting that the mitigating role of spirituality reduces the overall negative impact of exclusion, suggesting that the direct and indirect effects cancel each other out to some extent, and that spirituality plays an important role in mitigating the potential harm of social exclusion.

The findings from this study echo the conclusions of Karakus et al. (2021), who found a positive association between spirituality and well-being, particularly among adolescents and adults. The mediation of spirituality as a coping resource is further supported by Craig et al. (2021), who highlighted that spirituality can improve mood states and enhance psychological well-being by providing a sense of purpose and support. Thus, spirituality acts as a buffer, reducing the emotional toll of social exclusion and promoting greater well-being.

However, the direct negative effect of social exclusion on well-being observed in the results contrasts with findings in other studies, such as Filia et al. (2025), which emphasise a stronger negative relationship between exclusion and mental health. This discrepancy may result from unique cultural or environmental factors influencing the students which may mitigate or alter the psychological impact of exclusion.

The finding that spirituality mediates the relationship between social exclusion and well-being adds to the growing body of literature suggesting that spirituality can act as a protective factor for students facing social exclusion. This aligns with the work of Qi et al. (2021), who suggest that higher spiritual well-being may help students better utilise social support, further enhancing their mental health.

The findings highlight the complex relationship between social exclusion, spirituality, and well-being. While social exclusion has a weak direct

negative effect on well-being, its impact is significantly mediated by spirituality, which enhances well-being and helps students cope with the negative emotional consequences of exclusion. These results underscore the importance of spirituality in fostering resilience and well-being in the face of social adversity, aligning with existing research that highlights the protective role of spirituality in students' mental health. Future studies could investigate other mediating factors, such as social support, and their interaction with spirituality to further reduce the adverse effects of social exclusion on student well-being.

6. CONCLUSION

The findings from this study highlight the complex relationship between social exclusion, spirituality, and well-being among students. The results suggest that social exclusion may not have a statistically significant direct impact on well-being, which contrasts with existing literature that typically associates exclusion with negative psychological outcomes. However, the study reveals that spirituality plays an important role as a mediator, significantly enhancing well-being, especially for students who experience social exclusion. This finding aligns with prior research that *emphasizes* the positive impact of spiritual well-being on mental health, suggesting that spirituality may serve as a protective factor by helping students manage feelings of alienation and distress.

The weak positive correlation between social exclusion and spirituality in the study suggests that students who feel excluded may turn to spirituality as a coping mechanism, offering emotional support and fostering a sense of belonging. This relationship highlights how spirituality buffers against the psychological consequences of social exclusion.

Moreover, the mediation analysis demonstrates that spirituality significantly influences the relationship between social exclusion and well-being, indicating that its positive influence may partially offset the negative impact of exclusion. This underscores the value of promoting spiritual well-being within educational environments as a way to improve students' mental health, life satisfaction, and resilience in the face of social challenges.

These findings contribute to the growing body of literature suggesting that spirituality can act as a

protective factor for students, supporting their ability to navigate social exclusion and improving overall well-being. Future research could further explore the interaction between social support, spirituality, and other potential mediators to better understand how they collectively influence students' mental health outcomes.

7. RECOMMENDATIONS

Given the positive role of spirituality in enhancing well-being, schools and universities should consider integrating spiritual development initiatives that promote students' sense of purpose, meaning, and connection within a supportive community. These programs could include mindfulness activities, spiritual counseling, or opportunities for reflection, helping students cope with feelings of exclusion and build emotional resilience. As spirituality was found to mediate the effects of social exclusion, it is important to create a supportive social environment where students can access emotional care and develop meaningful connections. This can be achieved through peer support networks, mentorship programs, and accessible counselling services that guide students facing social exclusion, thereby enhancing the protective role of spirituality. Institutions should continue to develop inclusive practices that reduce social exclusion. Providing resources that support cultural, social, and religious inclusion can help students feel more connected and valued, thereby reducing the perceived isolation associated with social exclusion. Diversity training for staff and students could also foster greater cultural awareness and acceptance within the student body.

Future research should explore the interaction between spirituality, social support, and other potential mediators to better understand their combined effect on mental health outcomes. Specifically, examining how different dimensions of spirituality (e.g., personal compared to communal spirituality) affect students' resilience in the face of social exclusion could offer deeper insights into how best to support these students.

CONSENT

As per international standards or university standards, participants' written consent has been collected and preserved by the authors.

ETHICS STATEMENT

All the rules announced by COPE (Committee on Publication Ethics) have been complied with in the whole process, from planning to implementation of this research, from data collection to analysis. In the writing process of the study, scientific ethics and quotation rules were followed; No falsification has been made on the collected data, and this study has not been sent to any other academic publication environment for evaluation.

DISCLAIMER (ARTIFICIAL INTELLIGENCE)

Authors hereby declare that no generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of this manuscript.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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