



ORIGINAL CONTRIBUTION

Do Athletes Differ in Religious Coping: Gender Perspective of Sports Motivation

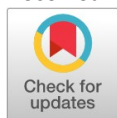
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Abstract— Religion plays an important role in shaping athletes' coping strategies and psychological functioning; however, little research has explored how these coping mechanisms affect motivation in competitive sports, especially within Muslim-majority contexts. This study investigated the influence of positive and negative religious coping on sports motivation, with a particular focus on the moderating role of gender. To address this gap, data were collected from 357 athletes (125 females, 232 males) aged between 18 and 65 years, all formally registered in national, international, university, college, or club-level competitions in Pakistan. The Brief Religious Coping Scale (B-RCOPE) was used to assess coping strategies, while the Sport Motivation Scale-II (SMS-II) measured athletes' motivation. Results showed that religious coping strategies accounted for 39% of the variance in sports motivation. Both positive and negative religious coping significantly influenced motivation, confirming their relevance in athletes' psychological processes. Furthermore, gender moderated these relationships, indicating meaningful differences in how male and female athletes employ religious coping to shape their motivation. Analyses were performed using SMART-PLS, which allowed for multi-group comparisons and testing of predictive validity. The findings highlight the significance of religious coping and gender differences in understanding sports motivation. Future research is encouraged to extend the model by examining additional psychological factors that may further explain athletes' motivational outcomes.

Index Terms— Positive religious coping, Negative religious coping, Sports motivation, Gender, Athletes

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Introduction

Religious athletes often pray together on the field or court before a game, praise God after a game, and point their fingers at the heavens after scoring a goal (Olayiwola et al., 2024). The fact that athletes display religious gestures before, during, and after tournaments is probably proof of their beliefs. According to Noh et al. (2024), religion is described as "beliefs, actions, and institutions which assume the existence of supernatural entities with powers of action, or impersonal powers or processes possessed of moral purpose." It is common to think of religion as an organised set of actions, including spiritual practices within organised spiritual organisations like churches, synagogues, mosques, temples, and other places of devotion, and beliefs aimed at "a God or gods," who can be seen as an all-knowing being, final truth, producer, basic object of belief, or higher power above oneself (Ahmedi, 2024; Tossici et al., 2024).

Religious athletes use prayers to enhance their athletic motivation (Garssen et al., 2021; Mahamid & Bdier, 2021; Noh et al., 2024; Pankowski & Wytrychiewicz-Pankowska, 2023; Surzykiewicz et al., 2022; Umarji et al., 2023). Adolescent athletes embrace religious practices to boost their confidence in their athletic talents (Hagan Jr, 2021), and these athletes feel that prayers help them improve their

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motivation, enabling them to give it their all (Imran et al., 2022). Athletes' religious beliefs can play a significant role in their lives (Sen et al., 2022). According to Noh et al. (2024), religion plays a significant role in athletes' life.

However, athletes view their physical prowess as a "gift," compete with others to find purpose in their life and accomplishments, and look to religion for guidance and humility (Roberts et al., 2021). Athletes rely on the Divine for mental and emotional assistance and must possess the inner fortitude to handle difficulties associated with sports, such as injury or losing a competition (Noh et al., 2024). Moreover, during periods of stress, such as experiencing a lost season, athletes require not only a sense of security but also emotional support, including comfort, understanding, and empathy (Hagan Jr, 2021). Lastly, by believing in a higher power, athletes can alleviate the anxiety that comes with performing and recovering from sports injuries.

Challenges are common in sports, particularly in competitive sports. In a sporting setting, stress can come from a variety of sources, including the athlete's physical condition, the opponent's caliber, motivation demands and expectations, team dynamics, issues interacting with other important individuals, making a physical or mental error, expecting coach criticism or reprimands, witnessing the opponent cheat, or suffering from pain or injury (Ahmedi, 2024; Noh et al., 2024; Tossici et al., 2024). Sport has a significant role as a tactic that can support social, economic, and health objectives. Indeed, people have had more opportunities to engage in sports over the past few decades, which is why researchers are attempting to ascertain the significance of sport motivation (Jam, Khan, & Paul, 2025; Sáez et al., 2021). One of the subjects that sports psychology researchers are interested in is why people choose to play a sport. Studies have been conducted on the motivations behind people's decisions to start or stop participating in a certain sport, as well as the degree of variation in motivational priorities in relation to individual characteristics like age, gender, experience, and others (Katanic et al., 2022). Understanding the priorities and mechanisms of sports motivation in order to continue and sustain physical activity is crucial when evaluating the motivation for sports (Moradi et al., 2020; Shah et al., 2024).

Most athletes worldwide have recently adopted religion and spirituality as an alternate coping strategy, particularly in cultures where cultural problems are widespread (Noor et al., 2022; Thomas & Barbato, 2020). For example, according to Garssen et al. (2021), athletes concurred that they believed in God or a supernatural entity to help them win events, manage stress, and prevent injuries. Some athletes use a variety of ritual practices, such as knocking on wood, keeping a crossed finger Surzykiewicz et al. (2022), and/or making the sign of the cross Mahamid and Bdier (2021), to demonstrate their belief in a spiritual being. In order to attempt to alter the results of competitive events, teams would sometimes even sprinkle animal blood, seeds, and other spiritual materials over the field or game arena (Pankowski & Wytrychiewicz-Pankowska, 2023; Umarji et al., 2023). Instead of using conventional tactics, athletes and their coaches employ spiritual methods to deal with their psychological difficulties.

Research have examined the use of alternative coping methods, such as positive religious coping (Chow et al., 2021; Garssen et al., 2021), despite the fact that there are substantial academic works on both positive and negative religious coping in sport (Benjar & Zarandi, 2023; Imran et al., 2022). Positive religious coping experiences prior to and during competition appear to be under-represented in the literature (Noh & Shahdan, 2022; Tanriverdi et al., 2025). Sen et al. (2022) examined how positive and negative religious coping strategies affected elite student-athletes' self-reported feelings based on gender, competitive position, and religion. Akrim et al. (2021) demonstrated that a range of negative coping (such as anxiety and rage) and positive religious coping (happy and excited) were experienced by athletes with varying levels of competition and religious commitment.

It is important to recognize that religious coping is not a uniform construct; rather, it comprises both positive and negative dimensions, each carrying distinct implications for athletes (Thomas & Barbato, 2020). Positive religious coping involves strategies that foster a sense of connection with the divine, promote spiritual growth, and provide comfort. Athletes engaging in positive religious coping may seek support through prayers, find meaning in their support through their faith, or experience a sense of peace and acceptance of the outcome of competition (Garssen et al., 2021; Noh & Shahdan, 2020, 2022). These strategies can enhance physiological well-being, build resilience, and contribute to a more balanced perspective on an athlete's success and failure. Conversely, negative religious coping reflects struggles and conflicts related to faith (Moazzami, 2025; Pankowski & Wytrychiewicz-Pankowska, 2023).

Religious coping has been recognized as an important factor influencing athletes' psychological well-being; however, limited research has examined its direct impact on sports motivation, a key determinant of athletic performance. Previous studies have focused primarily on general populations or broader mental health outcomes, leaving unanswered questions about how positive and negative religious coping strategies shape motivation in competitive sports. Furthermore, the potential moderating role of gender in these relationships remains underexplored, particularly in cultural contexts such as Pakistan, where both religion and gender norms significantly influence participation in sport.

To address this gap, the present study investigates the effect of negative and positive religious coping on sports motivation, while also examining whether gender moderates these relationships.

Literature Review

Positive religious coping and sports motivation

Religious coping is a useful tactic for handling stressful circumstances (Gall & Bilodeau, 2020). "The use of cognitive and behavioural techniques, in the face of stressful life events" is how this is described by Imperatori et al. (2020). A multifaceted concept, religious coping can influence outcomes in both positive and negative ways (Kandoli, 2022; Noh & Shahdan, 2020). Therefore, not every religious coping mechanism works. It is believed that positive religious coping is linked to advantages in psychosocial adjustment. Seeking religious assistance and making charitable religious reappraisals are two examples of positive religious coping, which is characterised by a self-assured and trustworthy relationship with God (Akrim et al., 2021; Thomas & Barbato, 2020). Coping is generally thought to be linked to psychological adjustment to the degree that it resolves the issue at hand or lessens the discomfort it causes (Chow et al., 2021); religious coping is thought to function similarly (Garssen et al., 2021). Higher levels of athletic motivation may occasionally be linked to the use of positive religious coping (Hagan Jr, 2021), but there are frequently reports of null or even inverse relationships between positive religious coping and adjustment (Li et al., 2019; Mahamid & Bdier, 2021). Numerous studies have been conducted in this area (Bitrián et al., 2020; Cason et al., 2020; Katanic et al., 2022; Moradi et al., 2020; Ramadhan et al., 2024; Sáez et al., 2021). The motivational elements associated with the students' physical activity were investigated by Cason et al. (2020). The results demonstrated that there was no meaningful correlation between females' levels of physical activity and the motivating aspects of playing sports. But for boys, these variations were notable. According to Ramadhan et al. (2024), there are six reasons to participate in sports: social standing, popularity, fitness and health, sporting events, and using sports as a way to decompress.

Religious positive coping, which relates to people's overall attitude to life's challenges in relation to God, have been the subject of a distinct field of study (Imran et al., 2022). The concept of three approaches that people employ to share control of their issues with God, however, is the focus of study on religious problem-solving styles: self-directed (working without God), deferring (working via God), and collaborative (working with God as partners) (Noh & Shahdan, 2022; Sen et al., 2022). According to Surzykiewicz et al. (2022), people's success in a range of situations is linked to these religious positive coping or problem-solving approaches (Pankowski & Wytrychiewicz-Pankowska, 2023). Over the past thirty years, scientific research and theoretical ideas have validated the unique function of religious coping in the pursuit of inner strength in trying circumstances (Pankowski & Wytrychiewicz-Pankowska, 2023; Umarji et al., 2023). There are both positive and negative facets to the multifaceted concept of religious coping (Noh et al., 2024). Lack of conceptual clarity, such as the inability to clearly define spirituality and distinguish it from religion, is one of the main barriers to spirituality research. This leads to little scientific debate, conceptual investigation, and model building (Chow et al., 2021). The word "religion" is employed in this essay since every participant identified as religious, identified with a specific religion, and described God as a higher power, ultimate reality, or supreme being that is superior to the person they are worshipping. A variety of behavioural and cognitive strategies are used in religious coping to help people deal with or adjust to challenging circumstances in life (Noh & Shahdan, 2020, 2022; Noh et al., 2024). The positive dedication of personal forces in the religious realm is linked to positive religious coping. Positive religious judgment, seeking spiritual and religious support, and one's relationships with God are a few instances of positive coping. Thus, we hypothesized that.

H1: Positive religious coping has a direct positive impact on sports motivation.

Negative religious coping and sports motivation

Negative religious coping strategies, such as religious dissatisfaction and punishing religious reappraisals, reveal a less stable relationship with God. Negative religious coping, which is typically employed far less frequently but is typically found to be substantially associated with worse sports motivation, has shown more consistent results (Imran et al., 2022; Mahamid & Bdier, 2021). Therefore, there seems to be a correlation between overall levels of motivation in sports and religious coping as a problem-solving approach. Negative religious coping has not, however, been included in studies that adopt this viewpoint on religious problem-solving. While previous findings have demonstrated a reciprocal relationship between well-being and negative religious coping, the evidence regarding the association between positive religious coping and well-being remains less conclusive. A thorough grasp of motivation can offer insight into the choice to remain active and continue doing so, as well as offer guidance on lowering participation (Cason et al., 2020). The psychological mechanisms that underlie behavior's arousal, direction, and persistence are known as motivation (Katanic et al., 2022; Moradi et al., 2020; Sáez et al., 2021).

Research on the importance of religion in sports has grown, and studies have shown that religious rituals like prayer have favorable psychological benefits on stress, anxiety, and confidence (Hagan Jr, 2021; Jam, Ali, et al., 2025). According to Surzykiewicz et al. (2022), young athletes used personal and religious rituals to boost their self-esteem. Additionally, Pankowski and Wytrychiewicz-Pankowska (2023) discovered that in order to feel more at ease and confident, sportsmen turn to extra-theistic spiritual practices, particularly those pertaining to God. Religion can play a significant role in athletes' lives by giving them the inner fortitude they need to handle challenges during uncertain times like illness, injury, or a losing season (Umarji et al., 2023). Religion involves worship activities including prayer, going to places of devotion, rites, and other rituals like meditation or singing in front of God. It also facilitates a close, intimate, and fulfilling

contact with ultimate reality, the Supreme Being, or higher power. According to Noh et al. (2024), spirituality encompasses more than only religious beliefs, values, and faith. Some people may still have spiritual demands and expectations, as well as a search for meaning and purpose in life, despite not belonging to any particular religion. Among other things, the negative religious coping pattern shows up as negative sentiments towards a particular incident that is seen as the devil's work or as God's retribution, or as discontent with God and the religious community. Negative religious coping is also a significant predictor of well-being, according to a number of research (Noh et al., 2024; Tossici et al., 2024; Umarji et al., 2023; Wang & Yu, 2023). Therefore, we hypothesized that.

H2: Negative religious coping has a direct negative impact on sports motivation.

The moderating role of gender

Existing research often examines positive and negative religious coping in relation to sports motivation as separate constructs (Imran et al., 2022; Sen et al., 2022), rather than exploring them simultaneously. However, studies that have considered both dimensions generally suggest that the effects of negative religious coping are more consistent and pronounced compared to positive religious coping, with gender frequently moderating these associations (Polo-Peña et al., 2021; Roberts et al., 2021; Wang & Yu, 2023). This raises the question of whether positive religious coping maintains an independent link with sports motivation when negative religious coping is also accounted for. Moreover, religious coping has commonly been investigated in relation to specific aspects of sports motivation and gender (Fitriana, 2023; Wang & Yu, 2023). In some cases, however, both positive and negative religious coping have been approached more broadly as general strategies for managing significant life stressors (Hagan Jr, 2021; Thomas & Barbato, 2020). Evidence indicates that negative religious coping is associated with poorer quality of life outcomes, including diminished sports motivation (Imran et al., 2022; Mahamid & Bdier, 2021; Sen et al., 2022). Additionally, religious struggles have been linked to greater psychological distress, negative health outcomes, and reduced well-being and athletic motivation (Hagan Jr, 2021; Pankowski & Wytrychiewicz-Pankowska, 2023).

Research has indicated a negative correlation between religious psychological uncertainties and athletic motivation, with the effect being more pronounced for men than women (Umarji et al., 2023). These variations represent the internal processes that shape people's actions, notably when it comes to forming a regular sports practice (Pankowski & Wytrychiewicz-Pankowska, 2023). In this context, some studies have indicated that women are more motivated than men to follow religious activities. For example, in the educational setting, religious coping, both positive and negative, is linked to athletic motivation for learning and is typically more strongly displayed by female students. In the context of participating in sports, Researcher discovered that while status was more significant to men than women, maintaining good health was viewed as being more highly encouraging by women than by men. Reviews of the gender-modified impacts of both positive and negative religious coping on motivation in sports have been done. Gender differences have been found to have a moderating influence on social comparison in the classroom, with female students' expectations of athletic motivation being negatively impacted (Mahamid & Bdier, 2021). Girls who had poorer self-efficacy had more worry about their athletic motivation than boys did (Imran et al., 2022). Numerous religious solutions for handling crises and challenging circumstances can be found in the Islamic faith. For instance, it exhorts Muslims to see the crisis and suffering as a necessary part of God's shrewd plan and to see it as a test from God to strengthen their faith. However, it deters people from engaging in self-harming behaviours and "giving up on the mercy of God" (Noh et al., 2024; Tossici et al., 2024). According to Ahmed (2024), if people approach their worries and fears with whole faith in God and if they are patient and appreciative of all situations, grief, and anxiety, then religiosity may be beneficial. Hence,

H3: Gender has a moderating role between positive religious coping and sports motivation.

H4: Gender has a moderating role between negative religious coping and sports motivation.

The investigation model, shown in Figure 1, is based on the hypotheses provided. Sports motivation is significantly impacted by the link between positive and negative religious coping, and gender acts as a moderator in this model.

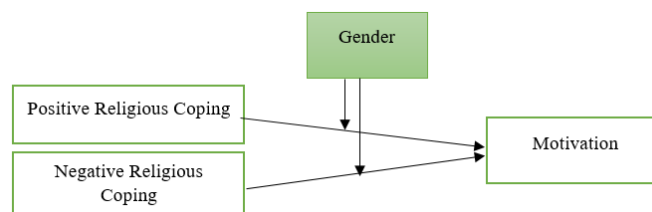


Fig. 1 Conceptual model

Methodology

This research utilized a quantitative methodology, with a two-phase cross-sectional study. The first phase focused on adopting the research instruments. This involved translating the tools from English to Urdu, a process guided by the translation principles outlined by Sousa and Rojjanasrirat (2011). To guarantee the clarity and cultural relevance of these tools within the Pakistani context, a panel of experts facilitated the adaptation, and a pilot study was conducted with 40 religious athletes. Subsequently, in the second phase, the reliability and validity of the questionnaire were assessed to ensure the accurate measurement of the intended constructs before examining the relationships between R-COPRE and SMS-II. Following the validation of the measurement model, the study proceeded to evaluate the significance of variables influencing sports motivation.

Ethical approval

This research received ethical approval from the University Malaya Research Ethics Committee (UM. TNC2/UMREC-841) before the commencement of data collection.

Data collection and participants

Participants were selected based on the following criteria:

- Being 18 years of age or older
- Active participation in any organizational sport, following a specific religion.

To ensure adequate statistical power of partial least squares structural equation modeling (PLS-SEM) analysis (Hair et al., 2019), a minimum sample size of 110 was calculated using an online power analysis calculator (Soper, 2021). The calculation was based on 17 latent variables, 89 observed indicators, a medium effect size ($f^2 = 0.3$), a significance level ($\alpha = 0.05$), and a power of 0.80 (Hair et al., 2019). The demographic details of the participants are presented in Table I. All respondents (100%) identified as Muslim. In terms of age distribution, the largest proportion (43.7%) fell within the 18–24 age range, followed by 37.5% aged 25–35 years, with smaller percentages in other age groups. Regarding sports participation, cricket accounted for the highest proportion (22.1%), followed by badminton (17.6%), soccer/football (13.7%), volleyball (9.2%), and athletics (6.4%), among others. The frequency of engaging in sports for 4 to 7 days was 60.5% and 1 to 3 days were 39.5%. The level of participation, the largest level of club level participation 51.3%, and then university level 19.6% and national level 10.4% so on. Lastly, the Impact of religion on self-perceived sport motivation all participants reported that religious had positive impact on sports motivation.

Table I
Demographic Characteristics of the Participants ($N = 357$)

Demographic	Value	Percentage
Religion	Islam	100
Age	18-24	43.7
	25-35	37.5
	36-45	10.9
	46-55	3.9
	56-65	3.9
Sports	Athletics	6.4
	Badminton	17.6
	Basketball	4.8
	Cricket	22.1
	Soccer/Football	13.7
	Gymnastic	5.6
	Handball	1.1
	Hockey	4.8
	Kabaddi	1.4
	Karate	1.4
	Polo	0.3
	Rugby	0.8
	Squash	0.6
	Table tennis	3.4
	Volleyball	9.2
	Other	6.8

Cont...		
Demographic	Value	Percentage
Frequency of Engaging in Sports	1-3/days	39.5
	4-7/days	60.5
Level of Participation	International	1.4
	National	10.4
	University	19.6
	College	14.6
	Club	51.3
	Other	2.8
The Impact of Religion on Self-Perceived Sport Motivation	Yes	100
	No	0

Table II shows that, out of 380 participants surveyed, 23 responses were excluded due to incompleteness, resulting in a final sample of 357 participants (125 females, 232 males) ranging in age from 18 to 65 years ($M = 29.39$; $SD = 10.04$).

Table II
Gender Distribution of Participants

Gender	Frequency	Percent	Cumulative Percent
Male	232	65.0	65.0
Female	125	35.0	100
Total	357	100	

Measurements

Brief Religious Coping Scale (B-RCOPE; (Pargament et al., 2011))

Pargament et al. (2011) revised the 63-item Religious Coping Scale (RCOPE; (Pargament et al., 2011)), resulting in the creation of the 14-item Brief Religious Coping Scale (B-RCOPE; (Pargament et al., 2011)). The B-RCOPE consists of two subscales: Positive Religious Coping (PRC) and Negative Religious Coping (NRC).

Positive religious coping

The 7-item positive religious coping scale was measured by (B-RCOPE; (Pargament et al., 2011)). The items included: the Positive Religious Coping (PRC) subscale with seven items, for example, "Looked for a stronger connection with God", "Sought God's love and care", "Sought help from God in letting go of my anger", "Tried to put my plans into action together with God", "Tried to see how God might be trying to strengthen me in this situation", "Asked forgiveness for my sins" and "Focused on religion to stop worrying about my problems". Respondents rate all items on these subscales using a four-point Likert scale, from 1 (not at all) to 4 (a great deal). The B-RCOPE is valid and reliable, demonstrating a Cronbach's α of 0.92 for PRC (Pargament et al., 2011).

Negative religious coping

The 7-item negative religious coping scale was measured by (B-RCOPE; (Pargament et al., 2011)). The items included: the Negative Religious Coping (NRC) subscale with seven items, such as "Wondered whether God had abandoned me", "Felt punished by God for my lack of devotion", "Wondered what I did for God to punish me", "Questioned God's love for me", "Wondered whether my church had abandoned me", "Decided the devil made this happen" and "Questioned the power of God". Respondents rate all items on these subscales using a four-point Likert scale, from 1 (not at all) to 4 (a great deal). The B-RCOPE is valid and reliable, demonstrating a Cronbach's α of 0.81 for NRC (Pargament et al., 2011).

Sport Motivation Scale-II (SMS-II; (Pelletier et al., 2013))

Pelletier et al. (2013) updated the 28-item Sport Motivation Scale, which originally featured seven subscales of Pelletier, to create the Sport Motivation Scale-II (SMS-II). The SMS-II consists of 18 items across six subscales: intrinsic regulation (three items, e.g., "Because it is very interesting to learn how I can improve"), integrated regulation (three items, e.g., "Because participating in sport is an integral part of my life"), identified regulation (three items, e.g., "Because I have chosen this sport as a way to develop myself"), introjected regulation (three

items, e.g., “Because I feel better about myself when I do”), external regulation (three items, e.g., “Because people around me reward me when I do”), and a motivated regulation (three items, e.g., “So that others will praise me for what I do”). The SMS-II uses a seven-point Likert scale ranging from 1 (does not correspond at all) to 7 (corresponds completely). The SMS-II has proven to be a reliable and valid instrument, with Cronbach’s α values ranging from 0.73 to 0.86 (Pelletier et al., 2013).

Data analysis

The SmartPLS (Version 4) software, which is used for SEM and allows scholars to look at the correlations between variables at the same time, was utilised to analyse the data. PLS-SEM was selected because (i) it permitted unlimited employing of individual items and (ii) it was designed to test an empirical framework from an estimation standpoint by modelling regarding the main endogenous factor (Hair et al., 2019). We followed a procedure with two stages in order to test the framework. Initially, we used a Confirmatory Factor Analysis (CFA) to get a look at the measurement model. Furthermore, the structural model was assessed when a suitable measurement model was identified. For an accurate understanding of the regression outcomes, multi-collinearity with Variance Inflation Factor (VIF) estimates was investigated prior to testing the structural model (Hair et al., 2019). Nevertheless, when using PLS-SEM, investigators should exercise great caution when using and reporting on the model fit because the essential threshold values have not been fully clarified, as the suggested standards are still in the initial study period (Hair et al., 2019).

Procedure

Ethical approval for the study was obtained from the relevant research ethics committee (UM. TNC2/UMREC-841). Following this, on-line questionnaires were created using Google Forms to support data collection. The use of an online survey was chosen to maintain participant anonymity and to reach a diverse pool of respondents. Recruitment targeted athletes from various settings, including sports clubs, universities, colleges, and community groups, and was further extended through social media platforms such as Facebook, e-mail, and WhatsApp. Potential participants received a cover letter, information sheet, and consent form together with the survey link. These materials outlined the objectives of the study, described the instruments, and clarified expectations regarding their completion. Participants were informed that their involvement was entirely voluntary, that they could skip any questions they found uncomfortable, and that their responses would remain anonymous and confidential. The communication also indicated that the questionnaire would take approximately 15–20 minutes to complete.

Results

Validation of the measurement model

Inter-item dependability, convergent validity, and internal consistency tests were performed on the measurement model (Hair et al., 2019). By investigating item-wise factor loadings and keeping a threshold of 0.60, inter-item dependability was determined (Hair et al., 2019). By inspecting the Average Variance Extracted (AVE), convergent validity was confirmed; all values were found to be higher than the 0.50 threshold (Hair et al., 2019). Likewise, a threshold of 0.70 has been preserved for evaluating internal consistency reliability using composite reliability estimates (Hair et al., 2019). Table III displays the measuring model’s entire findings.

Table III
Validation of measurement model

Constructs	Items	Factor Loadings			Composite Reliability			AVE		
		combine	Male	Female	combine	Male	Female	combine	Male	Female
Positive Religious Coping	PRC1	0.809	0.812	0.798	0.929	0.943	0.925	0.650	0.675	0.679
	PRC2	0.815	0.818	0.808						
	PRC3	0.772	0.780	0.765						
	PRC4	0.804	0.815	0.792						
	PRC5	0.802	0.828	0.799						
	PRC6	0.822	0.831	0.813						
	PRC7	0.820	0.825	0.818						
Negative Religious Coping	NRC1	0.775	0.798	0.773	0.906	0.918	0.910	0.582	0.588	0.580
	NRC2	0.848	0.849	0.837						
	NRC3	0.818	0.821	0.807						

Cont...

Constructs	Items	Factor Loadings			Composite Reliability			AVE		
		combine	Male	Female	combine	Male	Female	combine	Male	Female
Sports Motivation	NRC4	0.762	0.780	0.754						
	NRC5	0.707	0.714	0.700						
	NRC6	0.770	0.790	0.765						
	NRC7	0.743	0.754	0.733						
	SMS1	0.824	0.838	0.822	0.875	0.885	0.849	0.628	0.678	0.615
	SMS2	0.708	0.715	0.702						
	SMS3	0.770	0.784	0.766						
	SMS4	0.835	0.841	0.828						
	SMS5	0.815	0.843	0.810						
	SMS6	0.719	0.708	0.770						

To evaluate discriminant validity, the Heterotrait-Monotrait ratio of correlations (HTMT) was used. This approach establishes the discriminant validity based on the multi-trait-multimethod matrix (Fornell & Larcker, 1981). According to Fornell and Larcker (1981), maintaining threshold HTMT values below 0.85 and less than 0.90 can determine discriminant validity. According to the HTMT values shown in Table IV, discriminant validity has been determined by upholding the 0.85 criterion recommended by Fornell and Larcker (1981).

Table IV
Fornell-Larcker Criterion

Combine	1	2	3
NRC	0.763		
PRC	0.685	0.806	
SM	0.615	0.463	0.784
Male	1	2	3
NRC	0.718		
PRC	0.609	0.805	
SM	0.497	0.607	0.821
Female	1	2	3
NRC	0.779		
PRC	0.661	0.716	
SM	0.522	0.575	0.775

Note: NRC= Negative religious coping,
PRC= Positive religious Coping, SMS-II
= Sports Motivation Scale-II

Validation of structural model

Using the bootstrapping conduct and 5,000 subsamples obtained using SmartPLS version 4 (Hair et al., 2019), we tested the structural model in the following step in accordance with the suggested recommendations (Hair et al., 2019). According to a structural model's findings, which are shown in Table V, our data completely support H1 and H2.

Table V
Assessment of Structural Model

	Path Coefficient	Mean	SD	T Statistics	P Values
H1: Positive Religious Coping -> Sports Motivation	-0.476	-0.489	0.091	4.197	0.000
H2: Negative Religious Coping -> Sports Motivation	0.540	0.532	0.094	6.478	0.000

Explanatory power of the model

The evaluating coefficient of determination, or R^2 , was used to evaluate the model's explanatory strength (Hair et al., 2019). We discovered an R^2 value of sports motivation was 0.389, which indicates that all factors influencing sports motivation account for 39% of the variance, as shown in table VI.

Table VI
Assessment of R-Square

	R Square
Sports Motivation	0.389

PLS-MGA

Using a PLS-MGA analysis with SmartPLS4, the moderating effects of gender in the association between positive and negative religious coping and sports motivation were evaluated (Hair et al., 2019). Following guidelines, a two-step procedure was used. After making sure that both data groups were sizable enough to exhibit statistical power, two distinct data groups (males = 232 and females = 125) were created. According to Hair et al. (2019), multi-group modelling requires 100 per group. In light of this recommendation, the sample size in each group appears to be suitable. In the second phase, we Measured the Invariance of Composite Models (MICOM) to check for invariance. In accordance with Hair et al. (2019), we evaluated the measurement models of the two data groups independently to make sure that all of the indicators in the model are the same (see Table VII). After making sure the initial correlation was higher than or equal to the 5% quartile, composite invariance was investigated. This establishes measurement invariance.

Table VII
Measured the Invariance of Composite Models

Constructs	Original correlation	Correlation permutation means	50%	Permutation <i>p</i> -values
Positive Religious Coping	0.898	0.869	0.497	0.985
Negative Religious Coping	0.994	0.829	0.753	0.764
Sports Motivation	0.915	0.775	0.590	0.853

Following the invariance test, we moved on to the PLS-MGA's last phase. To find out if there are gender differences in both positive and negative religious coping and sports motivation, the path coefficients of each group were acquired using PLS-MGA (Ringle et al., 2020) (H3 – H4). The analysis of coefficient determination allows for the examination of the strength of moderating effects (Ringle et al., 2020). Coefficient of determination values of 0.02, 0.15, and 0.35 were proposed in the literature as being weak, moderate, and strong, respectively (Hair et al., 2019; Ringle et al., 2020). A weak moderating impact size (0.088) was shown by our findings. A small impact size does not imply that the moderating effect is negligible, according to (Hair et al., 2019). If the ensuing beta changes are significant, it is crucial to consider the strong moderating conditions that can make even a minor interaction noteworthy (Hair et al., 2019). The findings point to possible gender-based variations in the impact of positive religion imitation on athletic achievement. For both the male and female groups, the impact of positive religious coping on athletic motivation is shown to be statistically insignificant, indicating that hypothesis H3 is validated. On the other hand, positive religion coping is revealed to be significant in predicting male sports motivation, whereas gender as a moderator on positive religious coping for both male ($\beta = 0.498$, $p < 0.001$) and female ($\beta = 0.362$, $p < 0.001$) students, indicating complete support for hypothesis H3. Similarly, it was discovered that among both male ($\beta = 0.642$, $p < 0.001$) and female ($\beta = 0.538$, $p < 0.001$) students. It implies that hypothesis H4 has complete support as well.

Table VIII
PLS-MGA

Structural Path	Path Coefficient (Male)	Path Coefficient (Female)	Path coefficients differences	CI (path difference differences)
H3: Gender* Positive Religious Coping-> Sports Motivation	0.488	0.362	0.136	(0.217-0.220)
H4: Gender* Negative Religious Coping-> Sports Motivation	0.652	0.518	0.104	(0.334-0.339)

Discussion

The main aim of this study was to explore the relationship between religious coping, both positive and negative, and sports motivation. Regarding moderation, both positive and negative religion coping with sports motivation are moderated by gender. As noted by Noh et al. (2024), religious coping mechanisms are interconnected; people may employ a variety of constructive and destructive coping mechanisms in trying circumstances. Our study's findings show that respondents were more ready to employ positive religious coping than negative coping in trying circumstances. The average religious coping score showed a moderate outcome for negative coping and a high peak for positive coping. Seeking assistance from students was the least common positive method, whereas religious rituals were the most often

employed. Students who score highly on religious practices may view it as a sign of their religiosity as well as a helpful coping mechanism. The limited availability of priests during the pandemic may be the cause of low scores when asking for their assistance. In contrast, the least common negative technique was religious discontent, while the most common was self-directing religious coping. Students' obvious inclination to employ constructive techniques can be viewed as a personal asset. However, a relatively constant propensity to encounter conflicts pertaining to issues of religion and one's relationship with God might be associated with the adoption of negative religious coping mechanisms (Soomro et al., 2025; Umarji et al., 2023).

The results showed a strong correlation between sports motivation and positive religious coping. Our research also showed, in line with the findings of our predecessors, that sports motivation increases with the degree of positive religious coping (Noh & Shahdan, 2022; Pankowski & Wytrychiewicz-Pankowska, 2023; Sen et al., 2022; Surzykiewicz et al., 2022; Umarji et al., 2023). Although weak, there was a significant correlation between overall negative religious coping and positive religious coping. As per the findings of Kahil (2025) and Tossici et al. (2024), this association is negative. The findings about the connection between negative religious coping and sports motivation are in line with earlier studies that demonstrated that the more resilient a person is, the less likely they are to employ coping mechanisms that center on negative feelings and the urge to let them out (Noh et al., 2024; Wang & Yu, 2023). Therefore, it may be said that negative religious coping, the tendency to see challenging situations as God's punishment, or feelings of discontent with God and the church are all linked to sports motivation. Stated differently, the propensity to employ negative religious coping strategies is linked to lower levels of sports motivation, which is in line with earlier studies (Pankowski & Wytrychiewicz-Pankowska, 2023; Umarji et al., 2023). A moderation study has shown that there is a general positive and negative association between religious coping and sports motivation when gender is taken into account. To ensure that gender as a moderating effect was free from the influence of those crucial factors on the models, we eliminated age and sex as statistically significant covariates in our analyses. Although research by Wang and Yu (2023) showed that gender can enhance men's motivation in sports since they can be a source of positive changes and spiritual development, it is widely known that religious struggle and negative coping can negatively impact sports motivation.

Practical implications

The findings of this study offer valuable insights for sports psychologists, coaches, and athletic program developers, particularly when working with religiously inclined athletes. Understanding the dual role of positive and negative religious coping in shaping sport motivation is essential, especially given the gender differences observed. Specifically, the positive impact of religious coping on male athletes' motivation suggests that incorporating faith-based practices, such as prayer or spiritual reflection, into training routines or stress management programs may enhance motivation and performance.

In contexts where religious beliefs are central to an athlete's identity, recognizing and integrating religious coping strategies into psychological interventions may reduce stress and foster a healthier motivational climate. Moreover, the presence of spiritual support systems, such as sport chaplains or religious mentors, can offer both emotional and spiritual guidance during periods of pressure or interpersonal conflict. This support may be particularly helpful when athletes are struggling with low motivation or facing challenges from coaches or teammates.

When designing intervention programs, practitioners should consider religious coping styles as potential tools for enhancing motivation, especially among male athletes. Tailored support that respects individual belief systems may contribute not only to improved performance but also to better emotional regulation and psychological well-being in competitive sport settings.

Limitations and future research

Despite providing valuable insights into the role of religious coping and gender differences in sport motivation, this study is not without limitations.

First, the research was conducted within a specific cultural and religious context, focusing primarily on Muslim athletes in Pakistan. As a result, the findings may not be directly generalizable to athletes from other religious or cultural backgrounds. Future studies should consider cross-cultural comparisons to examine whether these relationships hold across diverse religious traditions and sporting environments.

Second, while the study identified gender-based variations in the effect of religious coping on motivation, it did not explore the underlying mechanisms or sociocultural factors that might contribute to these differences. Understanding how societal expectations, religious teachings, or gender roles influence coping and motivation could provide a deeper and more nuanced understanding.

Third, the study relied on self-report measures, which are subject to social desirability bias, particularly in contexts where religion plays a central role in social identity. Athletes may have overreported their engagement in positive religious coping or underreported negative coping to align with perceived social norms.

Finally, the study focused predominantly on motivation as a psychological outcome. Other important psychological and performance-related variables, such as confidence, anxiety, resilience, or team cohesion, were not extensively examined in relation to religious coping. Including a broader set of psychological factors could enhance the overall understanding of how faith-based strategies function in athletic contexts.

Conclusion

This is the first study to investigate how gender influences the relationship between positive and negative religious coping with sports motivation. Even though religious faith may have a big impact on enhancing motivation in sport, research on religion and sports motivation has gotten comparatively little attention. According to this research, coaches, sport psychologists, and other experts should consider the significance of religious belief and assist players in using constructive religious coping mechanisms to improve their sports motivation. Ensuring inclusiveness and respect for other belief systems is a problem for coaches and practitioners when putting into practice a holistic approach that incorporates aspects of religious or secular coping. Establishing a supportive atmosphere where athletes feel at ease discussing and using coping mechanisms that align with their own values and beliefs is essential. To do this, it may be necessary to use individualized strategies and transparent communication to comprehend the unique requirements and preferences of each athlete. As a result, the relationship between the components could only be inferred; further study is required to determine how each contributing factor affects athletic motivation.

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Conflict of Interest

The authors declare that there are no conflicts of interest.

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