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Investigating Pre-Competition-Related Discrete Emotions and Unaccustomed Religious Coping among Elite Student-Athletes: Implications for Reflexive Practice

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Abstract: Given that elite athletes experience a wide range of different emotions (e.g., anxiety, anger, dejection, excitement) toward upcoming sporting environments, it is surprising that researchers have given limited attention to the linkages between varied emotional experiences and diverse coping (unaccustomed) among athletes from diverse backgrounds. This study investigated the impact of religious coping, as opposed to conventional psychological skills, to ascertain whether these coping options influence elite student-athletes' emotional reactions across gender, competitive status, and religion. Using a descriptive cross-sectional survey design, self-reported discrete emotions and religious coping were measured with the Sport Emotion Questionnaire (SEQ) and Brief-Religious Coping Scale (Brief RCOPE) after 300 selected athletes were conveniently chosen. A factorial multivariate analysis of covariance (MANCOVA) after controlling for age revealed no significant interactions for between-subject factors (gender, status, religion) across all the discrete emotions and religious coping dimensions. However, significant main effects were realized for competitive status and religion on only anger, anxiety, dejection, and negative religious coping. A follow-up multiple regression analysis identified religion as the most significant predictor of anger, anxiety, and dejection, whereas competitive status was the most associated variable for negative religious coping. Current findings suggest that athletes' unpleasant or negative emotions were linked to negative religious coping, a maladaptive coping mechanism that may hinder attaining optimal emotional state prior to competition. Therefore, these athletes need purposeful strategies (e.g., positive religious coping, motivational strategies) that may improve weakened beliefs based on their struggles before competition. The development of appropriate psychological intervention framework that maintains respect for athletes' religious identities for improved psychological well-being is also warranted.

Keywords: anger; anxiety; dejection; discrete emotions; negative religious coping; student-athletes

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1. Introduction

Athletes react to an array of different emotions (e.g., happiness, excitement, relief, pride, anger, anxiety, dejection, guilt, and shame) during their sports involvement, with considerable implications for performance, well-being, and general team climate (e.g., Fletcher et al. 2006; Martinent et al. 2012, 2013). Within a competitive sporting environment, it is common to see many athletes show some emotional reactions such as excitement and happiness during memorable moments. Conversely, unpleasant experiences may evoke emotional responses not limited to dejection, sadness, and disappointment but also heightened levels of competitive anxiety among athletes (Crocker et al. 2004; Jones 2012; Martinent and Ferrand 2009). Therefore, achieving and maintaining a suitable emotional state prior to and within competition is crucial to performance success and satisfaction (e.g., Hanin 2007, 2010; Martinent et al. 2012; Martinent and Ferrand 2009). For

athletes, evoking a specific emotion is often dictated by an essential interaction between the individual athlete and the immediate working environment (Martinent et al. 2012, 2013).

Key to understanding the reported relational content of emotions is the dichotomy between positively and negatively toned emotions (Hanin 2007, 2010). According to Hanin's distinction, any emotion regardless of its state (i.e., positive or negative) could provide both a functional and/or a detrimental consequence regarding an athlete's performance. Therefore, whereas some emotions are considered beneficial for some athletes, the same set of emotions may prove debilitating for other performers. Previous research has revealed that athletes generally experience low intensity levels of negative emotions and relatively high levels of positive emotions toward different components of subjective well-being and performance (Lane et al. 2012; Mellalieu et al. 2006; Neil et al. 2011). For example, investigating perceived functionality of momentary pre-competitive emotional states among individual athletes of different skill levels, Cerin (2003) found that positive emotions (e.g., interest, enjoyment) and negative emotions (e.g., sadness, guilt, self-hostility, shame, shyness, and surprise) explained 30% of the perceived functionality variance. Cerin found that the presence of even very low intensities of shyness and shame were perceived to hinder performance, as were sadness, guilt, and self-hostility, even though higher levels of fear and anxiety were also noted. Sève et al. (2007) studied the emotional process of top-level table-tennis players during high stakes in matches and discovered that irritation (21.5%), pleasure (17%), confidence (14%), disappointment (11.5%), worry (11.5%), and displeasure (10.4%) were the most displayed emotions. Primarily, positive or pleasant emotions are usually related to adaptive performance effects compared to negative or unpleasant emotions that are normally connected to maladaptive performance outcomes (e.g., Cerin 2003; Cerin and Barnett 2006; Hanin 2007, 2010). There seems to be available evidence in sport psychology literature that a wide range of positive (e.g., happiness, excitement) and negative (e.g., anxiety, dejection) emotions play a critical role in perception of the functionality, performance variability, increases in self-focus attention, avoidance action tendencies, and improvement or impairment of athletes' performance (Campo et al. 2012; Hanin 2007, 2010; Jones 2012; Martinent and Ferrand 2009; Mellalieu et al. 2006).

Therefore, achieving sporting success not only involves athletes' physical skills but also impactful psychological and emotional skills available to them over prolong periods to manage their emotional experiences (Campo et al. 2017; Friesen et al. 2013; Hanin 2010; Uphill and Jones 2012). Athletes' capacity to battle their emotional experiences before and during competition through diverse self-regulation mechanisms may determine their chances of success, especially when competing against opponents of the same competitive level (Campo et al. 2017; Jones 2012). Researchers and applied specialists have long reiterated that positive adaptation in any achievement setting entails effective cognitive, behavioral, and emotional self-regulation skills (see Campo et al. 2017; Jones 2012; Uphill and Jones 2012). Till date, majority of research in sport psychology have focused on conventional psychological skills (e.g., goal-setting, imagery, relaxation, self-talk) and general coping strategies (e.g., problem-based, emotion-based (Hanin 2007, 2010; Hanton et al. 2004; Hardy et al. 2010; Mellalieu et al. 2006)). However, limited attention has been given to diverse strategies like religious coping within the sport psychology literature, especially in societies where culture is deeply rooted in the fabrics of everyday life (Hagan and Schack 2017; Hagan et al. 2019). Drawing from positive psychology, religious coping has been suggested to offer a buffering role on significant life stressful events (Vishkin 2020; Vishkin et al. 2014). For example, persons with professed spiritual backing (e.g., faith in God and use of prayer as coping resources) were more likely to manage better with high levels of life-event stress (Hagan and Schack 2017; Hagan et al. 2019; Sarkar et al. 2015; Sharp 2010; Vishkin 2020; Vishkin et al. 2014). Religious coping, in this study, is referred to spiritual efforts, both action-oriented and intrapsychic, to maintain self-control (i.e., master, tolerate, reduce, minimize) environmental and internal demands, perceived as threatening, which exceed a person's available resources (Koenig 2012; Koenig et al. 2012; Vishkin 2020; Vishkin et al. 2014).

Although considerable research exist on emotional expressivity and conventional coping mechanisms in sport, there seems to be limited attention concerning the linkages between diverse emotions and unaccustomed mechanisms among competitive athletes to feed quantitative research in sport psychology literature. Besides, cross-cultural studies exploring affective experiences of competitive athletes of African descent are sparse (Hagan et al. 2017a). It has been proven that emotional experiences originate from diverse shared norms, social behaviors, and values (Mesquita and Markus 2004). Hence, psychological strategies to regulate them might also not be universal across different cultures (Ekman and Davidson 1994).

Given that issues related to religion and spirituality are quite pervasive in Africa, with evidence of more overt religio-spiritual identity and orientation of its people (Hagan and Schack 2017; Hagan et al. 2019), investigating emotional experiences and related unaccustomed coping options in an African setting to better understand the possible cultural influences that previous studies have ignored is warranted. Sarkar et al. (2015) noted that "given religion and spirituality, for example, are important for the welfare of numerous individuals, it is somewhat surprising that relatively few studies within the sport psychology literature have directly examined the association between religion, spirituality, and well-being in sport performers" (p. 49). Only a few studies (e.g., Csíkszentmihályi 2008; Spittle and Dillon 2014) to date have examined the potential impact of spiritual practice and/or religious coping on emotional or affect experiences of athletes during competitive engagements. For example, Spittle and Dillon (2014) investigated 92 competitive golfers and found no correlation between scores on the Spirituality in Sports Test (SIST) and the Zone Test; however, a significant correlation was found between spirituality and "sense of control," a subscale of a measure of flow, the Dispositional Flow Scale (DFS). Of these limited studies, the extent to which variables such as gender, skill level and religion interact as a function of discrete emotions and religious coping before and during competition is undocumented. Since emotions play a critical role in basic models of coping (Koenig 2012; Koenig et al. 2012; Vishkin 2020; Vishkin et al. 2014) and self-regulation (Werner and Gross 2010), providing an account of their linkages may guide future athletes' psychological intervention framework that maintains respect for indigenous discourses and diverse cultural identities (Ryba et al. 2013).

Therefore, the main purpose of this current study was to establish the extent to which gender, competitive status, and religion interact across discrete emotions and religious coping. Based on extant literature on emotions and coping, it was hypothesized that international student-athletes would display more positive emotions and positive religious coping than their national counterparts prior to competition. For national and regional student-athletes, it was anticipated that there would be variations in the display of their discrete emotions and religious coping dimensions before competition, but no opinion was offered on which group will differ. It was further hypothesized that there would be a significant relationship between specific emotions experienced and related religious coping strategy used (i.e., positive emotions versus positive religious coping; negative emotions versus negative religious coping). These aforementioned hypotheses were tested across gender and religion after removing the effect of age. The other objective was to determine which factors would best predict the type of discrete emotions and religious coping strategies reported. This study also offers a more comprehensive picture of athletes' broad discrete emotions compared to the unitary emotional construct like anxiety that currently dominates sport psychology literature and religious coping that previous research has ignored.

2. Materials and Methods

2.1. Participants' Selection

Using a cross-sectional survey design, a sample of three hundred (N = 300) student-athletes comprising 164 (54.3%) males and 136 (45.7%) females, with age ranged from 19–34 years (mean = 25.95, standard deviation, SD = 3.254) who participated in the 2018

West Africa University Games (WAUG) in Nigeria were conveniently recruited for this study. For these student-athletes, N = 144 (48.0%) were classified as elite (international), with N = 125 (41.7%) named as semi-elite (national) and N = 31 (10.3%) as non-elite (regional), all with at least three years of competitive experience at the stated level and trains at least three times per week on the average. Of the athletes who were selected, the majority were predominantly Christians, N = 177 (59.0%), followed by Muslims, N = 87 (29.0%) and other religious/spiritual backgrounds (e.g., African Traditional Religion, Buddhism, Hinduism), N = 36 (12.0%), respectively. The selected participants were resident students who have officially enrolled in public universities in their respective countries and were either undertaking undergraduate or graduate studies at the time of the competition.

The inclusion criteria for elite (international) status were that student-athletes should have competed consistently at the sub-African regional level, achieved national honors, and represented their country in international events at different stages of their sports career (Hanton et al. 2005). Semi-elite (national) athletes were those who had participated and achieved national honors, whereas non-elite athletes were individual who had competed at district/regional and achieved honors at that level within their respective countries. These athletes represented three different West African countries (i.e., Benin, Ghana, Nigeria) in different sporting disciplines, including athletics (N = 150), basketball (N = 24), football (N = 78), handball (N = 24), and volleyball (N = 24). These study subjects were recruited through their leaders of delegation, team coaches and various captains at their assigned accommodation at the games' village. All study participants trained and competed with the main aim of winning the highest number of medals for their respective teams. The survey procedure was approved by the Institutional Review Board (IRB) at Bielefeld University and adhered to the ethical standards of the sixth revision of the Declaration of Helsinki. All study participants signed a written informed consent form before the commencement of the data collection.

2.2. Instrumentation

2.2.1. Discrete Emotions—Sport Emotion Questionnaire (SEQ)

Sport performers' pre-competition emotions were assessed using the 22 items from the SEQ. The items are categorized under five subscales: anxiety (five items: nervous, anxious, tense, apprehensive and uneasy); dejection (five items: unhappy, sad, upset, dejected and disappointed); anger (four items: annoyed, irritated, furious and angry); excitement (four items: enthusiastic, excited, energetic, and exhilarated); and happiness (four items: joyful, pleased, cheerful, and happy). These emotions are further clustered into two dimensions: (1) unpleasant or negative emotions (i.e., anger, anxiety, and dejection) and pleasant or positive emotions (i.e., excitement and happiness). The items are scored on a five-point Likert type scale, ranging from 0 (not at all) to 4 (extremely). Participants were required to indicate how they had felt "right now, at this moment, in relation to the upcoming competition" within their competitive environment during the week leading up to their engagements or events (Jones et al. 2005, p. 431). The psychometric properties of the SEQ have strongly been proven through face, content, factorial, and concurrent validity tests (Arnold and Fletcher 2015; Jones et al. 2005). Previous studies have reported excellent Cronbach alpha reliability values that ranged from 0.81 to 0.90 for the SEQ scales (e.g., Allen et al. 2009, 2013; Jones et al. 2005). Cronbach reliability values reported in the current study ranged from 0.74 to 0.88, scores that corroborate values in previous studies (e.g., Allen et al. 2013) and deemed appropriate.

2.2.2. Religious Coping—Brief RCOPE Inventory

Religious coping was assessed using the Brief RCOPE Inventory, which is a 14-item questionnaire (Pargament 1999; Pargament et al. 2000, 2011). The choice of this research instrument was based on its brevity and extensive use in mainstream health and psychology domains. Besides, the items' construction fitted well with the perceived religious and/or spiritual orientation of the chosen sample. The Brief RCOPE Inventory assesses positive

and negative religious coping on a four-point Likert scale, with response categories ranging between 0 ("never" or "not at all") and 3 ("very often" or "a great deal"). The Brief RCOPE comprises different ways of coping through which religion is thought to provide supportive role, termed positive religious coping: finding meaning during challenging situations or attainment of well-being and closeness to God and negative coping, or religious struggle, in which religion is used to release negative feelings such as anger or doubt or where it is connected with interpretations related to perceived punishment from God or being abandoned by God during stressful events. Study participants indicated the degree to which they use specific methods of religious coping in dealing with their challenging sport competition-related situations. Example of items include statements such as "trusting God will be on my side," "asking forgiveness of my sins," and "deciding the devil made this happen" in order to assess positive and negative aspects of religious coping. Consistent with previous studies (Braam et al. 2008, 2010; Freitas et al. 2015; Webb et al. 2010), the reported Cronbach coefficient alpha values in the current study on the two subscales are positive (0.89) and negative (0.78) religious coping, an indication of high internal consistency among the variables on the scales.

All the questionnaires used collected the same demographic information on gender, age, competitive status, religion, and country of all the study participants.

2.3. Procedure

Following institutional ethical approval, official approval from the leaders of the various delegations from three countries (i.e., Benin, Ghana, and Nigeria) who accompanied their teams at the 2018 West Africa University Games in Nigeria was sought. Sport performers were directly recruited through enquiries with coaches and team captains. Through an established rapport with the various teams' captains and coaches, study participants were informed that information provided would be strictly confidential and, apart from the researcher and two research assistants, no one else would have access to their responses. This process was to guarantee their anonymity and that their participation was solely voluntary by which they could stop answering the survey at any point in time during the process. The participants completed the SEQ and Brief RCOPE after being given standard instructions to indicate any adjectives or phrases that best described the emotions strategies they had experienced at any time during the week prior to their sport competition and also mention what religious coping strategies they had employed to manage their emotions. In order not to disrupt athletes' training programs, completed questionnaires were collected by the research assistants in the morning prior to the opening ceremony at their hostels in sealed envelopes. The duration for the completion of both instruments lasted 30 min.

2.4. Data Analysis

Preliminary data prescreening procedures were conducted to examine the accurateness of the data and statistical assumptions of homogeneous regression coefficients, homogeneity, outliers, and multicollinearity of variances were all assessed. To reduce the error variance because of a potential confounding variable, a factorial multivariate analysis of covariance (MANCOVA) was employed on the data (Field 2017; Tabachnick and Fidell 2007). Within the MANCOVA model, discrete emotions (i.e., two pleasant or positive emotions [i.e., excitement and happiness] and three unpleasant or negative emotions [i.e., anger, anxiety, and dejection]) as well as religious coping strategies (i.e., positive and negative religious coping served as the dependent variables whereas gender (male, female), competitive status (international, national, regional), and religion (Christian, Muslim, others: e.g., African Traditional Religion, Buddhism, Hinduism) were the independent variables. As continuous variable, age acted as covariate. A follow up univariate analyses of covariance (ANCOVA) were conducted to compare the means for each of the dependent variables to ascertain where significant differences existed through further post hoc analyses. Partial eta squares values were calculated and interpreted as small effect (0.20), medium or moderate

effect (0.50), and large effect (0.80). MANCOVA was used because several dependent variables could be tested simultaneously and interaction effects between the independent variables could be assessed (Tabachnick and Fidell 2007). Follow-up separate multiple regression analyses using the simultaneous entry method were conducted to determine the best predictor (s) (e.g., gender, competitive status, religion) of discrete emotions as well as religious coping (Field 2017; Tabachnick and Fidell 2007). All data analyses and related procedures were conducted using the Statistical Package for Social Sciences (SPSS) version 22.0 for Windows.

3. Results

3.1. Preliminary Data Screening

The assumptions of univariate and multivariate analyses together with missing cases and distributions were verified (Field 2017; Tabachnick and Fidell 2007). No missing cases and univariate or multivariate outliers were noted through Mahalanobis distance testing. Additionally, normality, linearity, multicollinearity, and singularity assumptions were checked and found to be appropriate. However, the equality of covariance matrices was found to be satisfactory at the univariate level (Levene's test and F_{max} ratios), although this assumption was violated in some instances at the multivariate level (Box's M Test). Hence, Pillai's trace was selected as the multivariate test statistic because of its robustness over test violations (Field 2017; Tabachnick and Fidell 2007). Other assumptions specific to multiple regression such as collinearity statistics (i.e., Tolerance and Variance Inflation Factor (VIF) were all within acceptable limits, including the assumption of multicollinearity. These tests revealed that multicollinearity was not an issue given that none of the independent variables correlated above 0.8, no single item scored more than VIF > 10, and the mean VIF score was more than one. The data also met the assumption of independent errors for both regressions (Threat, Durbin–Watson value = 1.58; Challenge, Durbin–Watson value = 1.30, (Field 2017; Tabachnick and Fidell 2007)).

3.2. MANCOVA Analysis on Discrete Emotions and Religious Coping

A 2 (Gender) × 3 (skill level) × 3 (religion) MANCOVA was computed on discrete emotions and religious coping. No significant interaction effects were observed across all analyses ($p > 0.05$), suggesting that any noted variation was consistent (or parallel) across the between-subject factors. Additionally, no significant main effects were also noted for gender across all analyses. The identification of significant main effects for between-subject factors (i.e., competitive status and religion) was followed with one-way ANCOVAs testing for any potential variation across the factors. A follow-up *t*-test with the Bonferroni correction factor was applied where necessary (Field 2017; Tabachnick and Fidell 2007).

3.2.1. Discrete Emotions

There was no evidence of effects for the covariate (i.e., age) on discrete emotions: age, *Pillai's trace* = 0.042, F (*11*, *268*) = 1.074, $p > 0.05$.

No significant main effect of gender, *Pillai's trace* = 0.065, F (*11*, *268*) = 1.692, $p > 0.05$ was realized. However, significant multivariate main effects were noted for competitive status, *Pillai's trace* = 0.165, F (*22*, *538*) = 1.449, $p = 0.001$, $\eta^2 p = 0.83$ and religion, *Pillai's trace* = 0.221, F (*22*, *538*) = 3.045, $p = 0.000$, $\eta^2 p = 0.21$. For competitive status, a follow-up between-subject ANCOVAs revealed inter-group variations for only anxiety, F (*2*, *278*) = 5.757, $p = 0.004$, $\eta^2 p = 0.41$ and anger, F (*2*, *278*) = 5.529, $p = 0.004$, $\eta^2 p = 0.38$ respectively. An examination of the corrected *t*-test showed that international student-athletes were reportedly more anxious ($M = 8.06$) than their other counterparts: national ($M = 7.27$) and regional ($M = 6.51$). Further, international student-athletes displayed minimal anger ($M = 2.20$) slightly above their national ($M = 2.00$) and regional ($M = 1.42$) respectively (see Figure 1).

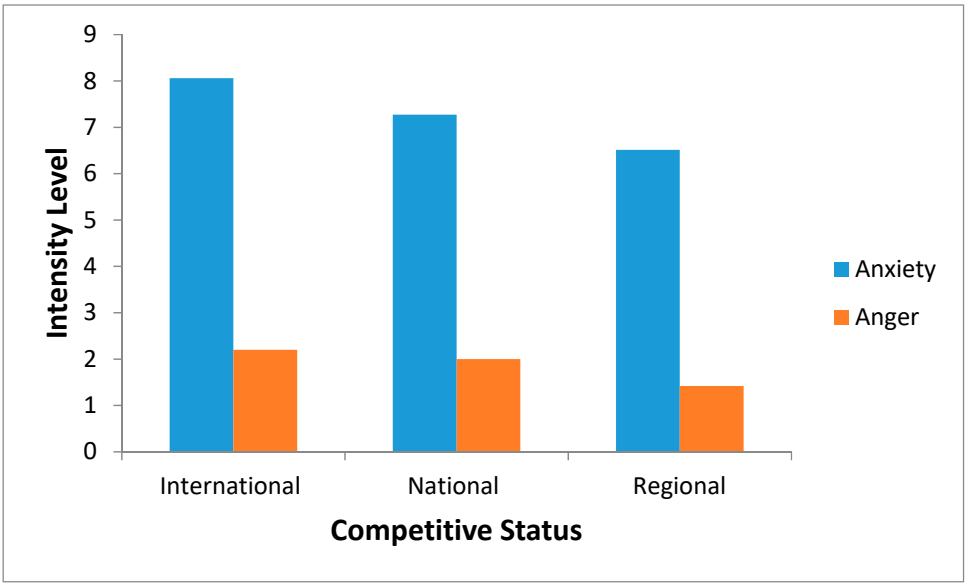

Figure 1. Student-athletes' reported negative emotions across competitive status.

For religion, a similar follow-up between-subject ANCOVAs also showed inter-group differences for only anxiety, F (2, 278) = 5.409, p = 0.005, η^2p = 0.37, anger, F (2, 278) = 3.610, p = 0.028, η^2p = 0.25, and dejection, F (2, 278) = 9.915, p = 0.000, η^2p = 0.67. Specifically, Christian student-athletes reported being less anxious (M = 6.68) compared to their other counterparts: Muslim (M = 7.63) and others (M = 8.51). Similarly, Christian student-athletes reported less anger (M = 1.54) and dejection (M = 1.35) than their other religious competitors: Muslim (anxiety- M = 2.10; dejection- M = 1.57) and other (anxiety- M = 2.20; dejection- M = 2.06), respectively (see Figure 2).

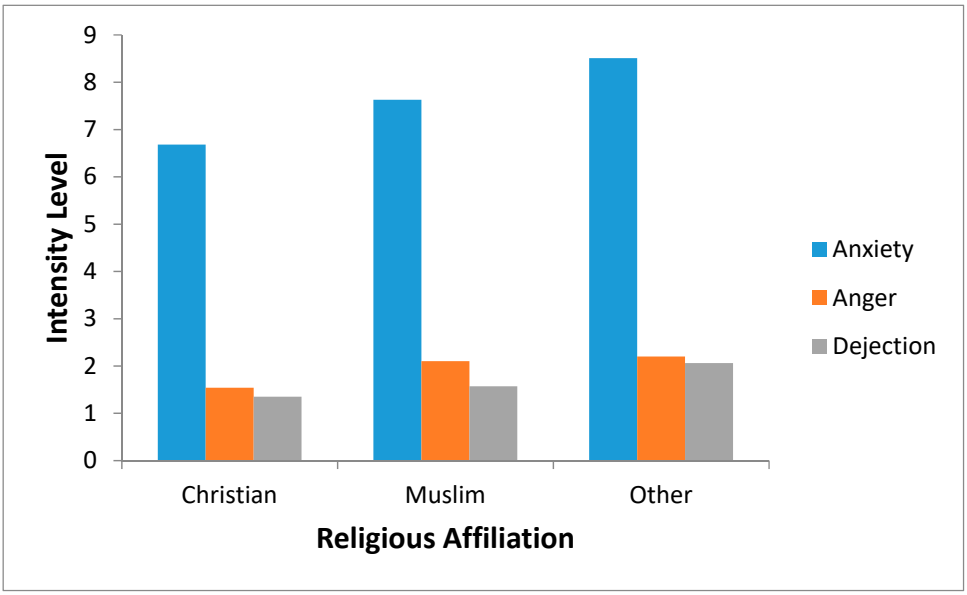

Figure 2. Student-athletes' reported negative emotions across religious affiliation.

3.2.2. Religious Coping

There was no indication of influence for the covariate (i.e., age) on religious coping: age, *Pillai's trace* = 0.042, F (11, 268) = 1.074, $p > 0.05$.

No significant main effects of gender, *Pillai's trace* = 0.065, F (11, 268) = 1.692, $p > 0.05$ was identified. However, significant multivariate main effects were realized for competitive status, *Pillai's trace* = 0.165, F (22, 538) = 2.201, p = 0.001, η^2p = 0.83 and religion,

Pillai's trace = 3.045, F (22, 538) = 3.045, p = 0.000, $\eta^2 p$ = 0.22. A follow-up between-subject ANCOVAs for competitive status revealed inter-group differences for only negative religious coping, F (2, 278) = 7.212, p = 0.001, $\eta^2 p$ = 0.49. Specifically, an inspection of the corrected t-test revealed that international student-athletes reported a higher mean value (M = 10.21) for using negative religious coping compared to the national (M = 8.58) and regional (M = 5.55) student-athletes, respectively (see Figure 3).

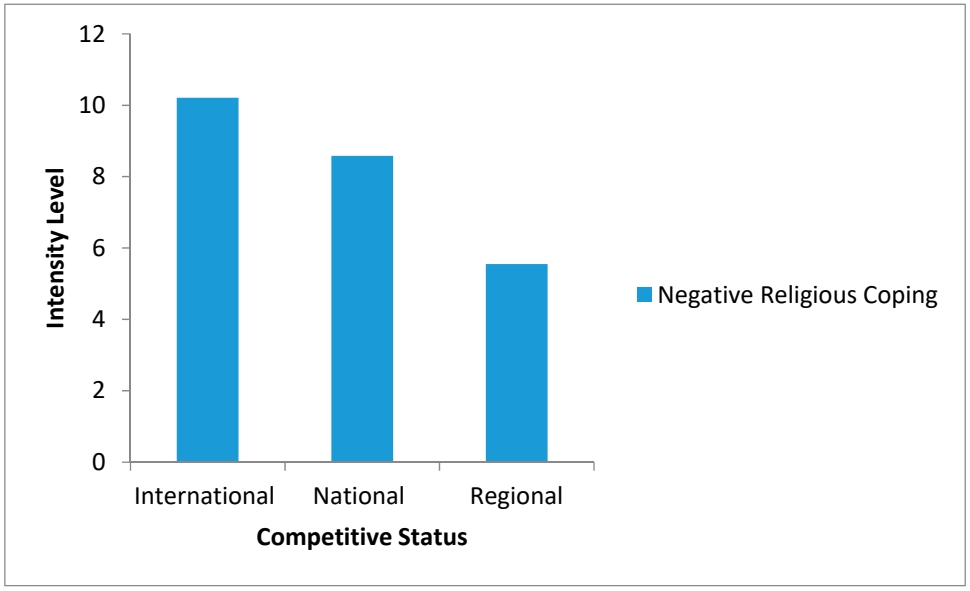

Figure 3. Student-athletes' reported negative coping across competitive status.

For religion, a similar follow-up between-subject ANCOVAs also showed inter-group variations for only negative religious coping, F (2, 278) = 7.911, p = 0.000, $\eta^2 p$ = 0.54. Specifically, Christian student-athletes reported the least mean value (M = 6.32) of purported use of negative religious coping, followed by other religious student-athletes: Muslim (M = 8.56) and others (M = 10.84), respectively (see Figure 4).

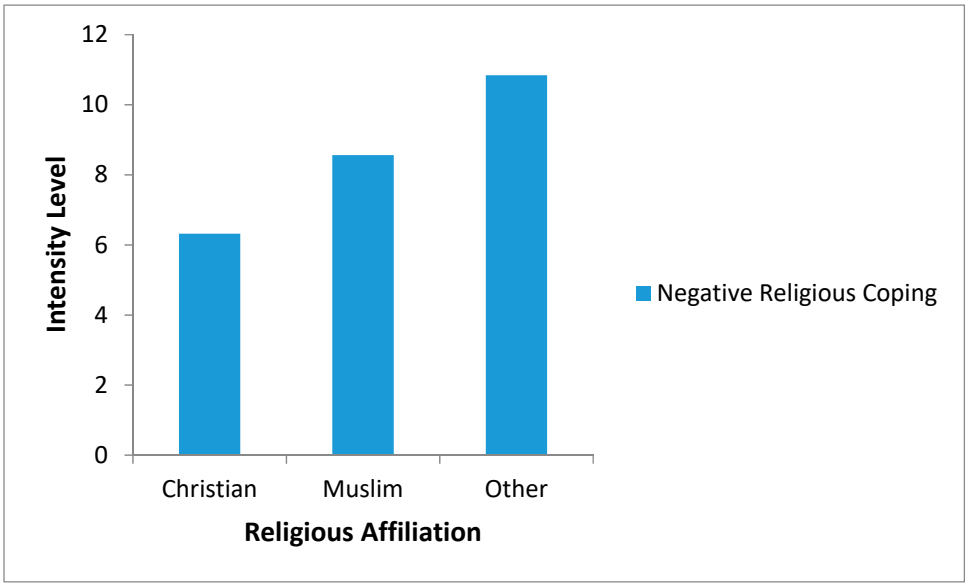

Figure 4. Student-athletes' reported negative coping across religious affiliation.

3.3. Multiple Regression Analysis on Predictors of Discrete Emotions and Religious Coping

To determine the best predictors of anxiety, anger, dejection and negative religious coping, separate multiple regression analyses were conducted using the aforementioned emotional dimensions and negative religious coping as the criterion variables and competitive status as well as religion as predictor variables.

As there were no significant influence of gender and age across discrete emotions and religious coping in the MANCOVA analyses, the former variables were not included in the subsequent regression models. The first regression which includes competitive status and religion made overall significant contribution to the regression model, F (*3*, *296*) = 9.221; $p < 0.0005$, which explained 38.5% of variance in reported anxiety. However, when the individual factors were considered separately, it was found that religion ($\beta = 0.31$) made the highest prediction on reported anxiety compared to competitive status ($\beta = 0.22$), all at $p = 0.000$ and $p = 0.25$, respectively.

The second regression that had competitive status and religion also contributed significantly to the regression model, F (*3*, *296*) = 11.662; $p < 0.0005$, explaining 20.6% of variance in reported anger. However, when the individual factors were assessed separately, only religion ($\beta = 0.28$; $p < 0.0005$) made unique significant prediction on reported anger. Although competitive status ($\beta = 0.09$; $p = 0.08$) made a marginal contribution, the noted p value was not significant.

A percentage of 16.8% of the total variance in reported dejection was explained by competitive status and religion in the regression model, F (*3*, *296*) = 7.233; $p < 0.0005$ for the third regression analysis. However, only religion ($\beta = 0.23$; $p < 0.0005$) uniquely made significant contribution to reported dejection when the individual factors were assessed separately. The noted minimal contribution of competitive status ($\beta = 0.10$, $p = 0.075$) was not significant.

The fourth regression saw the overall significant contribution of competitive status and religion to the regression model, F (*3*, *296*) = 13.673; $p < 0.0005$, accounting for 12.2% of total variance in reported negative religious coping. However, when these factors were individually assessed, it was found that competitive status ($\beta = 0.24$; $p < 0.0005$) made the highest prediction on reported negative religious coping compared to religion ($\beta = 0.21$; $p < 0.0005$).

4. Discussion

The main strength of the current study is the first quantitative design that simultaneously examines broad spectrum of discrete emotions and unaccustomed religious coping in a valid ecological setting compared to the individual emotional constructs (e.g., anxiety) and conventional psychological skills (e.g., self-talk, imagery, relaxation) that currently dominate sport psychology literature (Hanton et al. 2008; McCarthy 2011, 2012; Wagstaff et al. 2012). Despite the key roles that discrete emotions and diverse coping may play at the competitive level across different geographical boundaries, empirical research has largely overlooked the potential connections between these relational constructs, especially in societies (e.g., sub-Sahara Africa) where cultural issues are quite pervasive.

4.1. Interactions between Gender, Competitive Status, and Religion across Negative Discrete Emotions and Negative Religious Coping

Across all analyses, no significant between-subject interactions were identified. However, between-subject main effects for interpersonal factors (i.e., only competitive status and religion) were noted across only anxiety, anger, dejection and negative religious coping from other measured emotions (i.e., positive) and coping (i.e., positive religious) dimensions, though partly as hypothesized. Given that the concepts of discrete emotions and religious coping strategies could be best described as a function of different interpersonal factors, the no succinct variations noted across gender in this current study is in line with previous research that reported a similar finding during competition among elite athletes from Ghana (e.g., Hagan et al. 2017b). However, the current finding contradicts the com-

monly held assumption that gender differentiates emotional experiences (Jones and Cale 1989; Donzelli et al. 1990; Swain and Jones 1993). Drawing from cultural psychology, the body and mind are connected regarding the expression of negative emotions in distressed individuals regardless of gender in many parts of the world (Dzokoto 2010). According to Cohen (2009), these emotional experiences have been proven to differ across and within cultures, with non-western societies linked with more reports of physical symptoms in psychologically troubled individuals during stressful situations. Similarly, indigenous countries deep-rooted in diverse cultures (e.g., Ghana, Nigeria, Benin) are often noted to be on the strong uncertainty avoidance continuum (Hofstede 1991). Persons from these societies tend to experience negative emotions (e.g., anxiety, anger) irrespective of their gender status in stressful situations (Hagan et al. 2017b). According to some scholars (Hofstede 1991; Arrindell et al. 1997), these societies are perceived as compulsive or neurotic and stressful in challenging situations, thus buttressing the self-reported displayed negative emotions (e.g., anger, anxiety) by studied student-athletes regardless of their gender in the current study.

Referring to competitive status, international student-athletes were reportedly more anxious and angrier toward competition-related organizational issues than their counterparts with lower competitive standing (i.e., national and regional) when their mean values are compared (see Figure 1). Usually, high standard athletes are often uncomfortable with organizational related setbacks (e.g., bad training facilities; food, accommodation, and transport related problems) before competition contrarily to previously organized sporting events elsewhere. Drawing comparisons from previously well-organized competitions could trigger some unpleasant negative emotions because of the perceived high demands and unmet expectations associated mainly and directly with the sporting organizational challenges prior to competition (Fletcher and Hanton 2003). Because of their valued goals at stake, when prior events are deemed completely out of control, these moments are characterized with uncertainties that elicit negative emotions such as anxiety, apprehension, and displayed anger over unpleasant organizational issues that might have unfolded before competition (Hanin 2010; Neil et al. 2011). These dysfunctional emotions usually lead to switching behaviors and negative word-of-mouth that adversely influence athletes' commitment toward their teams and future games or events (Bougie et al. 2003; Sumino and Harada 2004).

Religion was identified as a source of variability and intensity in the reported display of different emotions by athletes (Kim-Prieto and Diener 2009; Tsai 2007). Christian, Muslim and other religious student-athletes reported varying degrees of negative emotions (i.e., anxiety, anger and dejection). However, comparing their mean values suggest that Christian athletes reportedly displayed less intensity compared to their Muslim and other groups on each of the unpleasant emotional constructs cited earlier (see Figure 2). Although religion has long been cited as a buffering link between positive emotional functioning (e.g., happiness) and subjective well-being (e.g., Koenig 2012; Koenig et al. 2012; Myers 2008), it can also elicit which specific emotions are desirable versus undesirable dependent on some circumstances (Emmons 2005). From the Affect Valuation standpoint, religion may impact beliefs on what emotions are ideal to experience because of culturally practiced systems (see Tsai 2007 for details). Judging from the unpleasant emotions reported by religious athletes of diverse backgrounds in the current study, perhaps due to the challenging or stressful organizational situations faced, it is imperative to encourage coping that facilitate certain emotions while discouraging others (Emmons 2005). Also, the order of varying intensity of reported negative emotions as displayed by student-athletes from the Christian, Muslim, and other religious affiliations mirrors the perspective that the intensity and expression of a specific emotion are determined and controlled by the type of religious affiliation of the individual (Tsai 2007). The least mean values reported by Christian athletes on anxiety, anger, and dejection support existing literature that Christians usually value high arousal positives states, such as excitement and happiness even though other religion also emphasis positive emotions, and not the sole providence of Christians

(Thagard 2005; Tsai 2007). Comparatively, the higher reported mean values of these expressed negative emotions by Muslim athletes also corroborate anthropological accounts that have widely recognized negative emotions such as justifiable anger and anxiousness as prevalent emotions in Islam (Abu-Lughod 1986; Appadurai 1985; Koenig and Al Shohaib 2014; Watts 2007). Similar accounts have been provided with scholarly evidence for followers of indigenous tribal religion, with emphasis on anger as a commonly expressed undesirable emotion (Harris 1978). Therefore, religion-specific set of beliefs, doctrines, and practices may moderate the intensity of a specific emotion (Vishkin 2020; Vishkin et al. 2014). Also, Christians are noted for regular doctrinal activities (e.g., more worship and prayers sessions) and weekly sectional or church groups' engagements compared to their Muslims counterparts. For example, prayer as a religious practice and/or congregational worship vary between Christians and Muslims, though both endorse prayer recitation sessions and other practices (e.g., melodious singing) (Johnson et al. 2015; Sharp 2010). Insofar as these characteristics may vary, student-athletes from these religious entities may use these doctrinal practices to serve as a buffering mechanism against the intensity levels of experienced emotions during situations perceived as challenging or demanding (Hagan and Schack 2017; Hagan et al. 2019). Additionally, it is also possible that even within a particular religion, there are persons who may be more engrossed in doctrinal practices and are thus considered to be more religious than individuals who are less immersed in such practices and are considered to be less religious (Vishkin 2020). However, the marginal difference between Christians and Muslim athletes might be due to similarities in belief, practices, and moral values (Koenig 2012; Koenig et al. 2012).

To regulate these negative emotional experiences, student-athletes should have a repertoire of diverse coping strategies available to them for automatic or deliberate use to manage displayed emotions (Gross and Feldman Barrett 2011; Gross and Thompson 2007). Some scholars (e.g., Jones 2012; Nicholls and Polman 2007; Nicholls et al. 2007) reiterate that these athletes can then initiate or use what they believe to be the most effective coping to counterbalance competition related situations they perceive to be challenging. Religious persons have the capacity of self-reflection through existential concerns related to uncertainties of random life events (Koole et al. 2006). Negative or unpleasant emotional experiences such as anxiety, anger, and dejection can arouse existential concerns (Greenberg et al. 2020; Lambert et al. 2014). Hence, religious coping may help individuals maintain soundness in the face of these potentially debilitating existential concerns (Batson and Stocks 2004). Surprisingly, there seems to be limited attention on religious coping within sport psychology literature (Sarkar et al. 2015).

In the current study, although international student-athletes differed from their national and regional counterparts, they all surprisingly reported using negative religious coping (see Figure 3). Previous research has clearly shown that elite athletes differ from their sub-elite counterparts based on their superior use of varied coping resources (e.g., Folkman and Moskowitz 2004; Hagan et al. 2017b; Nicholls and Polman 2007; Nicholls et al. 2007). For the maintenance of already reported negative emotions (i.e., anger, anxiety, dejection) in their adaptive value and not inhibit athletes' proper functioning, the reported use of negative religious coping may be maladaptive and cause emotional dysregulation in these performers (Lee et al. 2013; Werner and Gross 2010). This mismatch emotion-coping linkage has the potential to deplete athletes' limited, internal resources necessary to complete daily tasks (e.g., training) before competition and obstruct future outcomes caused by heightened reactivity and perceived prolonged recovery (Ekman 2003; Hill et al. 2011; Lee et al. 2013). For example, Carthy et al. (2010) showed in their study that when individuals were predisposed to challenging stimuli, those with heightened anxiety displayed greater emotional reactivity and slower emotional recovery than normal controls. Therefore, if athletes' negative emotions are not properly controlled, they can exacerbate and be harmful to these performers.

Other results also indicate that all studied student-athletes with different competitive standings reported using negative religious coping, though those with international status

recorded a higher mean value (see Figure 4). The stressful situations that international athletes suffer may vary compared to those that are encountered by relatively low standard athletes because of high valued goals and demands at stake (Hagan et al. 2017a, 2017b). According to previous research, these elite performers do encounter several unpleasant relational and organizational situations before major competitions (Campo et al. 2017; Martinent et al. 2012, 2013). Once these religious athletes perceive their situation to be challenging and completely out of control, they are more tempted to ascribe to thoughts such as "wondered whether God had abandoned me and/or felt punished by God for my lack of devotion" often caused by negative reappraisals of God's power, spiritual questioning and doubting, and interpersonal religious discontent (Pargament et al. 2004; Pargament et al. 2011). Further, Christian, Muslim, and other religious student-athletes reported differing magnitude of negative religious coping. However, Christian athletes reported less intensity of this coping mechanism compared to the other religious counterparts. The noted variations could possibly be ascribed to the different standards of religious adherence to doctrinal practices and values that may facilitate the controllability of one's emotions (Kim-Prieto and Diener 2009; Vishkin 2020). Also, although religion may serve as a symbolic meaning-making system that offers reappraisals of negative events, Muslim, compared to Christian athletes studied, may have failed reinterpreting their perceived challenges with positive coping in a way that makes their setbacks less negative (Koenig and Al Shohaib 2014). With varying usage level of reported negative religious coping, managing with aversive emotional states should encourage individuals to alleviate their negative existential concerns with positive emotion regulatory strategies (e.g., problem-based and emotion-based coping (Vishkin and Tamir 2020)). These strategies would help manage one's current emotional state in line with one's desired emotional state in an adaptive manner (Gross and Thompson 2007; Vishkin 2020).

4.2. Predictors of Negative Discrete Emotions and Negative Religious Coping

To analyze the relative contribution of the predictors of reported negative discrete emotions (i.e., anxiety, anger, and dejection), religion was identified as a unique predictor of all the elicited negative emotions in the current study. This finding is not surprising given that religion may prescribe the level of intensity with which specific emotions are experienced. Religion may also determine which emotion regulatory strategies are elicited toward the expression of a specific emotion and its intensity, especially in societies that are deeply rooted in culture (Kim-Prieto and Diener 2009; Tsai 2007). More studies are required to investigate the role of religion itself as a source of variability in the experience of discrete emotions in sport.

For negative religious coping, both competitive status and religion were the significant predictors, although the former made a slightly higher contribution compared to the latter. Therefore, depending on student-athletes' capacity relative to their competitive status to alter their competitive environment, religious status may also predict which specific emotions are elicited and regulated. By expressing a specific emotion, an individual's competitive standing may further help prescribe behaviors and practices to facilitate proper human functioning toward upcoming tasks. For athletes with religious inclination, religious practices such as prayer, singing, chanting, or meditation are diverse means through which specific negative emotions could actively be regulated in sport. Therefore, athletes' coping may vary as a function of their beliefs in a particular context (Hagan and Schack 2017; Hagan et al. 2019; Lutz et al. 2008).

4.3. Limitations

While the current study provides evidence for religion as a source of variability in the expression of emotions, some limitations need to be recognized in the interpretation of findings. First, the study sample was drawn from elite student-athletes—hence, restrict generalizability of noted findings to elite professional athletes. Second, due to the self-reported nature of measured variables, it is possible that some athletes will intentionally

report within a narrow range of values provided while others may also fluctuate (i.e., under- or over-report). Again, since data was collected at a single point in time, the results of this study may likely change if more data points had been taken over a period of time (e.g., before, during, and post-competition) to provide a more accurate picture of expressed emotions and coping variability. Alternatively, the use of momentary assessment techniques such as the experience sampling method or ecological momentary assessment protocols provide useful avenue for measuring felt emotions. Another concern is the use of prior to competition paradigm to measure discrete emotions and religious coping. Although this approach has generally been used in emotion studies (e.g., Hanton et al. 2004; Hemenover 2003; Thomas et al. 2004, 2007), it is limited in scope because emotions displayed before competition may not mimic real emotions expressed during competitive events. Therefore, current findings may be prone to measurement errors (Pittenger 2003). Future research could target the transactional perspective using a longitudinal design and more robust analytic tools, such as latent variable modelling, which allows the estimation of measurement errors and individual variations of emotional values in order to provide precise or accurate results (Raykov 1999).

Although the Brief RCOPE has considerable research attention, more studies are required to determine the extent to which the instrument is useful in cultures outside of Western societies like sub-Sahara Africa where issues about religion are quite dominant. The present study was also conducted in a cross-cultural environment. Hence, it is likely that intermixing of cultures across athletes' geographical boundaries may have influenced their expressed emotions and coping due to context-specific reasons. Therefore, it would be useful to examine whether context-specific differentials (e.g., ethnic identity) may affect athletes' emotions and coping options in future research.

4.4. Practical Implications

Findings from the current study provide evidence that athletes should employ appropriate strategies through appraisal of their situation to create appropriate emotional state for competition. Therefore, to enhance athletes' emotion regulation, practitioners working with religious athletes should help these performers identify emotional states that marry their beliefs because of their religious identities. It is critical to identify a coping strategy the athlete believes to be effective and not what coaches or the technical team conventionally prescribe. For example, many athletes use coping to manage how they are feeling through trial and error, thus require coping diversity that maintains respect for their identities. Because past research on religion and emotions in sport is relatively sparse compared to other disciplines (e.g., mainstream psychology) with predominantly Christian samples, it is important to replicate the current findings with other athletes from diverse religious affiliations (e.g., Hinduism, Buddhism). This call is because an athlete from a type of religion may experience emotions (i.e., intensity and variability) and coping that are more closely aligned with the values of the religion. This approach may help unearth useful information to guide practitioners in their quest to help athletes examine their emotional labeling and suggest alternate coping options that may be congruent with their beliefs. Therefore, working with religious athletes requires enhanced cultural competence and reflexive practice from practitioners in sport.

5. Conclusions

Findings provide a link between competitive level and religion on student-athletes' experienced emotions and religious coping. Athletes' competitive level showed variations in the display of negative discrete emotions (e.g., anxiety, anger) and negative religious coping. Another source of variability that is of interest arises from religion-emotion-coping linkage. Current findings demonstrate that athletes' religion affiliation influence the variability and controllability of emotions, with different religious athletes eliciting unpleasant emotions and negative religious coping. Different discrete emotions require their accompanying regulation strategies that are linked to each other. In the current

study, undesirable or negative emotions were connected to negative religious coping, a dysfunctional coping approach that may obstruct athletes' attaining optimal emotional states before competition. Athletes studied require functional strategies (e.g., positive religious coping, motivational strategies) that may boost weakened beliefs related to their struggles before competition. Current findings suggest that when examining relationships between discrete emotions and religious coping among athletes, it is necessary to account for variation by religious affiliation, as well as by competitive status. Future research could target other context-specific cultural characteristics (e.g., specific religious practices and other emotion regulation options (e.g., problem-based; emotion-based coping) not captured in the current study.

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