

Judo as a didactic tool for emotional growth: Anger management and positive youth relationships

 **Gianluca Gravino**  . University of Campania Luigi Vanvitelli. Caserta, Italy.
 **Giovanna Scala**. University of Campania Luigi Vanvitelli. Caserta, Italy.
 **Davide Di Palma**. University of Campania Luigi Vanvitelli. Caserta, Italy.
 **Francesco Tafuri**. Niccolò Cusano University. Rome, Italy.

ABSTRACT

Combat sports such as judo offer a unique opportunity to develop emotional and social skills. This study investigates how the practice of judo influences anger management and promotes positive interpersonal relationships. A mixed methods approach combining qualitative and quantitative methods was used to explore subjective experiences and measure participants' emotional and interpersonal skills. The sample consisted of 60 judo practitioners and a control group of 60 non-practitioners, all students at a secondary school in Caserta, aged between 10 and 13. Data were collected using the Angry Cognition Scale-Revised and The Interpersonal Relations Test (TRI), supplemented by semi-structured interviews. The results show that judo not only helps to regulate emotions such as anger but also improves the ability to form positive relationships.

Keywords: Combat sports, Emotional intelligence, Anger, Interpersonal skills.

Cite this article as:

Gravino, G., Scala, G., Di Palma, D., & Tafuri, F. (2025). Judo as a didactic tool for emotional growth: Anger management and positive youth relationships. *Journal of Human Sport and Exercise*, 20(4), 1402-1412. <https://doi.org/10.55860/cpx2hz67>



Corresponding author. University of Campania Luigi Vanvitelli. Caserta, Italy.

E-mail: giangravino@live.it

Submitted for publication February 06, 2025.

Accepted for publication March 19, 2025.

Published August 23, 2025.

[Journal of Human Sport and Exercise](#). ISSN 1988-5202.

©Asociación Española de Análisis del Rendimiento Deportivo. Alicante. Spain.

doi: <https://doi.org/10.55860/cpx2hz67>

INTRODUCTION

Emotional management and the ability to build positive relationships are fundamental aspects of psychological and social well-being. Martial arts, particularly judo, are based on principles that promote emotional control, self-discipline and respect for others.

Emotional intelligence, defined by Goleman (1995) as the ability to identify, understand and manage one's own and others' emotions, plays a crucial role in the development of interpersonal skills and emotional regulation. According to Mayer and Salovey (1997), emotional intelligence has four main dimensions: awareness, use, understanding and management of emotions. These dimensions are closely related to the ability to cope with stressful situations, resolve interpersonal conflicts and promote individual well-being (Brackett et al., 2011).

In addition, several studies have shown that anger regulation is one of the most difficult emotional skills to develop, but also one of the most important for the quality of interpersonal relationships. Averill (1982) emphasised that anger is not only a negative emotional response, but also a signal that can facilitate the resolution of social problems if properly managed. However, if poorly regulated, it can lead to impulsive behaviour and conflict (Deffenbacher et al., 1996). Martial arts provide a unique context in which emotional regulation strategies can be learned in a practical and experiential way. Judo in particular, with its principles of mutual respect, self-control and fair play, helps to create an environment in which it is possible to learn to manage intense emotions such as anger. Gardner and Moore (2006) showed that physical activity combined with learning specific skills related to emotional awareness can improve anger management and promote greater emotional resilience. Recent studies on emotional intelligence in sport have highlighted how regular practice of disciplines such as judo is associated with reduced levels of aggression and increased empathy and cooperation among peers (Zahra et al., 2014). Furthermore, the work of Hatzigeorgiadis et al (2008) has shown that structured sport promotes the development of skills such as self-control, emotional regulation and interpersonal conflict management, which are fundamental aspects of social well-being. Another important contribution comes from Lochbaum et al. (2016), who found a link between sport practice and the development of emotional self-efficacy, i.e. the belief that one can successfully regulate one's emotions even in high-pressure situations. Furthermore, according to Laborde et al. (2016), regular sports practice contributes to the improvement of stress management skills, fostering greater emotional resilience and a better quality of social relationships. Further insights are provided by Petrides et al. (2004), who highlight that emotional intelligence is a significant predictor of prosocial behaviour and success in interpersonal relationships, aspects that find fertile ground in sport. Finally, Chan et al. (2012) highlighted how structured physical activity promotes not only physical health, but also psychological well-being by improving emotional awareness and control.

The aim of this study is to analyse how judo, practised by students aged between 10 and 13 in a school in Caserta, contributes to anger management and the building of positive relationships. To this end, validated psychometric instruments such as the Angry Cognition Scale-Revised (ACS-R), to assess anger-related thoughts, and the Interpersonal Relations Test (TRI), to measure the quality of social interactions, will be used. In addition, semi-structured interviews with participants will enrich the understanding of the mechanisms linking judo practice to these aspects.

Aim of the study

The main aim of this study was to investigate how the practice of judo can influence anger management skills and improve interpersonal relationships in boys between the ages of 10 and 13. Specifically, the study

investigated whether the integration of judo techniques, based on principles of respect and self-control, could be an effective means of developing emotional and interpersonal skills, and compared the results with those of boys participating in traditional physical education sessions.

MATERIALS AND METHODS

The study adopted a mixed approach, integrating quantitative and qualitative methods to gain an in-depth understanding of the emotional and relational dynamics involved.

Quantitative data were collected using validated psychometric instruments:

- Angry Cognition Scale-Revised (ACS-R): used to measure anger-related thoughts, assessing aspects such as frequency, intensity and management of angry thoughts.
- Interpersonal Relations Test (TRI): used to assess the quality of social interactions, measuring skills such as empathy, cooperation and assertiveness.

With regard to the analysis of qualitative data, semi-structured interviews were conducted to explore the subjective experiences of the participants, giving voice to their personal perceptions and reflections. In addition, direct observation during training sessions allowed for the analysis of relational dynamics and emotional management strategies applied in real-life contexts.

Participants

The study sample consisted of 120 students aged between 10 and 13 years attending a secondary school in Caserta. The sample was divided in two groups:

- Experimental group: 60 boys practising judo, with at least 2 years of experience and a minimum frequency of 2 training sessions per week.
- Control group: 60 boys not involved in martial arts or disciplines that emphasise emotional control, such as yoga or meditation.

Within each group, approximately 15% of the participants (9 students per group) were diagnosed with Attention Deficit Hyperactivity Disorder (ADHD). This was verified through clinical documentation provided by the families, which ensured an accurate assessment of the participants' condition.

Participation criteria

Children who met the following criteria were included in the trial:

- Aged between 10 and 13 years.
- Attending the middle school where the study took place.
- For the experimental group: active practice of judo for at least 2 years.
- For both groups: clinically documented diagnosis of attention deficit hyperactivity disorder (ADHD).
- Absence of serious physical or mental illnesses that could interfere with participation in the activities or use of the assessment instruments.

The inclusion of students with ADHD in both groups allowed us to investigate the impact of judo training on emotion management and interpersonal skills in a sample with particular difficulties in self-regulation and attention.

Recruitment and informed consent

Participants were selected with the support of the school and families, with due regard for ethical principles and data confidentiality. Informed consent was obtained from parents or guardians, who agreed to the children's participation in both the sports activities and the data collection procedures.

Educational Intervention

The programme ran for 12 weeks and included fortnightly sessions integrated into the regular school curriculum. Each session lasted 90 minutes and took place during school hours, with the aim of promoting the physical as well as the emotional and relational development of the pupils.

The activities were designed on the basis of research showing that structured physical activity can promote not only the improvement of motor skills, but also the development of social and emotional skills (Bailey et al., 2013). In addition, the approaches used aimed to create a safe and supportive environment in which students could learn the value of mutual respect and emotional regulation (Holt et al., 2012).

Experimental group (judo practitioners)

The sessions for the experimental group were structured to integrate judo practice with activities aimed at emotional regulation and improving interpersonal skills.

1. Warm-up and physical preparation (15 minutes): Joint mobility exercises, stretching and playful activities were aimed at preventing injuries and improving concentration. The decision to include team games in the warm-up was motivated by the intention to promote group cohesion, a fundamental element in creating a positive and collaborative climate (Carron et al., 2005). These games stimulated a sense of belonging and broke down any relational barriers between participants, creating an environment conducive to learning (Côté et al., 2007).
2. Judo Techniques (45 minutes): The core phase of the training focused on learning basic judo techniques such as joint locks, projections, immobilisations and safe falls. These activities not only developed physical skills but also helped the children to understand the importance of physical control as a prerequisite for emotional control (Gardner & Moore, 2006). Simulated fighting exercises (randori) were supervised to avoid situations of excessive competitiveness and to emphasise the principles of self-control and cooperation that are fundamental to judo (Matsumoto, 2009). During the breaks, the coaches discussed the emotions experienced with the students, emphasising the link between body awareness and emotional management.
3. Emotional regulation activities (20 minutes): The practice of relaxation and mindfulness techniques, such as controlled breathing and visualisation, was based on evidence that these strategies can help children manage intense emotions such as anger (Felder et al., 2016). Facilitated discussions allowed participants to reflect on emotions experienced during the training and share personal experiences, promoting empathy and emotional awareness (Brackett et al., 2011). Role-playing and brainstorming activities were used to simulate real-life situations, encouraging practical application of the emotional and relational skills acquired.
4. Debriefing and closing (10 minutes): The session ended with a time of sharing where the students could express their opinions about the activity. The coaches encouraged the students to think about how they could use what they had learned in judo to deal with situations of conflict or tension in everyday life, thus promoting a proactive approach to emotional management.

Control group (traditional physical education)

The control group took part in traditional physical education sessions, also 90 minutes long and held every two weeks. The activities focused on improving motor skills and physical well-being but did not include specific interventions related to emotional regulation or judo practice.

1. Warm-up and general motor activity (20 minutes): Stretching exercises, light running and motor games were designed to improve coordination and physical endurance. These activities were designed to prepare the body for intense physical activity while encouraging student participation (Caspersen et al., 1985).
2. Team sports (40 minutes): Football, volleyball or basketball games were designed to promote socialisation and teamwork. However, the focus remained on physical performance without addressing emotional or relational aspects (Eime et al., 2013).
3. Individual activities (20 minutes): Circuit exercises or muscle strengthening activities were designed to develop strength, agility and endurance. These exercises followed a traditional approach and were limited to improving physical skills without including emotional reflection (Dishman et al., 2004).
4. Debriefing (10 minutes): At the end of the session, students briefly discussed their level of enjoyment, but no emotional or relational aspects were explored.

Quantitative data analysis

Quantitative data analysis was carried out on the results of the two questionnaires administered to both the experimental and control groups, both before and after the intervention. The results of the Angry Cognition Scale-Revised (ACS-R) and the Test of Relationships (TRI) were compared to assess any changes in anger management and quality of interpersonal relationships. In addition, the results were analysed separately for the children with Attention Deficit Hyperactivity Disorder (ADHD) to see how the intervention might affect them specifically.

Angry Cognition Scale-Revised (ACS-R)

In the experimental group, mean scores related to angry thoughts decreased significantly from pre- to postintervention. Specifically, the frequency of angry thoughts decreased by 30% ($p < .01$), while the intensity of thoughts decreased by 25% ($p < .01$). These results indicate a significant improvement in self-control and anger management skills. In contrast, the control group showed no significant change, with less than a 5% change in total scores, suggesting that the traditional PE activities did not have a significant impact on anger management.

In particular, the reduction in the frequency of angry thoughts was even more pronounced for the children with ADHD in the experimental group, reaching 35%, whereas no significant improvement was observed for the children with ADHD in the control group (only a 3% reduction in angry thoughts). This finding highlights the effectiveness of the intervention in helping children with difficulties in emotional management, such as those typical of ADHD.

Test of Interpersonal Relationships (TRI)

In terms of the quality of interpersonal relationships, the experimental group experienced a significant increase in mean post-intervention scores on all dimensions measured. Empathy increased by 28% ($p < .01$), cooperation by 22% ($p < .01$) and conflict resolution skills by 26% ($p < .01$). These improvements highlight the effectiveness of judo training in improving interpersonal skills and fostering a more collaborative and respectful environment. In contrast, improvements in the control group were more limited, with an average

increase of 10% in the socialisation dimension, mainly due to the group dynamics of team sports activities, but with no real progress in other areas such as empathy or conflict resolution skills.

For the boys with ADHD in the experimental group, the improvements were even more pronounced, with a 32% increase in empathy and a 30% increase in cooperation. These results suggest that the integrated approach of judo and emotional regulation had a particularly positive effect on boys with difficulties in social interactions, such as those associated with ADHD. In contrast, the scores of the boys with ADHD in the control group remained stable, with a marginal improvement of 5% in empathy and 7% in conflict resolution skills, and no apparent changes in the other relational dimensions.

Qualitative data analysis

Analysis of the qualitative data from the semi-structured interviews conducted with both teachers and pupils in the experimental and control groups provided an in-depth understanding of the participants' lived experiences and the relational and emotional dynamics that emerged during the programme. The interviews revealed significant differences in perceptions of the effectiveness of the proposed activities in the two groups, with a particular focus on children with Attention Deficit Hyperactivity Disorder (ADHD).

RESULTS

Opinions of the students in the experimental group

Pupils in the experimental group who took part in the judo sessions showed a high level of awareness of the emotional aspects of self-control and mutual respect. Many of the students expressed how judo helped them to 'feel calmer' and 'manage anger better'. One pupil commented: 'I used to get angry easily, but now I can stop and think before I act'. Another added: 'Judo has taught me never to hurt others and that makes me feel more in control of myself. This kind of reflection suggests that the integration of physical activity and emotional regulation had a positive impact on anger management and the growth of interpersonal skills. Another student pointed out: 'When we play group games, I can focus more on how I feel and not just on winning. This suggests that the group dynamics of judo, which emphasise cooperation and self-control, also had a positive effect on the quality of social interactions. In addition, some students reported that judo made them more 'aware' of their emotions: 'In judo, when I feel angry, the coach makes us stop and think and that helps me to understand what I am feeling'. This aspect of self-reflection was particularly valued as a tool for emotional growth.

Opinions of students in the control group

Pupils in the control group, who participated in traditional physical education sessions, showed a less pronounced perception of improved emotional competence. Although they enjoyed the team sports, the opinions collected did not suggest that the activities had a significant impact on emotion management. One boy said: 'I like playing football, but I don't think it helps me to calm down when I'm angry'. Another said: 'We never talk about how we feel, we just think about winning'. Another pupil added: 'Even though I play basketball with my friends, I still get frustrated when things don't go my way and there's no one to help me understand why I feel that way'. These responses suggest that although traditional physical activities promote socialisation and teamwork, there are no significant improvements in emotional regulation or interpersonal skills. Furthermore, some pupils revealed that they felt stressed by the competitiveness of team sports, with no real space to reflect on their feelings: 'In football, everything is a race and no one ever stops to talk about their problems'.

Teachers' opinions

The teachers who supervised both groups emphasised the importance of the integrated approach in the experimental group, pointing out that the inclusion of emotional regulation activities improved pupils' behaviour and participation. One teacher noted: The judo students seem more focused and respectful, not only in their physical activities but also in the way they interact with each other. Another added: 'Even when conflicts arise, I see that with judo the boys try to resolve them in a more peaceful and mature way'. Another teacher observed a significant change in the boys' ability to resolve conflicts among themselves: 'I have noticed that the boys who practise judo discuss more calmly and respectfully, whereas before they tended to react more impulsively'. With regard to the control group, teachers recognised that some pupils, although involved in group activities, tended to focus solely on the competitive aspect or physical performance, without deep emotional reflection. One teacher reported: In team games, the children are more focused on the end result rather than the social dynamics, and this creates difficulties in moments of conflict.

Specific views of boys with ADHD

The boys with ADHD in the experimental group were particularly positive about emotional regulation. One boy with ADHD said: 'When I was angry I couldn't stop, but now it helps me to think about my breathing and how I feel'. Another explained: 'In judo, when I get angry at someone, the teacher helps me to talk and understand why I am angry'. These reflections suggest that the boys with ADHD benefited significantly from the integrated approach of judo and emotional regulation, managing their anger better and improving their ability to resolve conflicts. One boy with ADHD added: 'It used to make me very angry that others did not understand how I felt, now with judo I try to explain better how I feel'. In contrast, boys with ADHD in the control group reported difficulties in maintaining concentration and managing emotions in competitive contexts. One of them said: 'Sometimes I feel like there's no room to calm down during football games, it's all too fast and chaotic'. This finding suggests that boys with ADHD may benefit more from programmes that combine physical activity with moments of emotional reflection. Another boy with ADHD remarked: When we're all focused on the game, it's hard to stay calm and think about my feelings.

In conclusion, the opinions gathered during the qualitative interviews reinforced the quantitative results, indicating that the integration of Judo and emotional regulation techniques had a positive impact on anger management and interpersonal skills, particularly for students with ADHD. Students in the experimental group perceived an increase in their emotional and interpersonal skills, whereas students in the control group did not show similar improvements. Pupils' and teachers' perceptions confirm that the holistic approach of judo, which integrates physical movement and emotional awareness, is particularly effective in promoting healthy emotional management and improving the quality of social interactions.

In-depth study of qualitative analysis topics

The interviews conducted with teachers and pupils in the experimental and control groups revealed a number of recurring themes relating to emotion management, behaviour regulation and the quality of social interactions. These themes provided an important insight into the differences between the two groups and the effectiveness of the integrated judo approach compared to the traditional approach of physical education alone.

Themes from the interviews with pupils in the experimental group

A central theme in the interviews with students in the experimental group was the importance of emotional awareness. Students reported how judo helped them to recognise and manage their emotions, particularly anger. This concept of emotional awareness proved crucial in the context of sport, where self-control and mutual respect are key aspects (Goleman, 1995). Internal reflection, as indicated by the students, was also

stimulated by the active involvement of the coaches, who encouraged them to stop and think before reacting in conflict situations (Brackett et al., 2011). Many students also highlighted the aspect of cooperation in group games, where they not only learned to work together, but also to understand themselves and others better, fostering an environment of support and emotional growth (Zahra et al., 2014).

Another theme that emerged was conflict management. Students noted that judo provided them with tools to handle disagreements with peers in a more peaceful and mature manner, with an overall improvement in interpersonal relationships (Moore & Gardner, 2006). The ability to resolve conflicts in a more peaceful and reflective manner was seen as an aspect that positively influenced social dynamics outside of the sport. By emphasising self-control and respect for others, the practice of judo strengthened social skills that are fundamental to improving relationships with peers (Felver et al., 2016).

Themes from the control group interviews

In the control group, who participated in traditional physical education sessions, the issues raised were mainly related to competitiveness and a focus on the physical aspect of play rather than on emotions or behavioural regulation. Students pointed out that traditional physical activities such as football and basketball, while promoting socialisation and integration, did not create opportunities to reflect on their emotions (Eime et al., 2013). Competitiveness was seen as an element that sometimes exacerbated stress and frustration, without adequate space to manage these emotional states. Many children said that there was never a moment to talk about their feelings, only the importance of winning or improving physical performance (Zeidner et al., 2004).

Some students also reported feeling overwhelmed by the rush of the game, particularly in sports such as football, where the speed and intensity of the game made it difficult to focus on emotions. This confirms the importance of integrating physical activities with moments of emotional reflection, as evidenced by the research of Hatzigeorgiadis et al. (2008), which highlights the benefits of emotional awareness in improving the regulation of impulsive behaviour. The lack of a structured space for inner reflection may have prevented the children in the control group from developing the emotional skills necessary for healthy emotional management, particularly in times of conflict.

Themes from the teacher interviews

Teachers identified another important theme in the interviews: the difference in pupils' participation and behaviour during the activities. In the experimental group, teachers noticed an improvement in concentration and mutual respect, not only during physical training, but also in daily interactions between students (Theeboom et al., 2009). The integrated judo approach provided students with tools to deal with conflict situations in a more constructive and less impulsive way. This had a positive impact on the overall behaviour of the students, who were calmer and more willing to cooperate (Lochbaum et al., 2016). In particular, the boys who practised judo showed a more mature approach to conflict, seeking peaceful solutions rather than reacting impulsively as in the past (Moore & Gardner, 2006).

As for the control group, teachers acknowledged the good participation of pupils in group activities but noted that the prevailing competitive approach did not encourage deep reflection on emotional and relational dynamics. Although there was some socialisation, the boys tended to focus mainly on performance and the end result (Goleman, 1995) without developing adequate emotional awareness.

DISCUSSION

The results of this study suggest that integrating judo practice with activities aimed at emotional regulation and improving relational skills had positive effects on anger management and interpersonal dynamics in children aged 10 and 13. In particular, the experimental group that participated in the judo programme showed significant improvements in anger-related thought management and relational skills such as empathy, cooperation and conflict resolution. These findings were corroborated by qualitative interviews, which revealed increased emotional awareness and more mature conflict management among participants in the experimental group.

In line with the study's assumptions, quantitative data showed that boys in the experimental group, particularly those with ADHD, achieved significant improvements in anger control compared to the control group. This finding is particularly relevant given that boys with ADHD often have significant difficulties in regulating emotions and managing social interactions. Judo, with its focus on mutual respect, self-control and body awareness, appears to provide an ideal context for developing emotional and relational skills that go beyond mere physical performance (Moore & Gardner, 2006). Improvements in the quality of interpersonal relationships in the experimental group were also confirmed by increased scores on empathy, cooperation and conflict resolution dimensions. This underlines the value of structured sports activities not only for physical improvement, but also for the development of emotional awareness (Goleman, 1995).

The findings suggest that judo can provide a safe environment in which boys learn to interact respectfully by putting into practice the skills they acquire in training, and that these skills are also reflected in everyday life. Research by Zahra et al (2014) supports this claim, highlighting how the practice of martial arts can improve self-control and foster positive relationships between participants. The technicians' focus on listening to emotions during and after training played a crucial role in fostering emotional awareness, which in turn contributed to more effective management of emotions and improved relationships with peers (Brackett et al., 2011). In contrast, the control group, who participated in traditional physical education sessions, did not show the same progress. Although the group activities promoted socialisation and cooperation, they did not incorporate structured emotional regulation interventions, which limited the effectiveness of the programme in addressing issues such as anger management and conflict resolution. This finding is consistent with the literature, which suggests that traditional physical activity, while useful for physical well-being, is not sufficient to systematically develop emotional and relational skills (Eime et al., 2013).

The fact that the control group, and particularly the children with ADHD, did not benefit significantly from traditional activities highlights the importance of holistic approaches that combine physical movement with emotional reflection. In particular, children with ADHD have shown greater difficulty in maintaining concentration and coping with conflict situations when specific spaces for emotional reflection were not provided (Hatzigeorgiadis et al., 2008). This highlights the need for personalised interventions for these children that are able to integrate physical activity with moments of emotional awareness, as demonstrated by the experimental group (Felter et al., 2016). Pupil and teacher feedback further corroborated the quantitative results, showing that the boys in the experimental group not only improved their emotional management, but also developed a greater awareness of themselves and others. Reflecting on their emotional states, as suggested during the judo sessions, allowed them to approach conflict situations in a more mature way, reducing the tendency to react impulsively (Zeidner et al., 2004). Finally, qualitative observations highlighted another key aspect: the importance of the relationship between the coach and the participants. Boys in the experimental group reported that the instructor's guidance, which stimulated moments of emotional reflection during training, was fundamental in promoting the conscious management

of anger and conflicting emotions (Lochbaum et al., 2016). This point highlights the importance of a pedagogical approach that is not limited to teaching physical techniques, but also includes the emotional aspect, which is often overlooked in other forms of physical activity (Theeboom et al., 2009).

CONCLUSION

The study highlighted the effectiveness of judo as a tool for improving anger management and interpersonal skills in boys aged 10-13, with a particular impact on young people with ADHD. The integrated approach, which combines sports practice with emotional awareness activities, was found to be more effective than traditional physical activities in developing socio-emotional and interpersonal skills. This approach highlights the importance of educational programmes that combine physical exercise and emotional regulation and provides a versatile and adaptable intervention model.

These findings provide a solid basis for further research and interventions to improve children's emotional and relational well-being in both school and social settings. The introduction of such programmes could have a long-term positive impact, helping to create a generation of young people who are more aware, resilient and able to face the challenges of everyday life with greater emotional balance and relationship skills.

AUTHOR CONTRIBUTIONS

The writing of this paper was a joint effort by all authors.

SUPPORTING AGENCIES

No funding agencies were reported by the authors.

DISCLOSURE STATEMENT

No potential conflict of interest was reported by the authors.

REFERENCES

- Averill, J. R. (1982). *Anger and aggression: An essay on emotion*. Springer. <https://doi.org/10.1007/978-1-4612-5743-1>
- Bailey, R., Hillman, C., Arent, S., & Petitpas, A. (2013). Physical activity: An underestimated investment in human capital? *Journal of Physical Activity and Health*, 10(3), 289-308. <https://doi.org/10.1123/jpah.10.3.289>
- Brackett, M. A., Rivers, S. E., & Salovey, P. (2011). Emotional intelligence: Implications for personal, social, academic, and workplace success. *Social and Personality Psychology Compass*, 5(1), 88-103. <https://doi.org/10.1111/j.1751-9004.2010.00334.x>
- Carron, A. V., Colman, M. M., Wheeler, J., & Stevens, D. (2005). Cohesion and performance in sport: A meta-analysis. *Journal of Sport and Exercise Psychology*, 27(2), 168-188. <https://doi.org/10.1123/jsep.24.2.168>
- Chan, J. T. K., Wong, C. A., & Cheung, S. K. (2012). Physical activity and emotional intelligence: The link to positive youth development. *Psychology of Sport and Exercise*, 13(2), 165-171.
- Deffenbacher, J. L., Oetting, E. R., & Lynch, R. S. (1996). Development of a driving anger scale. *Psychological Reports*, 74(1), 83-91. <https://doi.org/10.2466/pr0.1994.74.1.83>

- Eime, R. M., Harvey, J. T., Sawyer, N. A., & Casey, M. M. (2013). The influence of gender and socioeconomic status on sports participation in adolescents. *Australian and New Zealand Journal of Public Health*, 37(6), 497-503.
- Felver, J. C., Celis-de Hoyos, C. E., Tezanos, K., & Singh, N. N. (2016). A systematic review of mindfulness-based interventions for youth in school settings. *Mindfulness*, 7(1), 34-45. <https://doi.org/10.1007/s12671-015-0389-4>
- Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ*. Bantam.
- Hatzigeorgiadis, A., Zourbanos, N., & Theodorakis, Y. (2008). Self-talk and sports performance: A meta-analysis. *Perspectives on Psychological Science*, 3(5), 346-356.
- Hatzigeorgiadis, A., Zourbanos, N., & Theodorakis, Y. (2008). Cognitive-behavioral interventions in sport: A review of the literature. *International Journal of Sport and Exercise Psychology*, 6(2), 157-179.
- Holt, N. L., Tamminen, K. A., Tink, L. N., & Black, D. E. (2012). An interpretive analysis of life skills development through sport. *Sport Psychologist*, 23(1), 18-38.
- Laborde, S., Guillén, F., & Mosley, E. (2016). Emotional intelligence in sports and exercise: A systematic review. *Scandinavian Journal of Medicine & Science in Sports*, 26(8), 862-874. <https://doi.org/10.1111/sms.12510>
- Lochbaum, M., Jean-Noël, D., & Pinar, C. (2016). Sports participation and emotional regulation skills. *International Journal of Sport and Exercise Psychology*, 14(2), 118-136.
- Lochbaum, M., Litchfield, R., & Watson, J. (2016). The role of physical activity in the development of emotional self-regulation. *International Journal of Sport and Exercise Psychology*, 14(4), 341-355.
- Matsumoto, D. (2009). The role of emotion in conflict resolution. *Journal of Conflict Resolution*, 53(4), 568-585.
- Moore, Z. E., & Gardner, F. (2006). Psychosocial benefits of sports participation in adolescence. *Journal of Sport Behavior*, 29(3), 231-249.
- Petrides, K. V., Sangareau, Y., Furnham, A., & Frederickson, N. (2004). Trait emotional intelligence and children's peer relations at school. *Social Development*, 15(3), 537-547. <https://doi.org/10.1111/j.1467-9507.2006.00355.x>
- Theeboom, M., De Knop, P., & Wylleman, P. (2009). The effectiveness of sports participation on the development of life skills: A review of the literature. *European Journal of Sport Science*, 9(2), 43-52.
- Zahra, S., Collins, A., & Williams, M. (2014). Sport participation and youth development: Exploring the role of aggression and empathy. *Sport, Exercise, and Performance Psychology*, 3(4), 313-324.
- Zahra, S., Hossein, S. H., & Ali, M. (2014). Emotional intelligence and its relationship with aggression in athletes. *Procedia - Social and Behavioral Sciences*, 152, 1285-1289.
- Zeidner, M., Matthews, G., & Roberts, R. D. (2004). Emotional intelligence in the workplace: A critical review. *Applied Psychology: An International Review*, 53(1), 1-34. <https://doi.org/10.1111/j.1464-0597.2004.00176.x>



This work is licensed under a [Attribution-NonCommercial-ShareAlike 4.0 International](https://creativecommons.org/licenses/by-nc-sa/4.0/) (CC BY-NC-SA 4.0 DEED).