



Motivational Traits and Emotional Responsiveness in Educational and Sport Contexts

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Abstract

Background: Understanding the relationship between emotional responsiveness and motivational traits is essential in the context of physical education and sport sciences, as both constructs significantly influence students' academic engagement and athletic performance. Despite the importance of these variables, limited research in Iraqi universities has explored them within contemporary motivational and emotional frameworks.

Methods: This study employed a descriptive–correlational design. A stratified random sample of 48 fourth-year students from the College of Physical Education and Sport Sciences at Al-Noor University was selected. Two standardized instruments were used: a 20-item scale for emotional responsiveness and a 20-item scale for motivational traits. Data were analyzed using descriptive statistics, one-sample t-tests against theoretical midpoints, and Pearson correlation coefficients.

Results: The findings revealed that students demonstrated a moderate-to-high level of emotional responsiveness ($M = 67.4$, $SD = 8.5$; $t(47) = 3.5$, $p < 0.01$) and a high level of motivational traits ($M = 75.8$, $SD = 9.7$; $t(47) = 5.5$, $p < 0.001$). A significant positive correlation was found between emotional responsiveness and motivational traits ($r = 0.64$, $p < 0.001$).

Conclusion: The results suggest that higher motivational traits are associated with stronger emotional responsiveness. Integrating Self-Determination Theory and Control-Value Theory provides a useful framework for interpreting these findings.

Recommendations: It is recommended that physical education curricula incorporate strategies for enhancing emotional regulation and intrinsic motivation. Future studies should expand the sample size, include multi-site settings, and test intervention programs grounded in self-determination theory.

Introduction

Emotions and motivation are fundamental psychological constructs that play a central role in shaping learning processes, engagement, and performance outcomes in both educational and sport contexts, particularly in practice-oriented disciplines such as physical education and sport sciences. Achievement-related emotions—including enjoyment, pride, anxiety, and stress—have been shown to significantly influence students' persistence, cognitive engagement, and practical performance [1,2]. These emotions are not isolated reactions; rather, they are dynamically intertwined with motivational orientations and personal psychological resources that determine how students respond to academic and performance-related demands.

Within this framework, Self-Determination Theory (SDT) posits that the satisfaction of basic psychological needs—autonomy, competence, and relatedness—enhances intrinsic motivation, positive emotional experiences, and psychological well-being, whereas the frustration of these needs is associated with controlled motivation, emotional dysregulation, and reduced performance [1,3]. Complementing this perspective, Control-Value Theory (CVT) explains that achievement emotions arise from individuals' cognitive appraisals of perceived control over learning tasks and the subjective value assigned to those tasks; emotions such as enjoyment and pride are linked to high control and value, while anxiety and hopelessness emerge under conditions of low perceived control or threat, ultimately influencing motivation and performance outcomes [4–6].

In the field of sport and exercise psychology, empirical research has increasingly emphasized the role of emotion regulation strategies, particularly cognitive reappraisal and expressive suppression, in shaping emotional and motivational outcomes. Studies indicate that adaptive strategies such as cognitive reappraisal are associated with higher levels of self-determined motivation, emotional stability, and performance consistency, whereas maladaptive regulation strategies are linked to increased anxiety and motivational decline [7,8]. Furthermore, recent literature highlights the importance of Psychological Capital (PsyCap)—a higher-order construct encompassing hope, optimism, resilience, and self-efficacy—as a protective psychological resource that enables students to cope with stressors, regulate emotions effectively, and transform negative emotional states into positive motivational drives [9].

Previous studies, conducted primarily in Western and Asian contexts, consistently report significant

associations between motivation, achievement emotions, and academic or sport performance. These studies demonstrate that students with higher intrinsic motivation and stronger psychological resources tend to exhibit more positive emotional responses and better performance outcomes [2,6,9]. However, most existing research has examined these constructs separately or focused on either educational or sport settings in isolation, with limited integration of emotional responsiveness and motivational traits within a single analytical framework. Moreover, empirical evidence from developing educational contexts—particularly in Middle Eastern countries and Iraq—is notably scarce.

To date, no empirical study has systematically examined the relationship between emotional responsiveness and motivational traits among university-level physical education students in Iraq, despite the unique emotional and motivational demands imposed by practical assessments, teaching practicums, and graduation requirements. Consequently, there is limited evidence to inform educators and curriculum designers about how emotional responsiveness interacts with motivational traits in this specific context. The present study seeks to address this gap by providing an integrated examination of emotional responsiveness and motivational traits among fourth-year students in the College of Physical Education and Sport Sciences at Al-Noor University, thereby contributing context-specific empirical evidence and extending contemporary motivational and emotional theories to an underrepresented population.

2- Methods

Research Design

The study employed a descriptive–correlational research design. This design was selected because it allows for the measurement of emotional responsiveness and motivational traits as they naturally occur and enables the examination of the relationship between these two constructs without manipulation of variables [1].

Population and Sample

The research population consisted of fourth-year students enrolled in the College of Physical Education and Sport Sciences at Al-Noor University during the academic year 2023–2024. A stratified random sampling technique was used to ensure fair representation of students from different classes and sections. The final sample included **48 students**, which is considered sufficient for correlation analysis based on methodological standards in educational and sport psychology [2].

Research Instruments

Two standardized scales were adopted in this study:

1. **Emotional Responsiveness Scale:** A 20-item instrument measuring the degree to which students experience and express achievement-related emotions (e.g., enjoyment, pride, anxiety). Responses were scored on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Previous studies have supported the validity and reliability of this scale [3].
2. **Motivational Traits Scale:** A 20-item instrument measuring traits such as persistence, self-efficacy, intrinsic versus extrinsic orientation, and achievement motivation. Responses were scored on the same 5-point Likert scale. The scale has been used in educational and sport contexts with acceptable psychometric properties [4,5].

Validity and Reliability

Content validity of the instruments was verified by a panel of experts in sport psychology and educational measurement. Reliability was assessed using Cronbach's alpha, which demonstrated acceptable internal consistency: $\alpha = 0.83$ for the Emotional Responsiveness Scale and $\alpha = 0.86$ for the Motivational Traits Scale. These values exceed the minimum reliability threshold of 0.70 recommended in the literature [6].

Table (1): Descriptive Statistics of the Emotional Responsiveness Scale

Statistic	Value
Sample size (n)	48
Mean	67.4
Standard deviation (SD)	± 8.5
Theoretical mean	60
Calculated t-value	3.5
Significance level (p)	0.01
Response level	Moderate to high

The results indicated that the mean score of emotional responsiveness among the sample was $M = 67.4$, $SD = 8.5$. A one-sample t-test against the theoretical midpoint demonstrated that this level was significantly above average, $t(47) = 3.5$, $p < 0.01$. This suggests that fourth-year students in the College of Physical Education and Sport Sciences demonstrated a moderate-to-high level of emotional responsiveness..

Note:

This table is adopted from a previously published study by the author. Numerical values were transferred exactly as reported, while the accompanying explanation was translated and adapted linguistically without altering the statistical meaning.

Data Collection Procedure

After receiving ethical approval from the University Research Committee, the researcher administered the two instruments to students in classroom settings. The objectives of the study were explained, and informed consent was obtained. Students were assured of confidentiality, and participation was voluntary. Data were collected over a two-week period during the second semester of the 2023–2024 academic year.

Statistical Analysis

Data were coded and analyzed using SPSS version 25. The following statistical procedures were employed:

- **Descriptive statistics** (means, standard deviations, frequencies) to determine levels of emotional responsiveness and motivational traits.
- **One-sample t-tests** to compare students' scores with the theoretical midpoint of the scales.
- **Pearson correlation coefficient (r)** to examine the relationship between emotional responsiveness and motivational traits. Statistical significance was set at $p < 0.05$.

Results

4.1.1 Emotional Responsiveness

4.1.2 Motivational Traits

Table (2): Descriptive Statistics of the Motivational Traits Scale

Statistic	Value
Sample size (n)	48
Mean	75.8
Standard deviation (SD)	± 9.7
Theoretical mean	60
Calculated t-value	5.5
Significance level (p)	0.001
Motivational traits level	High

Table (2): Descriptive Statistics of the Motivational Traits Scale

Statistic	Value
Sample size (n)	48
Mean	75.8
Standard deviation (SD)	±9.7
Theoretical mean	60
Calculated t-value	5.5
Significance level (p)	0.001
Motivational traits level	High

The mean score for motivational traits was $M = 75.8$, $SD = 9.7$. Results from the one-sample t-test showed that the level was significantly higher than the theoretical midpoint, $t(47) = 5.5$, $p < 0.001$. Thus, students displayed a high level of motivational traits, re

Table (3): Correlation between Emotional Responsiveness and Motivational Traits

Variables	r-value	p-value	Relationship type
Emotional responsiveness × Motivational traits	0.64	0.001	Positive (moderate–strong)

Pearson correlation analysis revealed a significant positive relationship between emotional responsiveness and motivational traits ($r = 0.64$, $p < 0.001$). This indicates that students with higher motivational traits tended to report stronger levels of emotional responsiveness.

Discussion

The present study revealed that emotional responsiveness among fourth-year students in the College of Physical Education and Sport Sciences was at a moderate-to-high level, indicating that students possess a relatively well-developed capacity to perceive, experience, and manage emotions in response to academic and practical demands. This finding aligns with recent literature suggesting that emotionally engaged students and athletes tend to experience more adaptive emotional states—such as enjoyment, pride, and enthusiasm—particularly when they are deeply involved in meaningful academic and athletic tasks [10,11]. In practice-oriented disciplines, emotional responsiveness may serve as a functional mechanism that facilitates learning, performance adaptation, and persistence under evaluative pressure.

The elevated level of motivational traits observed in the current sample further supports contemporary research emphasizing the central role of intrinsic motivation, passion, and self-determined regulation in fostering academic engagement and psychological well-being. Recent studies have shown that motivated students are more likely to demonstrate resilience, sustained effort, and adaptive coping strategies when facing

flecting persistence, achievement orientation, and self-determination.

3.1.3 Relationship between Emotional Responsiveness and Motivational Traits

performance-related challenges [12,13]. Within physical education and sport sciences, where students are frequently exposed to competitive and performance-based assessments, high motivation appears to act as a protective factor against emotional exhaustion and disengagement.

The strong positive correlation identified between emotional responsiveness and motivational traits provides compelling empirical evidence for recent extensions of motivational theories in educational and sport contexts. Research grounded in Self-Determination Theory consistently demonstrates that satisfaction of basic psychological needs—autonomy, competence, and relatedness—supports both motivational quality and emotional well-being [14,15]. Students who feel autonomous and competent in their learning environment are more likely to experience functional emotions and to regulate negative emotional states effectively. These findings reinforce the view that motivation and emotion are not independent constructs but rather mutually reinforcing processes that shape students' academic and athletic experiences.

From the perspective of Control-Value Theory, recent empirical work highlights that achievement emotions are directly influenced by motivational appraisals of control and value. Students who perceive greater control over their learning tasks and assign higher value to academic and athletic activities are more likely to experience positive emotions, which in turn enhance motivation, engagement, and performance outcomes [16]. The present findings are consistent with this

theoretical framework, suggesting that motivational orientations may act as a key mechanism through which emotional responsiveness is shaped and maintained over time.

In sport psychology, increasing attention has been directed toward the mediating role of emotion regulation strategies in the relationship between motivation and emotional outcomes. Recent evidence indicates that athletes who employ adaptive regulation strategies, such as cognitive reappraisal, are better able to maintain motivation, manage competitive stress, and sustain optimal emotional states during both training and competition [17,18]. Furthermore, interpersonal factors—particularly coaching relationships and perceived social support—have been shown to significantly influence athletes' emotional stability and motivational persistence [19]. These findings underscore the importance of considering both individual and social dimensions when interpreting the motivation–emotion relationship in sport-related educational settings.

Within the context of higher education in Iraq, the present study contributes valuable empirical evidence to a relatively underexplored area. While international research has extensively documented the motivation–emotion link, regional studies remain limited. Recent local evidence suggests that Iraqi physical education students with higher motivational orientations exhibit greater emotional engagement and adaptability during academic activities [20]. The current findings extend this emerging body of literature by demonstrating that contemporary motivational–emotional frameworks are applicable within the Iraqi educational context, despite differences in cultural norms, institutional resources, and pedagogical practices.

Taken together, these findings highlight the necessity of adopting an integrated motivational–emotional approach in physical education and sport science programs. Enhancing students' motivation may represent an effective pathway to improving emotional responsiveness, thereby promoting adaptive learning behaviors, psychological well-being, and sustainable athletic performance. Such an approach is particularly relevant for senior students, who face heightened academic and performance-related pressures during the final stages of their university education.

Practical Implications

The results of this study suggest that academic curricula and instructional practices in physical education and sport sciences should prioritize strategies that support intrinsic motivation, such as

autonomy-supportive teaching, meaningful goal setting, and competence-enhancing feedback. In parallel, incorporating structured emotion regulation training—focused on adaptive strategies like cognitive reappraisal and emotional awareness—may further strengthen students' emotional responsiveness and resilience. By integrating motivational enhancement with emotional skill development, educational institutions may foster more engaged, emotionally stable, and high-performing graduates.

Conclusions

Based on the findings of the present study, several key conclusions can be drawn. First, fourth-year students in the College of Physical Education and Sport Sciences at Al-Noor University demonstrated a moderate-to-high level of emotional responsiveness, indicating a meaningful degree of emotional engagement with both academic and practical tasks. This suggests that students are not only cognitively involved in their learning process but are also emotionally invested in their educational and athletic experiences.

Second, the students exhibited a high level of motivational traits, including persistence, self-efficacy, and achievement orientation. These characteristics reflect a strong readiness to sustain effort, cope with challenges, and strive for success across academic and athletic domains, which is particularly important during the final year of university study.

Third, the presence of a strong and statistically significant positive correlation between emotional responsiveness and motivational traits ($r = 0.64$, $p < 0.001$) indicates that students with higher levels of motivation tend to report stronger emotional responsiveness. This finding highlights the close and dynamic interrelationship between motivation and emotional functioning in educational and sport contexts.

Finally, the results provide empirical support for the core assumptions of Self-Determination Theory (SDT) and Control-Value Theory (CVT). Specifically, the findings suggest that satisfaction of basic psychological needs and positive control–value appraisals play a fundamental role in shaping both motivational quality and achievement-related emotions, thereby influencing students' academic engagement and performance.

Recommendations

In light of the study's findings, the following recommendations are proposed:

1. Curriculum Development:

Physical education curricula should be designed to explicitly support students' needs for autonomy, competence, and relatedness. Incorporating learner-centered approaches and meaningful task design may enhance intrinsic motivation and promote adaptive emotional experiences.

2. Training in Emotion Regulation:

Structured workshops and classroom-based interventions should be implemented to develop students' emotion regulation skills, particularly adaptive strategies such as cognitive reappraisal. Such training may improve students' ability to manage stress, anxiety, and performance-related pressure.

3. Practical Teaching Applications:

Faculty members are encouraged to adopt autonomy-supportive teaching styles, provide constructive and competence-enhancing feedback, and create practice environments that increase students' perceptions of control and task value, thereby strengthening both motivation and emotional engagement.

4. Future Research Directions:

Future studies should involve larger and more diverse samples drawn from multiple universities across Iraq to enhance the generalizability of the findings. Longitudinal and experimental research designs are also recommended to examine causal relationships between emotional responsiveness and motivational traits.

5. Integration with Psychological Capital:

Subsequent research should explore the role of positive psychological resources—such as resilience, optimism, hope, and self-efficacy—in strengthening the relationship between emotions and motivation, thereby contributing to a more comprehensive understanding of student well-being and performance.

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