KMAN PUBLISHING INSTITUTE
Journal Website

Article history:
Received 23 July 2026
Revised 24 October 2026
Accepted 01 November 2026
Initial Publication 02 November 2026
Final Publication 01 September 2027

Journal of Adolescent and Youth Psychological Studies

Volume 8, Issue 5, pp 1-16

E-ISSN: 2981-2526

# Effectiveness of an Indigenous Life Skills Training Program on Cognitive Emotion Regulation Strategies and the Course of Interpersonal Relationships (Coach–Athlete–Parent) in Adolescent Football Players: A Pretest–Posttest Study with Follow-Up

Somaye. Wahabiyan[1], Rokhsareh. Badami[2*], Zohreh. Meshkati[2], Mahsa Sadat. Mousavi[3]

[1] Ph.D Student, Department of Motor Behaviour and Sport Psychology, Isf.C., Islamic Azad University, Isfahan, Iran
[2] Department of Motor Behaviour and Sport Psychology, Isf.C., Islamic Azad University, Isfahan, Iran
[3] Depatment of Midwifery, Community Health Research Center, Isf.C., Islamic Azad University, Isfahan, Iran

*** Corresponding author email address**: rokhsareh.badami@iau.ac.ir

A r t i c l e  I n f o

**Article type:**
*Original Research*

**How to cite this article:**
Wahabiyan, S., Badami, R., Meshkati, Z., & Mousavi, M. S. (2027). Effectiveness of an Indigenous Life Skills Training Program on Cognitive Emotion Regulation Strategies and the Course of Interpersonal Relationships (Coach–Athlete–Parent) in Adolescent Football Players: A Pretest–Posttest Study with Follow-Up. *Journal of Adolescent and Youth Psychological Studies, 8*(5), 1-16.
http://dx.doi.org/10.61838/kman.jayps.6636

© 2027 the authors. Published by KMAN Publication Inc. (KMANPUB), Ontario, Canada. This is an open access article under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

A B S T R A C T

**Objective:** This study aimed to determine the effectiveness of an indigenous life skills training program in improving cognitive emotion regulation strategies and the perceived course of interpersonal relationships within the coach–athlete–parent triad among adolescent football players.

**Methods and Materials:** This applied study employed a longitudinal quasi-experimental design with repeated measurements. The statistical population consisted of 14-year-old football players from a football academy, of whom data from 22 participants meeting the inclusion and exclusion criteria were included in the final analysis. The intervention comprised 12 twenty-minute life skills training sessions developed through a participatory action research approach and delivered immediately before technical and tactical football practices. Data were collected at multiple measurement points using the Cognitive Emotion Regulation Questionnaire and a questionnaire assessing positive and negative processes within coach–athlete–parent relationships. Statistical analyses were conducted using repeated-measures analysis of variance followed by Bonferroni-adjusted pairwise comparisons to examine changes across the pretest, posttest, and follow-up assessments.

**Findings:** Repeated-measures analysis revealed a statistically significant effect of time on all study outcomes ($p < .001$). Adaptive cognitive emotion regulation strategies increased significantly following the intervention, with an effect size of 81.8%, whereas maladaptive emotion regulation strategies decreased significantly, with an effect size of 83.9%. Negative processes within coach–athlete–parent relationships also showed a significant decline across measurement occasions, accounting for 60.5% of the observed variance, and this improvement remained stable during the follow-up period. Positive interpersonal relationship processes increased significantly from pretest to posttest and demonstrated an additional statistically significant improvement between the posttest and follow-up assessments, with an effect size of 72.4%. Overall, the inferential findings indicated both immediate and sustained intervention effects on emotional regulation and interpersonal relationship processes.

**Conclusion:** Integrating culturally adapted life skills training into routine football practice may provide an effective and sustainable approach to strengthening adaptive emotion regulation, reducing maladaptive cognitive responses, and improving the quality of coach–athlete–parent relationships among adolescent football players. The persistence and continued development of several outcomes during follow-up further support the incorporation of such programs into youth football development systems.

***Keywords:*** *Life Skills, Cognitive Emotion Regulation, Coach–Athlete–Parent Relationship, Youth Football, Positive Youth Development*

## 1. Introduction

Adolescence is a developmental period characterized by substantial biological, cognitive, emotional, and social changes that collectively reshape the way young people perceive themselves, regulate affect, respond to stress, and interact with significant others. During this period, adolescents become increasingly capable of abstract reasoning, self-reflection, and future-oriented thinking, yet their emotional and behavioral regulation systems are still developing, producing a developmental context in which intense affective experiences may coexist with incomplete regulatory capacities (Steinberg, 2005). These developmental characteristics make adolescence a particularly important period for preventive and developmental interventions designed to strengthen self-awareness, adaptive coping, decision-making, communication, and emotion-management capacities before maladaptive behavioral patterns become consolidated. Educational and psychosocial programs that target such competencies may therefore have consequences not only for immediate emotional adjustment but also for interpersonal functioning, school engagement, sport participation, and broader psychosocial development. The conceptual foundation for such interventions is closely aligned with the life skills framework proposed by the World Health Organization, which emphasizes a set of psychosocial abilities enabling individuals to deal effectively with the demands and challenges of everyday life, including decision-making, problem solving, creative and critical thinking, effective communication, interpersonal relationships, self-awareness, empathy, coping with emotions, and coping with stress (World Health, 1994). Within adolescence, life skills training is particularly relevant because these competencies address developmental tasks that are simultaneously intrapersonal and interpersonal. Recent educational research has similarly suggested that structured training programs can strengthen self-efficacy, decision-making, emotion management, and related adaptive psychological resources among adolescents and school-age populations (Mosbat Shahjouyi & Hasanvand, 2024; Obeidavi et al., 2024; Zayed & Mohamed, 2025). Consequently, life skills education may be understood not merely as an educational supplement, but as a developmental intervention capable of supporting adolescents in managing the emotional, social, and behavioral demands associated with transition into later adolescence and adulthood.

One of the most important psychological mechanisms through which life skills may influence adolescent adjustment is emotion regulation. Emotion regulation refers broadly to the processes through which individuals monitor, evaluate, modify, or maintain emotional experiences and responses in accordance with situational demands and personal goals. Cognitive emotion regulation is especially important because it concerns the ways people cognitively interpret and manage emotionally arousing experiences after they occur. Garnefski et al. identified a range of cognitive strategies used in response to negative or stressful life events, distinguishing relatively adaptive strategies such as acceptance, positive refocusing, refocus on planning, positive reappraisal, and putting into perspective from more maladaptive strategies such as self-blame, other-blame, rumination, and catastrophizing (Garnefski et al., 2001). This distinction is particularly relevant during adolescence, when individuals encounter increasing academic, family, peer, and performance-related demands but may not yet possess fully developed regulatory repertoires. Reliance on maladaptive cognitive strategies can intensify emotional distress, prolong negative affect, and interfere with effective problem solving, whereas adaptive strategies may enable adolescents to reinterpret stressful events, maintain perspective, identify actionable responses, and recover more efficiently from setbacks. Life skills interventions may influence these processes by making automatic cognitive reactions more explicit and by teaching adolescents to replace rigid, catastrophic, self-critical, or blame-oriented interpretations with more flexible forms of appraisal and planning. Recent intervention evidence has reinforced this proposition. For example, comparison of compassion-



JAYPS
E-ISSN: 2981-2526

focused therapy and Islamic life skills training among adolescents with internet addiction indicated that life skills-oriented approaches can improve cognitive emotion regulation strategies, highlighting the potential relevance of culturally grounded programs for adolescent emotional functioning (Alizadeh et al., 2025). Likewise, educational programs emphasizing self-awareness and emotion management have been associated with improvements in children's understanding and regulation of emotional experiences (Mosbat Shahjouyi & Hasanvand, 2024). These findings support the view that emotion regulation can be taught and strengthened through structured developmental experiences rather than being treated solely as an individual trait.

The potential value of life skills training may be especially pronounced in sport settings because sport constitutes a naturally occurring environment in which emotional challenges, interpersonal demands, goal pursuit, competition, failure, cooperation, and feedback are repeatedly experienced in real time. Youth sport exposes participants to moments of success and disappointment, competitive pressure, mistakes, coach evaluation, parental expectations, peer comparison, selection decisions, and the need to function cooperatively within a team. These experiences can generate emotionally demanding situations, but they also create repeated opportunities for learning psychological and social competencies. Long before contemporary positive youth development frameworks became prominent, psychological skills training research demonstrated that structured mental training could improve athletes' psychological functioning and performance-related responses. Daw and Burton showed that comprehensive psychological skills training could be systematically incorporated into collegiate sport, providing early evidence that athletes can acquire and apply mental competencies through planned intervention (Daw & Burton, 1994). Similarly, Thelwell and Greenlees demonstrated that a mental skills training package could improve psychological and performance-related outcomes in athletic contexts, further supporting the trainability of psychological skills within sport participation (Thelwell & Greenlees, 2001). These studies helped establish sport as more than a physical activity context; it can also operate as an educational environment in which athletes learn self-regulation, goal setting, concentration, coping, communication, and other competencies that extend beyond technical sport performance.

This developmental potential has been elaborated within the literature on positive youth development through sport. Gould and Carson argued that sport can provide a powerful context for life skills development when such skills are deliberately taught, reinforced, and connected to experiences beyond the sporting environment (Gould & Carson, 2008). Importantly, sport participation alone does not guarantee positive developmental outcomes. The quality of the sport environment, coaching practices, interpersonal climate, opportunities for reflection, and intentionality of life skills teaching determine whether experiences become developmentally constructive. This distinction between implicit exposure and explicit life skills education is central to contemporary youth sport research. Systematic evidence indicates that well-designed sport programs can contribute to positive youth development, including psychosocial competence, leadership, personal responsibility, emotional skills, and social development, particularly when interventions move beyond technical training and explicitly incorporate developmental objectives (Bean et al., 2018). A systematic review of adolescents' sport participation and socioemotional learning similarly showed that sport has considerable potential to support the development of competencies such as self-awareness, relationship skills, emotional regulation, and responsible decision-making when supportive contextual and pedagogical conditions are present (Jacobs et al., 2022). Thus, sport represents a potentially effective delivery setting for life skills training because learning can occur in close proximity to the situations in which emotional and interpersonal skills are actually needed.

The transfer of skills learned in sport to other areas of life is, however, a critical consideration. A psychological skill demonstrated on the football field cannot automatically be assumed to generalize to home, school, friendships, or future occupational settings. Camiré et al. conceptualized life skills transfer as a process through which competencies learned in sport are intentionally recognized, adapted, and applied in nonsport contexts (Camiré et al., 2012). From this perspective, transfer is strengthened when young athletes understand not only how to perform a skill but also why it matters, where else it can be used, and how its application may differ across contexts. For example, cognitive reframing used after a missed scoring opportunity can also be applied following an academic failure; active listening practiced when receiving coaching feedback can support family communication; and conflict-resolution strategies used with teammates may be relevant to peer and parent


JAYPS Adolescent and Youth Psychological Studies
E-ISSN: 2981-2526

relationships. Consequently, life skills interventions embedded in sport should include explicit mechanisms for reflection, rehearsal, contextual adaptation, and transfer. This is particularly important in adolescent football, where training sessions occur repeatedly, social interactions are intensive, and performance feedback is immediate. Embedding brief life skills components immediately before technical and tactical practice may therefore facilitate experiential reinforcement by allowing athletes to apply newly learned competencies during the same training environment in which stress, competition, cooperation, and feedback naturally occur.

Football also presents a distinctive interpersonal ecology because young athletes typically develop within a relational system involving at least three central actors: the athlete, the coach, and the parent. The quality of interactions among these parties can shape motivation, emotional security, sport enjoyment, commitment, and developmental experience. The coach may serve simultaneously as an instructor, evaluator, authority figure, and source of emotional support, while parents often influence participation through logistical support, encouragement, expectations, evaluation, and emotional reactions to performance. The athlete must therefore navigate two influential adult relationships that may be mutually supportive, inconsistent, or conflictual. Lisinskiene et al. conceptualized this dynamic as the coach–athlete–parent relationship and developed the Positive and Negative Processes in the Coach–Athlete–Parent Questionnaire to quantify athletes' perceptions of supportive and problematic interactions within this triadic system (Lisinskiene et al., 2019). Positive processes include dimensions such as emotional support, constructive communication, understanding, and relational closeness, whereas negative processes encompass conflict, pressure, control, and tension. This framework is especially useful for youth sport research because it shifts attention away from isolated dyadic relationships and recognizes that adolescent sport participation unfolds within an interconnected relational network. Improvements in an athlete's communication, emotional control, self-awareness, and conflict-management skills may therefore affect not only the athlete's internal emotional functioning but also the broader pattern of interaction within the sport triad.

The connection between emotion regulation and interpersonal relationships is particularly important in competitive youth sport. An adolescent who responds to errors with rumination, catastrophizing, or self-blame may be more vulnerable to frustration, withdrawal, anger, or defensive reactions toward coaches and parents. Conversely, an athlete who can positively reappraise a setback, refocus on planning, communicate needs assertively, and manage physiological and cognitive arousal may be better positioned to receive feedback and maintain constructive relationships during emotionally charged situations. From a broader psychosocial perspective, emotional intelligence, empathy, and conflict-resolution competencies are closely connected with life satisfaction and interpersonal adaptation, suggesting that emotional and relational skills function as interdependent rather than isolated domains (Khan et al., 2025). This interdependence is directly relevant to life skills interventions. Training that improves emotion regulation may reduce the likelihood that disappointment is expressed through interpersonal conflict, while communication and problem-solving training may simultaneously create a relational context that supports more effective emotional regulation. Similarly, educational interventions during adolescence have emphasized the importance of simultaneously addressing emotional, moral, and academic development rather than conceptualizing these dimensions as separate developmental processes (Obeidavi et al., 2024). Within sport, an integrated life skills approach may therefore be particularly useful because athletes are required to regulate themselves while continuously interacting with coaches, teammates, and parents.

The design of culturally and contextually relevant life skills programs also warrants attention. Many established psychological interventions are developed in settings that differ considerably in social expectations, coaching culture, family involvement, and communication norms from those in which they are subsequently implemented. Although core life skills such as emotion regulation, problem solving, and interpersonal communication may be broadly applicable, the situations through which they are taught, the meanings attached to coach and parent authority, acceptable forms of emotional expression, and common sources of sport-related conflict may vary across cultural and institutional contexts. A locally developed intervention can therefore improve ecological validity by incorporating the actual experiences and needs of participants. This principle is consistent with the broader life skills literature, which emphasizes purposeful design rather than assuming that generic sport participation automatically produces transferable psychosocial competencies (Bean et al., 2018; Gould & Carson, 2008). It is also compatible with contemporary evidence supporting culturally grounded psychological and educational interventions for adolescents, including life



JAYPS
E-ISSN: 2981-2526

skills-based approaches targeting cognitive emotion regulation (Alizadeh et al., 2025). A program informed by participatory needs assessment among athletes, coaches, and parents may be particularly well suited to identifying the emotionally salient experiences that occur in a specific football environment and converting these experiences into practical training scenarios.

Another methodological issue concerns the temporal course of intervention effects. Much of the value of developmental programming depends not only on whether participants improve immediately after training but also on whether gains are sustained after formal instruction ends. This question is especially relevant for life skills because their intended outcome is functional application over time rather than short-term knowledge acquisition. Research on psychological skills training in sport has historically emphasized repeated practice and integration into athletic routines, recognizing that psychological competencies develop through rehearsal, feedback, and consolidation rather than a single instructional exposure (Daw & Burton, 1994; Thelwell & Greenlees, 2001). Similarly, the positive youth development literature emphasizes sustained opportunities to practice, reflect on, and transfer skills across environments (Camiré et al., 2012; Jacobs et al., 2022). Repeated-measures designs with follow-up assessments can therefore provide information that a simple pretest–posttest comparison cannot capture. They can reveal whether improvement is progressive during intervention exposure, whether gains plateau after a particular stage, whether improvements decay after training, or whether certain interpersonal effects continue developing after the formal program ends. For coach–athlete–parent relationships in particular, delayed effects may be plausible because adolescents may require time to apply communication and conflict-management strategies repeatedly before stable relational changes become perceptible.

Despite the theoretical compatibility among life skills education, emotion regulation, positive youth development, and interpersonal functioning in sport, important gaps remain. Existing studies have demonstrated the value of life skills and socioemotional learning in educational and sport contexts (Bean et al., 2018; Jacobs et al., 2022; World Health, 1994), documented the relevance of cognitive emotion regulation in adaptation to stressful experiences (Garnefski et al., 2001), and highlighted the coach–athlete–parent relationship as a central element of youth sport development (Lisinskiene et al., 2019). However, fewer studies have simultaneously evaluated intrapersonal emotional regulation and relational processes within the coach–athlete–parent triad as outcomes of the same culturally adapted sport-based life skills intervention. Furthermore, there remains a need for longitudinal evidence examining how these outcomes change across multiple measurement occasions rather than only before and immediately after intervention. An intervention embedded directly within routine football practice may offer a particularly ecologically valid strategy because it allows emotional and interpersonal competencies to be taught in close temporal proximity to their practical application. Such an approach also aligns with developmental models that frame sport as a context for intentional life skills learning and transfer rather than as a setting in which positive development is assumed to occur automatically (Camiré et al., 2012; Gould & Carson, 2008). By integrating self-awareness, adaptive cognitive regulation, reduction of maladaptive responses, communication, conflict resolution, goal setting, and transfer strategies, a sport-specific life skills program may simultaneously strengthen athletes' internal regulatory capacities and improve the interpersonal climate surrounding their participation.

Accordingly, the present study aimed to determine the effectiveness of an indigenous sport-based life skills training program on adaptive and maladaptive cognitive emotion regulation strategies and positive and negative coach–athlete–parent relationship processes among adolescent football players across pretest, posttest, and follow-up assessments.

## 2. Methods and Materials

### *2.1. Study Design and Participants*

The present study was an applied investigation employing a longitudinal, single-group quasi-experimental design with repeated measurements at three assessment points: pretest, posttest, and a two-month follow-up. The study was conducted among 14-year-old male football players enrolled in a football academy. Because the intervention was designed as a developmental and educational program and withholding the training from eligible athletes was considered undesirable from both practical and ethical perspectives, the life skills training program was delivered to all 25 players who were actively participating in the academy at the beginning of the study. Nevertheless, predefined inclusion and exclusion criteria were applied to determine the participants whose data were eligible for the final statistical analyses, thereby increasing methodological


JAYPS E-ISSN: 2981-2526

consistency and reducing the potential influence of incomplete exposure to the intervention or missing measurements. The inclusion criteria consisted of official membership in the academy's 14-year-old age category, at least two years of experience in structured sports participation, and provision of written informed consent by both the adolescent athlete and a parent or legal guardian. Participants were excluded from the statistical analysis if they were absent from more than two intervention sessions, experienced a severe sports injury resulting in withdrawal from regular training during the intervention period, or failed to complete the study questionnaires at any of the three assessment points. After applying these criteria, complete data from 22 male adolescent football players were included in the final analyses. Prior to commencement of the study, written informed consent was obtained from the participating athletes and their parents. Participants were informed about the purpose and procedures of the research, the voluntary nature of participation, and their right to withdraw from the study at any stage without adverse consequences. They were also assured that all collected information would remain confidential and that questionnaires and statistical records would be coded without recording participants' names or other directly identifying information. The pretest assessment was administered before the commencement of the life skills training program, the posttest was conducted following completion of the 12-session intervention, and the follow-up assessment was performed two months after the intervention to examine the maintenance of intervention-related changes.

### *2.2. Measures*

The Cognitive Emotion Regulation Questionnaire (CERQ), developed by Garnefski et al. (2001), was used to assess cognitive strategies employed by participants when responding to stressful, threatening, or emotionally challenging experiences. The CERQ is a 36-item self-report instrument in which responses are rated on a five-point Likert scale ranging from 1 (almost never) to 5 (almost always). The questionnaire assesses nine cognitive emotion regulation strategies that can be conceptually classified into adaptive and maladaptive domains. Adaptive cognitive emotion regulation strategies include acceptance, positive refocusing, refocus on planning, positive reappraisal, and putting into perspective, whereas maladaptive strategies include self-blame, other-blame, rumination, and catastrophizing. Higher scores on each domain indicate greater reliance on the corresponding category of cognitive emotion regulation strategies. The instrument was selected because the intervention specifically addressed cognitive appraisal, emotional awareness, planning, rumination, catastrophizing, and attributional responses to stressful events occurring both during football participation and in everyday life. The CERQ was administered at the pretest, posttest, and two-month follow-up assessments to determine changes in adaptive and maladaptive cognitive emotion regulation over time. Previous research has supported the psychometric adequacy of the questionnaire and its translated versions for the assessment of cognitive emotion regulation. In the present study, internal consistency was evaluated using Cronbach's alpha. The alpha coefficient was .84 for the total questionnaire, while coefficients of .81 and .78 were obtained for the adaptive and maladaptive strategy domains, respectively, indicating acceptable internal consistency within the study sample.

The Positive and Negative Processes in Coach–Athlete–Parent Relationships Questionnaire (PNPCAP), developed by Lisinskiene et al. (2019), was employed to assess athletes' perceptions of constructive and problematic interpersonal processes within the coach–athlete–parent relational system. The instrument was designed specifically for the youth sport context and conceptualizes the athlete's developmental environment as a relational triangle in which coaches, athletes, and parents interact continuously and can either facilitate or hinder positive sport experiences. The questionnaire contains 24 items rated on a five-point Likert scale and provides scores for two principal dimensions: positive processes and negative processes. The positive processes dimension assesses perceived emotional support, constructive communication, interpersonal closeness, understanding, and supportive interactions involving the athlete, coach, and parents. The negative processes dimension assesses experiences such as interpersonal conflict, psychological pressure, excessive control, tension, and other potentially dysfunctional relational patterns perceived by the adolescent athlete. Higher positive-process scores reflect a more supportive and constructive relational climate, whereas higher negative-process scores indicate greater perceived conflict, pressure, and dysfunctional interaction within the coach–athlete–parent triad. A Persian version of the instrument had previously undergone psychometric evaluation and validation by Eghbali and Badami (2021). In the present study, the questionnaire was administered at all three measurement points to examine both immediate and sustained changes in athletes'


JAYPS Adolescent and Youth Psychological Studies
E-ISSN: 2981-2526

perceptions of interpersonal relationship processes. Cronbach's alpha coefficients calculated using the current sample were .86 for the total instrument, .83 for the positive processes dimension, and .79 for the negative processes dimension, demonstrating acceptable internal consistency.

### *2.3. Intervention*

The intervention consisted of an indigenous, sport-based life skills training program that had previously been developed through a qualitative participatory action research approach based on a field-based needs assessment involving adolescent football players, coaches, and parents. The program was therefore designed to address the psychosocial demands encountered by young athletes within their actual sporting and interpersonal environment rather than presenting life skills as decontextualized classroom concepts. The methodological and content quality of the intervention package was evaluated using the Appraisal of Guidelines for Research and Evaluation II (AGREE II) framework, with scores exceeding 75% across all six quality domains, indicating satisfactory methodological rigor and content appropriateness. Findings from the qualitative development phase were organized into six interconnected practical skill domains comprising self-awareness, adaptive emotion regulation, management of maladaptive responses, interpersonal communication, conflict resolution, and transfer of learned skills to everyday situations. The intervention was delivered in 12 sessions, each lasting approximately 20 minutes, in the football club environment immediately before the technical and tactical components of routine training sessions. Sessions were conducted in a workshop-oriented format incorporating brief instruction, guided discussion, behavioral rehearsal, role-play, and practical simulations related to situations commonly experienced during training and competition. Sessions 1 and 2 focused on self-awareness and emotional recognition, including identification of emotions such as anger, anxiety, disappointment, and frustration, recognition of emotional triggers during competition, and awareness of stressful interactions involving coaches and parents. Sessions 3 and 4 addressed adaptive cognitive regulation by teaching cognitive restructuring, positive reappraisal, and the replacement of dysfunctional interpretations with constructive and plan-oriented thoughts. Sessions 5 and 6 targeted maladaptive emotion regulation strategies and emphasized interruption of rumination following mistakes, unfavorable referee decisions, or match losses, together with strategies for reducing catastrophizing, self-blame, and blaming others. Sessions 7 and 8 concentrated on effective interpersonal communication, including active listening to coaching instructions, constructive reception of parental feedback, assertive communication, appropriate expression of needs and emotions, and the use of positive nonverbal communication. Sessions 9 and 10 focused on conflict management and problem solving through a structured five-step problem-solving approach that could be applied under competitive pressure, alongside anger-management techniques and strategies for resolving interpersonal disagreements with teammates, coaches, and parents. Sessions 11 and 12 emphasized motivational goal setting, development of individualized precompetition routines, consolidation of previously learned skills, and deliberate transfer of emotion-regulation, communication, and problem-solving skills from the football setting to family, school, and other everyday contexts. The integration of the intervention immediately before regular football practice was intended to facilitate ecological learning, provide opportunities for immediate behavioral application, and strengthen the transfer and maintenance of acquired skills beyond the formal training sessions.

### *2.4. Data Analysis*

Data analysis was performed using IBM SPSS Statistics version 26. Descriptive statistics, including means and standard deviations, were calculated to summarize study variables at the pretest, posttest, and two-month follow-up assessments. Before conducting the primary inferential analyses, the assumptions required for parametric repeated-measures procedures were examined. The Shapiro–Wilk test was used to evaluate the normality of the distributions, while relevant variance–covariance assumptions were assessed prior to hypothesis testing. Mauchly's test of sphericity was conducted to determine whether the sphericity assumption was satisfied for within-subject effects across the three measurement occasions; where violations of sphericity were identified, an appropriate correction to the degrees of freedom was applied. Changes in adaptive cognitive emotion regulation, maladaptive cognitive emotion regulation, positive coach–athlete–parent relationship processes, and negative coach–athlete–parent relationship processes across the pretest, posttest, and follow-up assessments were examined using repeated-measures multivariate analysis of variance (repeated-measures MANOVA), followed by corresponding within-subject analyses for individual



JAYPS Adolescent and Youth Psychological Studies
E-ISSN: 2981-2526

dependent variables. When significant time effects were identified, Bonferroni-adjusted pairwise comparisons were conducted to determine which assessment occasions differed significantly from one another while controlling for inflation of the Type I error rate associated with multiple comparisons. Effect sizes were calculated to estimate the magnitude of changes attributable to time and the intervention across the three measurement occasions. All statistical tests were two-tailed, and the level of statistical significance was set at $p < .05$.

## 3. Findings and Results

Descriptive statistics were first examined to characterize changes in adaptive and maladaptive cognitive emotion regulation strategies and positive and negative coach–athlete–parent relationship processes across the six measurement occasions, including the pretest, three posttest assessments, and two follow-up assessments. Table 1 presents the means, standard deviations, and Kolmogorov–Smirnov normality test results for each study variable at each measurement occasion.

**Table 1**

*Descriptive Statistics and Normality Test Results for the Study Variables Across Six Measurement Occasions*

| Variable | Measurement | M | SD | K–S Statistic | p |
|---|---|---|---|---|---|
| Adaptive emotion regulation strategies | Pretest | 21.54 | 1.37 | .165 | .131 |
| | Posttest 1 | 27.13 | 2.19 | .161 | .142 |
| | Posttest 2 | 30.45 | 2.24 | .171 | .092 |
| | Posttest 3 | 32.45 | 2.50 | .108 | .200 |
| | Follow-up 1 | 33.10 | 2.91 | .167 | .140 |
| | Follow-up 2 | 32.77 | 3.50 | .140 | .200 |
| Maladaptive emotion regulation strategies | Pretest | 29.77 | 1.80 | .169 | .103 |
| | Posttest 1 | 23.95 | 1.86 | .182 | .056 |
| | Posttest 2 | 19.64 | 2.08 | .160 | .147 |
| | Posttest 3 | 17.63 | 2.12 | .159 | .156 |
| | Follow-up 1 | 18.04 | 2.08 | .177 | .072 |
| | Follow-up 2 | 18.18 | 2.03 | .122 | .200 |
| Positive coach–athlete–parent relationship processes | Pretest | 17.68 | 3.85 | .179 | .064 |
| | Posttest 1 | 21.90 | 3.11 | .137 | .200 |
| | Posttest 2 | 24.10 | 3.26 | .182 | .057 |
| | Posttest 3 | 25.41 | 3.85 | .159 | .157 |
| | Follow-up 1 | 26.04 | 3.86 | .123 | .200 |
| | Follow-up 2 | 26.36 | 4.03 | .153 | .200 |
| Negative coach–athlete–parent relationship processes | Pretest | 13.68 | 2.85 | .131 | .200 |
| | Posttest 1 | 10.27 | 2.39 | .112 | .200 |
| | Posttest 2 | 7.95 | 2.31 | .129 | .200 |
| | Posttest 3 | 6.64 | 1.70 | .119 | .200 |
| | Follow-up 1 | 7.09 | 1.74 | .158 | .165 |
| | Follow-up 2 | 7.27 | 1.69 | .166 | .118 |

As shown in Table 1, adaptive emotion regulation strategies increased progressively from the pretest ($M = 21.54$, $SD = 1.37$) to the third posttest ($M = 32.45$, $SD = 2.50$), after which scores remained relatively stable at the first ($M = 33.10$, $SD = 2.91$) and second follow-up ($M = 32.77$, $SD = 3.50$). In contrast, maladaptive emotion regulation strategies declined substantially from the pretest ($M = 29.77$, $SD = 1.80$) to the third posttest ($M = 17.63$, $SD = 2.12$), with only minor changes during the two follow-up assessments. A comparable pattern was observed for interpersonal relationships. Positive coach–athlete–parent relationship processes increased from $M = 17.68$ ($SD = 3.85$) at pretest to $M = 26.36$ ($SD = 4.03$) at the second follow-up, whereas negative relationship processes decreased from $M = 13.68$ ($SD = 2.85$) at pretest to $M = 6.64$ ($SD = 1.70$) at the third posttest and remained comparatively stable during follow-up. Furthermore, all Kolmogorov–Smirnov tests were nonsignificant (all $p > .05$), supporting the assumption of approximate normality across all variables and measurement occasions.

Before conducting the repeated-measures analyses, the principal assumptions of the parametric model were examined. As indicated by the Kolmogorov–Smirnov results presented in Table 1, none of the distributions differed



JAYPS
E-ISSN: 2981-2526

significantly from normality. Mauchly's test, however, indicated that the assumption of sphericity was violated for adaptive emotion regulation strategies, W = .034, $\chi^2$ = 64.31, p < .001; maladaptive emotion regulation strategies, W = .006, $\chi^2$ = 97.30, p < .001; positive coach–athlete–parent relationship processes, W = .033, $\chi^2$ = 65.11, p < .001; and negative coach–athlete–parent relationship processes, W = .008, $\chi^2$ = 93.37, p < .001. Accordingly, Greenhouse–Geisser corrections were applied when evaluating the within-subject effects. The multivariate tests also demonstrated a significant effect of time for all four outcomes. For adaptive emotion regulation strategies, Pillai's trace was .882, F(5, 17) = 183.62, p < .001, partial $\eta^2$ = .882; for maladaptive strategies, Pillai's trace was .896, F(5, 17) = 261.81, p < .001, partial $\eta^2$ = .896; for positive relationship processes, Pillai's trace was .780, F(5, 17) = 162.72, p < .001, partial $\eta^2$ = .780; and for negative relationship processes, Pillai's trace was .622, F(5, 17) = 61.98, p < .001, partial $\eta^2$ = .622. Wilks' lambda tests yielded the same substantive conclusions, indicating that scores changed significantly across the six assessment occasions for all study variables.

**Table 2**

*Repeated-Measures Analysis of Variance for Study Outcomes Across Six Measurement Occasions*

| Variable | Correction | SS | df | MS | F | p | Partial $\eta^2$ | Power |
|---|---|---|---|---|---|---|---|---|
| Adaptive emotion regulation strategies | Greenhouse–Geisser | 2231.697 | 2.15 | 1038.74 | 235.93 | < .001 | .818 | 1.000 |
| Maladaptive emotion regulation strategies | Greenhouse–Geisser | 2519.152 | 2.03 | 1239.90 | 324.19 | < .001 | .839 | 1.000 |
| Positive coach–athlete–parent relationship processes | Greenhouse–Geisser | 1208.432 | 2.67 | 451.51 | 183.80 | < .001 | .724 | 1.000 |
| Negative coach–athlete–parent relationship processes | Greenhouse–Geisser | 806.270 | 2.06 | 391.68 | 109.90 | < .001 | .605 | 1.000 |

As presented in Table 2, the Greenhouse–Geisser-corrected repeated-measures analyses revealed statistically significant effects of time for all four study variables. Adaptive emotion regulation strategies changed significantly across measurement occasions, F = 235.93, p < .001, partial $\eta^2$ = .818, indicating that approximately 81.8% of the within-subject variance was associated with changes over time. Maladaptive emotion regulation strategies likewise demonstrated a significant time effect, F = 324.19, p < .001, partial $\eta^2$ = .839, representing an effect size of 83.9%. Significant changes were also observed for positive coach–athlete–parent relationship processes, F = 183.80, p < .001, partial $\eta^2$ = .724, and negative relationship processes, F = 109.90, p < .001, partial $\eta^2$ = .605. Thus, the largest time-related effect was observed for maladaptive emotion regulation strategies, followed by adaptive emotion regulation strategies, positive relationship processes, and negative relationship processes. The observed statistical power was 1.00 for all analyses, indicating a high probability of detecting the observed effects.

**Table 3**

*Bonferroni-Adjusted Pairwise Comparisons Across Measurement Occasions*

| Variable | Comparison | Mean Difference | SE | p |
|---|---|---|---|---|
| Adaptive emotion regulation strategies | Pretest – Posttest 1 | -5.59 | .299 | < .001 |
| | Pretest – Posttest 2 | -8.90 | .335 | < .001 |
| | Pretest – Posttest 3 | -10.90 | .451 | < .001 |
| | Pretest – Follow-up 1 | -11.45 | .541 | < .001 |
| | Pretest – Follow-up 2 | -11.22 | .638 | < .001 |
| | Posttest 1 – Posttest 2 | -3.32 | .153 | < .001 |
| | Posttest 1 – Posttest 3 | -5.31 | .380 | < .001 |
| | Posttest 1 – Follow-up 1 | -5.86 | .448 | < .001 |
| | Posttest 1 – Follow-up 2 | -5.64 | .553 | < .001 |
| | Posttest 2 – Posttest 3 | -2.00 | .329 | < .001 |
| | Posttest 2 – Follow-up 1 | -2.54 | .376 | < .001 |
| | Posttest 2 – Follow-up 2 | -2.31 | .481 | < .001 |
| | Posttest 3 – Follow-up 1 | -.545 | .329 | .833 |
| | Posttest 3 – Follow-up 2 | -.318 | .269 | .921 |
| | Follow-up 1 – Follow-up 2 | .227 | .311 | .978 |
| Maladaptive emotion regulation strategies | Pretest – Posttest 1 | 5.77 | .534 | < .001 |



JAYPS
E-ISSN: 2981-2526

| | | | | |
|---|---|---|---|---|
| | Pretest – Posttest 2 | 10.09 | .546 | < .001 |
| | Pretest – Posttest 3 | 12.09 | .546 | < .001 |
| | Pretest – Follow-up 1 | 11.68 | .548 | < .001 |
| | Pretest – Follow-up 2 | 11.54 | .565 | < .001 |
| | Posttest 1 – Posttest 2 | 4.32 | .282 | < .001 |
| | Posttest 1 – Posttest 3 | 6.31 | .290 | < .001 |
| | Posttest 1 – Follow-up 1 | 5.90 | .348 | < .001 |
| | Posttest 1 – Follow-up 2 | 5.77 | .360 | < .001 |
| | Posttest 2 – Posttest 3 | 2.10 | .066 | < .001 |
| | Posttest 2 – Follow-up 1 | 1.56 | .170 | < .001 |
| | Posttest 2 – Follow-up 2 | 1.45 | .225 | < .001 |
| | Posttest 3 – Follow-up 1 | -.409 | .182 | .533 |
| | Posttest 3 – Follow-up 2 | -.545 | .244 | .543 |
| | Follow-up 1 – Follow-up 2 | -.136 | .165 | .724 |
| Positive coach–athlete–parent relationship processes | Pretest – Posttest 1 | -4.22 | .474 | < .001 |
| | Pretest – Posttest 2 | -6.32 | .363 | < .001 |
| | Pretest – Posttest 3 | -7.72 | .379 | < .001 |
| | Pretest – Follow-up 1 | -8.86 | .345 | < .001 |
| | Pretest – Follow-up 2 | -8.68 | .374 | < .001 |
| | Posttest 1 – Posttest 2 | -2.09 | .301 | < .001 |
| | Posttest 1 – Posttest 3 | -3.50 | .359 | < .001 |
| | Posttest 1 – Follow-up 1 | -4.14 | .396 | < .001 |
| | Posttest 1 – Follow-up 2 | -4.45 | .430 | < .001 |
| | Posttest 2 – Posttest 3 | -1.40 | .340 | .007 |
| | Posttest 2 – Follow-up 1 | -2.04 | .155 | < .001 |
| | Posttest 2 – Follow-up 2 | -2.36 | .150 | < .001 |
| | Posttest 3 – Follow-up 1 | -.636 | .155 | < .001 |
| | Posttest 3 – Follow-up 2 | -.955 | .180 | .008 |
| | Follow-up 1 – Follow-up 2 | -.318 | .102 | .076 |
| Negative coach–athlete–parent relationship processes | Pretest – Posttest 1 | 3.40 | .194 | < .001 |
| | Pretest – Posttest 2 | 5.73 | .417 | < .001 |
| | Pretest – Posttest 3 | 7.04 | .477 | < .001 |
| | Pretest – Follow-up 1 | 6.59 | .495 | < .001 |
| | Pretest – Follow-up 2 | 6.41 | .482 | < .001 |
| | Posttest 1 – Posttest 2 | 2.31 | .274 | < .001 |
| | Posttest 1 – Posttest 3 | 3.64 | .387 | < .001 |
| | Posttest 1 – Follow-up 1 | 3.18 | .425 | < .001 |
| | Posttest 1 – Follow-up 2 | 3.00 | .406 | < .001 |
| | Posttest 2 – Posttest 3 | 1.32 | .297 | .003 |
| | Posttest 2 – Follow-up 1 | .864 | .385 | .539 |
| | Posttest 2 – Follow-up 2 | .682 | .374 | .823 |
| | Posttest 3 – Follow-up 1 | -.455 | .252 | .699 |
| | Posttest 3 – Follow-up 2 | -.636 | .259 | .345 |
| | Follow-up 1 – Follow-up 2 | -.182 | .084 | .637 |

Bonferroni-adjusted pairwise comparisons presented in Table 3 clarified the temporal pattern of these effects. For adaptive emotion regulation strategies, the pretest score differed significantly from all three posttests and both follow-up assessments (all $p < .001$). Posttest 1 also differed significantly from Posttests 2 and 3 and from both follow-ups, while Posttest 2 differed significantly from Posttest 3 and both follow-up assessments (all $p < .001$). However, no significant differences were observed between Posttest 3 and either follow-up or between the two follow-up assessments (all $p > .05$), indicating that the improvement in adaptive strategies reached a relatively stable level by the third posttest. A similar pattern was found for maladaptive emotion regulation strategies: scores declined significantly from pretest through the successive posttest assessments, and the first two posttests differed significantly from subsequent measurements, whereas differences between Posttest 3 and the two follow-ups and between the two follow-ups were nonsignificant, suggesting maintenance of the reduction achieved by the third posttest. For positive coach–athlete–parent relationship processes, significant increases were observed from pretest to every subsequent



JAYPS Adolescent and Youth Psychological Studies
E-ISSN: 2981-2526

assessment and across most successive posttest comparisons. Importantly, scores at Posttest 3 remained significantly lower than those at Follow-up 1 ($p < .001$) and Follow-up 2 ($p = .008$), indicating that positive relationship processes continued to improve after completion of the active intervention; however, the difference between the two follow-up assessments was not significant ($p = .076$), suggesting stabilization thereafter. For negative relationship processes, significant reductions occurred from pretest to all subsequent assessments and from Posttest 1 to all later measurements. Posttest 2 also differed significantly from Posttest 3 ($p = .003$), but not from either follow-up, and no significant differences were observed among Posttest 3, Follow-up 1, and Follow-up 2. Collectively, these results indicate that the life skills program was associated with progressive improvement in both emotion regulation and interpersonal relationship processes, with most changes becoming stable by the later posttest and follow-up phases, while positive relationship processes showed an additional delayed improvement during follow-up.

## 4. Discussion

The present study examined the effectiveness of an indigenous, sport-based life skills training program in improving cognitive emotion regulation strategies and the course of coach–athlete–parent relationships among adolescent football players across six measurement occasions. The findings showed a clear and statistically significant pattern of change over time in all four study outcomes. Adaptive cognitive emotion regulation strategies increased progressively from the pretest through the posttest phases and remained stable during follow-up, whereas maladaptive cognitive emotion regulation strategies declined significantly over the same period and similarly demonstrated maintenance after the intervention. Positive coach–athlete–parent relationship processes also improved significantly, with an important additional finding that positive relational processes continued to increase from the final posttest into the follow-up period before reaching relative stability. In contrast, negative relationship processes decreased markedly during the intervention and remained largely stable during follow-up. The magnitude of the observed effects was substantial, particularly for adaptive and maladaptive emotion regulation, followed by positive and negative relationship processes. These results suggest that embedding life skills training within routine football practice can produce meaningful improvements in both intrapersonal emotional regulation and the interpersonal environment surrounding adolescent athletes.

The significant increase in adaptive cognitive emotion regulation strategies is consistent with the theoretical proposition that life skills training can strengthen adolescents' capacity to interpret, manage, and respond constructively to emotionally demanding situations. Cognitive emotion regulation concerns the cognitive processes individuals use after exposure to stressful or negative experiences, including acceptance, planning, positive refocusing, positive reappraisal, and putting events into perspective (Garnefski et al., 2001). The intervention in the present study directly targeted several of these processes by teaching participants to identify emotional triggers, reconstruct dysfunctional interpretations, reappraise negative situations, and shift attention from emotionally reactive responses toward planning and problem solving. The progressive increase in adaptive strategies across successive posttests therefore appears theoretically coherent. Rather than producing an abrupt, isolated change, the intervention may have facilitated gradual acquisition and consolidation of cognitive skills through repeated practice in emotionally meaningful football situations. This interpretation is compatible with the broader life skills framework, which emphasizes the development of psychosocial competencies such as self-awareness, emotional coping, decision-making, and problem solving as capacities that can be learned through structured education and repeated application (World Health, 1994).

The observed improvement in adaptive cognitive emotion regulation also accords with findings from recent intervention research among adolescents. Alizadeh et al. reported that life skills-oriented intervention could significantly improve cognitive emotion regulation strategies among adolescents, supporting the proposition that cognitive responses to stressful experiences are modifiable through structured training (Alizadeh et al., 2025). Similarly, educational programs centered on self-awareness and emotion management have demonstrated positive effects on emotional competencies in younger populations (Mosbat Shahjouyi & Hasanvand, 2024). The present findings extend these results into a sport-specific context by showing that emotion regulation skills can be developed within the ecological environment of football practice. This is important because adolescent athletes encounter frequent emotionally salient events, including mistakes, defeat, criticism, performance pressure, interpersonal disagreement, and parental expectations.


JAYPS E-ISSN: 2981-2526

Training adaptive regulation strategies immediately before technical and tactical practice may have allowed participants to apply new cognitive approaches in real situations soon after instruction, thereby strengthening learning through experience and reinforcing the functional value of the skills.

The significant reduction in maladaptive cognitive emotion regulation strategies provides further evidence that the intervention altered the way participants processed stressful sport-related experiences. Maladaptive strategies such as rumination, catastrophizing, self-blame, and blaming others are associated with prolonged emotional distress and ineffective coping (Garnefski et al., 2001). These patterns may be particularly problematic in competitive youth sport because a single mistake, unfavorable referee decision, missed opportunity, or critical comment can trigger repetitive negative thinking and emotional escalation. Sessions in the present intervention explicitly addressed these processes by teaching athletes to interrupt rumination, challenge catastrophic interpretations, reduce excessive self-blame, and avoid directing blame toward coaches, teammates, or parents. The large effect observed for maladaptive strategies suggests that these intervention components were particularly influential. The stability of the reduction during follow-up further indicates that participants may have internalized alternative cognitive responses rather than merely demonstrating short-term changes associated with repeated assessment or immediate intervention exposure.

This finding is also compatible with developmental perspectives on adolescence. Emotional and cognitive regulatory systems continue to mature during adolescence, and young people may show heightened emotional reactivity while executive and self-regulatory capacities are still developing (Steinberg, 2005). Consequently, interventions that provide explicit cognitive and behavioral strategies may be especially useful during this developmental stage because they supplement emerging self-regulatory capacities with structured tools for managing emotionally intense situations. Programs emphasizing emotional, moral, social, and behavioral competencies have similarly been proposed as particularly important during the critical adolescent period (Obeidavi et al., 2024). The current results therefore support the value of introducing structured emotion regulation education at a developmental stage when adolescents are increasingly exposed to complex social and performance demands but may still benefit substantially from guided practice in managing them.

The findings also revealed significant improvement in positive coach–athlete–parent relationship processes. This result can be understood within the relational nature of youth sport. The adolescent athlete does not participate in isolation but functions within an interconnected network involving coaches and parents, each of whom can influence motivation, emotional experiences, perceived support, and sport engagement. Lisinskiene et al. emphasized that the coach–athlete–parent relationship should be conceptualized as a triadic system containing both positive processes, such as support, communication, and closeness, and negative processes, such as pressure, control, and conflict (Lisinskiene et al., 2019). The intervention addressed several competencies directly relevant to this relational system, including active listening, assertive communication, constructive reception of feedback, positive nonverbal communication, problem solving, anger management, and interpersonal conflict resolution. Improvement in positive relational processes may therefore have emerged because athletes became better able to interpret feedback constructively, communicate their needs, regulate negative emotional responses during interactions, and respond to coaches and parents in a more deliberate manner.

The continued improvement in positive relationship processes from the final posttest into the follow-up period is especially noteworthy. Unlike some cognitive skills, which may change relatively quickly once an individual learns and practices a strategy, interpersonal relationships are reciprocal and may require repeated interactions before meaningful change becomes consolidated. An athlete may begin communicating more effectively during the intervention, but coaches and parents may need time to perceive this change, adjust their own responses, and establish new patterns of interaction. The delayed strengthening of positive relational processes may therefore reflect a cumulative interpersonal effect. As athletes repeatedly applied communication and conflict-management skills, their social environment may have responded in ways that reinforced more supportive and constructive exchanges. This interpretation is consistent with the broader literature on life skills transfer, which emphasizes that skills learned in sport become developmentally meaningful when they are intentionally applied across contexts and reinforced through real-life relationships (Camiré et al., 2012). It is also consistent with positive youth development models that emphasize the role of supportive relationships, meaningful engagement, and opportunities for skill application in converting sport


JAYPS Adolescent and Youth Psychological Studies
E-ISSN: 2981-2526

participation into broader developmental gains (Bean et al., 2018).

The significant reduction in negative coach–athlete–parent relationship processes further supports the relational impact of the intervention. Decreases in perceived conflict, psychological pressure, and controlling interaction may partly reflect improvements in the athletes' own emotional and communicative responses. When adolescents are better able to manage anger, reduce catastrophizing, tolerate criticism, and engage in structured problem solving, potentially conflictual interactions may be less likely to escalate. The intervention also taught participants to identify relational stressors and distinguish between emotional reactions and constructive responses, which may have reduced the perceived intensity of negative exchanges. From this perspective, changes in emotion regulation and interpersonal relationships are likely to be mutually reinforcing. Improved regulation may reduce conflict, while a less conflictual relational environment may in turn make it easier for adolescents to regulate emotion effectively. This interdependence is consistent with evidence that emotional intelligence, empathy, and conflict-resolution skills are closely related to interpersonal functioning and life satisfaction (Khan et al., 2025).

The observed relationship outcomes can also be interpreted through the positive youth development literature. Sport is frequently described as a promising context for psychosocial growth, but participation alone does not automatically produce positive developmental outcomes. Rather, developmental benefits are more likely when programs intentionally teach life skills, provide supportive relationships, and create opportunities for reflection and transfer (Gould & Carson, 2008). Systematic review evidence similarly suggests that sport-based positive youth development programs can strengthen psychosocial competencies when developmental objectives are explicitly embedded in program design (Bean et al., 2018). The present intervention followed this intentional approach. Rather than assuming that football participation would naturally enhance emotional and social competence, the program explicitly addressed self-awareness, emotion regulation, communication, problem solving, conflict management, goal setting, and skill transfer. The significant improvements in both cognitive and relational outcomes therefore support the proposition that sport becomes a more effective developmental context when psychosocial learning is deliberately integrated into routine practice.

The results are also consistent with the growing literature on socioemotional learning through sport. Jacobs et al. concluded that adolescent sport participation can support socioemotional development, particularly when learning opportunities involve self-awareness, emotional competence, relationship skills, and responsible decision-making (Jacobs et al., 2022). The present findings provide empirical support for these mechanisms in adolescent football. The intervention did not focus exclusively on sport performance but used football as the context through which adolescents practiced transferable psychological and interpersonal competencies. This distinction is important because the goal of life skills education is broader than improving immediate competitive outcomes. It involves developing competencies that can support young people in family relationships, educational contexts, peer interactions, and future life challenges. The inclusion of transfer-oriented sessions in the intervention may therefore have contributed to the maintenance of effects during follow-up by encouraging participants to apply the acquired strategies beyond formal training sessions.

The present findings also correspond with earlier sport psychology research demonstrating that psychological skills can be systematically developed through structured training. Daw and Burton showed that comprehensive psychological skills training could improve athletes' psychological functioning when mental skills were deliberately incorporated into sport programs (Daw & Burton, 1994). Thelwell and Greenlees likewise demonstrated beneficial effects of a structured mental skills package in an athletic setting (Thelwell & Greenlees, 2001). Although those interventions differed from the current program in population, content, and primary outcomes, they support a common principle: psychological competencies are trainable and may be strengthened when instruction is structured, contextually relevant, and repeatedly practiced. The present study extends this principle by emphasizing not only internal mental skills but also the interpersonal processes connecting adolescent athletes with coaches and parents.

Another explanation for the magnitude and maintenance of the observed effects may lie in the indigenous and participatory nature of the intervention. The program was developed through a needs-oriented process involving the realities of players, coaches, and parents and was delivered within the actual sporting environment. This likely increased contextual relevance and may have made the examples, language, exercises, and simulated situations more recognizable to participants. Adolescents may engage more



JAYPS
E-ISSN: 2981-2526

readily with psychological training when the material is directly connected to experiences they encounter during practice, competition, and interaction with significant adults. Such contextualization is consistent with the principle that life skills are most effectively developed when learning is intentional, experiential, and meaningfully connected with participants' lives (Camiré et al., 2012; Gould & Carson, 2008). The participatory foundation of the program may therefore have contributed to both acceptability and ecological validity.

The repeated-measures pattern also provides insight into the developmental trajectory of change. Adaptive emotion regulation increased and maladaptive emotion regulation decreased progressively across the posttest assessments, after which both domains stabilized during follow-up. This pattern suggests that the effects were cumulative during the active intervention period and then maintained after formal training ended. Negative relationship processes followed a broadly similar pattern, with most improvement occurring during the intervention and later scores remaining relatively stable. Positive relationship processes, however, continued to improve into follow-up. These differences suggest that cognitive regulation and negative relational processes may respond relatively quickly to direct skill instruction, whereas the construction of positive relational patterns may require more extended interpersonal experience. The findings therefore underscore the value of repeated assessments. A single immediate posttest would have captured only part of the intervention process and might have missed the continued development of positive relational outcomes.

The findings also reinforce the developmental logic of life skills education described by the World Health Organization. Core skills such as emotional coping, self-awareness, communication, problem solving, interpersonal relationships, and decision-making are not independent competencies but mutually interacting resources that help young people respond effectively to everyday demands (World Health, 1994). The present intervention integrated these domains rather than treating emotion regulation or relationships as isolated targets. This integrated design may explain why changes were observed simultaneously in both emotional and relational outcomes. For example, cognitive reappraisal can support more constructive communication, while effective communication can reduce interpersonal stress and thereby decrease the need for maladaptive emotion regulation. Similarly, conflict resolution can strengthen relationships while also improving perceived control over stressful situations. Such reciprocal mechanisms may have amplified the intervention effects across domains.

The findings are additionally compatible with evidence indicating that programs targeting wisdom, self-efficacy, and decision-making can enhance adolescents' capacity to navigate difficult life circumstances (Zayed & Mohamed, 2025). Although the specific intervention focus differed, both lines of research support the broader principle that structured psychosocial training can strengthen adolescents' competence in responding to complex emotional and interpersonal demands. In the present study, this competence was cultivated within sport, where stressors are immediate, socially meaningful, and frequently repeated. The football setting may therefore have functioned as a natural laboratory for practicing adaptive responses to frustration, evaluation, competition, cooperation, and conflict. Repeated application of these skills under authentic conditions may have contributed to the strong effects observed in both emotion regulation and relationship outcomes.

## 5. Conclusion

Taken together, the results support the effectiveness of a culturally adapted life skills program integrated into routine youth football. The intervention was associated with substantial increases in adaptive emotion regulation, substantial reductions in maladaptive emotion regulation, stronger positive coach–athlete–parent processes, and lower negative relational processes, with most gains maintained over the follow-up period. These findings are broadly consistent with research on cognitive emotion regulation, life skills education, positive youth development, socioemotional learning, and psychological skills training in sport (Bean et al., 2018; Garnefski et al., 2001; Gould & Carson, 2008; Jacobs et al., 2022). They also suggest that the developmental benefits of sport may be enhanced when psychosocial competencies are intentionally taught and explicitly connected to the interpersonal realities of youth sport. The study therefore contributes to the emerging understanding of football not merely as a setting for physical and technical development but as a potentially powerful context for structured emotional and social learning.

## 6. Limitations & Suggestions

Several limitations should be considered when interpreting the findings. First, the study employed a single-group quasi-experimental design without a control or comparison group, which limits the extent to which observed



JAYPS Adolescent and Youth Psychological Studies E-ISSN: 2981-2526

changes can be attributed exclusively to the intervention because maturation, repeated testing, ongoing football participation, seasonal influences, or other uncontrolled experiences may also have contributed to change. Second, the final statistical sample consisted of only 22 male football players of the same age from a single academy, which restricts generalizability to female athletes, other age groups, athletes from different competitive levels, and participants in other sports or cultural settings. Third, the study relied primarily on self-report questionnaires, creating the possibility of social desirability, recall bias, or response effects associated with participants' awareness of the intervention goals. Fourth, although two follow-up assessments were included, the follow-up period remained relatively short for determining whether the observed effects persist over longer developmental periods. Finally, because relational outcomes were measured from the athlete's perspective, the study did not directly examine whether coaches and parents independently perceived corresponding changes in the coach–athlete–parent relationship.

Future studies should evaluate the intervention using randomized controlled or controlled quasi-experimental designs with larger and more diverse samples to strengthen causal inference and external validity. Replication should include athletes of different ages, female football players, athletes from multiple academies, and participants from individual as well as team sports. Longer follow-up periods would be valuable for determining whether emotional and relational improvements remain stable across an entire competitive season or beyond. Future investigations could also incorporate multi-informant assessments completed by athletes, coaches, and parents, as well as observational measures of communication, conflict, emotional behavior, and coach–parent interaction. Examining potential mediating mechanisms would further clarify whether improvements in cognitive emotion regulation precede and explain changes in interpersonal relationships, or whether enhanced relational support contributes independently to emotional regulation. It would also be useful to compare different delivery formats, session lengths, and intervention intensities and to investigate whether specific components, such as cognitive restructuring, conflict resolution, or transfer training, account for particularly strong effects.

Youth football academies may benefit from integrating structured life skills education into routine training rather than treating psychological development as a separate or optional service. Brief sessions delivered immediately before technical and tactical practice may be particularly feasible because they allow coaches and athletes to connect psychological concepts directly with situations occurring on the field. Programs should include practical training in emotional awareness, cognitive reappraisal, rumination control, constructive communication, anger management, problem solving, conflict resolution, goal setting, and transfer of skills to family and school contexts. Coaches should also receive guidance on how to reinforce these competencies during ordinary training interactions, while parents can be involved through brief educational sessions emphasizing supportive communication, constructive feedback, and reduced performance pressure. Embedding these principles into academy culture may help create a more developmentally supportive environment in which technical football training and psychosocial development are pursued simultaneously.

**Acknowledgments**

We would like to express our appreciation and gratitude to all those who cooperated in carrying out this study.

**Declaration of Interest**

The authors of this article declared no conflict of interest.

**Ethical Considerations**

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

**Transparency of Data**

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

**Funding**

This research was carried out independently with personal funding and without the financial support of any governmental or private institution or organization.

**Authors' Contributions**

All authors equally contributed to this article.

**References**

Alizadeh, M., Akbari, B., & Mehregan, B. (2025). Comparison of the Effectiveness of Compassion-Focused Therapy and



JAYPS E-ISSN: 2981-2526

Islamic Life Skills Training on Cognitive Emotion Regulation Strategies in Adolescents with Internet Addiction. *Rooyesh-e Ravanshenasi*, *14*(6), 101-110.

Bean, C., Kramers, S., Forneris, T., & Camiré, M. (2018). Systematic Review of Positive Youth Development through Sport Programs. *The Sport Psychologist*, *32*(2), 142-155. https://doi.org/10.1123/tsp.2017-0035

Camiré, M., Trudel, P., & Forneris, T. (2012). Coaching and Life Skills Transfer: Definitions, Mechanisms, and Perspectives. *International Journal of Sports Science & Coaching*, *7*(2), 243-254. https://doi.org/10.1260/1747-9541.7.2.243

Daw, J., & Burton, D. (1994). Evaluation of a Comprehensive Psychological Skills Training Program for Collegiate Tennis Players. *The Sport Psychologist*, *8*(1), 37-57. https://doi.org/10.1123/tsp.8.1.37

Garnefski, N., Kraaij, V., & Spinhoven, P. (2001). Negative Life Events, Cognitive Emotion Regulation and Emotional Problems. *Personality and individual differences*, *30*(8), 1311-1327. https://doi.org/10.1016/S0191-8869(00)00113-6

Gould, D., & Carson, S. (2008). Life Skills Development through Sport: Current Status and Future Directions. *International Review of Sport and Exercise Psychology*, *1*(1), 58-78. https://doi.org/10.1080/17509840701834573

Jacobs, J. M., Wright, P. M., & Richards, K. A. R. (2022). Adolescents' Sport Participation and Socioemotional Learning: A Systematic Review. *Frontiers in Sports and Active Living*, *4*, 843105.

Khan, S., Khan, S., Raza, H., Abbasi, P., & Munawar, S. (2025). Relationship Between Emotional Intelligence and Life Satisfaction: Mediated by Empathy and Moderated by Conflict Resolution Skills. *Jssa*, *3*(1), 429-439. https://doi.org/10.59075/jssa.v3i1.129

Lisinskiene, A., Lochbaum, M., May, E., & Huml, M. (2019). Quantifying the Coach–Athlete–Parent (C–A–P) Relationship in Youth Sport: Initial Development of the Positive and Negative Processes in the C–A–P Questionnaire (PNPCAP). *International journal of environmental research and public health*, *16*(21), 4140. https://doi.org/10.3390/ijerph16214140

Mosbat Shahjouyi, H., & Hasanvand, K. (2024, January 18). The Impact of Life Skills Training on Increasing Self-Awareness and Emotion Management in Primary School Children. First International Conference on New Developments in Educational Sciences, Psychology, and Education, Urmia.

Obeidavi, A., Mouli, Z., & Boujallali, A. (2024). Teaching Life Skills on the Emotional, Moral, and Academic Development of Students in the Critical Adolescent Period. First International Conference on Modern Developments in Educational Sciences, Psychology, and Education, Urmia, Iran.

Steinberg, L. (2005). Cognitive and Emotional Development in Adolescence. *Annual review of psychology*, *56*, 115-132. https://doi.org/10.1146/annurev.psych.56.091103.070134

Thelwell, R. C., & Greenlees, I. A. (2001). The Effects of a Mental Skills Training Package on Gymnasium Triathlon Performance. *The Sport Psychologist*, *15*(2), 127-141. https://doi.org/10.1123/tsp.15.2.127

World Health, O. (1994). *Life Skills Education in Schools*.

Zayed, A. M. A., & Mohamed, N. M. A. (2025). The Effectiveness of a Wisdom-Based Training Program in Improving Emotional and Academic Self-Efficacy and Decision-Making Skills among High School Students with Negative Life Orientation. *Journal of the Faculty of Education, Sohag University*, *131*(131), 647-716.



JAYPS
E-ISSN: 2981-2526