



Article

Effectiveness of a Judo Intervention Programme on the Psychosocial Area in Secondary School Education Students

David Lindell-Postigo ¹, Félix Zurita-Ortega ², Eduardo Melguizo-Ibáñez ^{2,*}, Gabriel González-Valero ², Manuel Ortiz-Franco ³ and José Luis Ubago-Jiménez ²

- ¹ Department of Physical Education, Sunland International School, 29580 Málaga, Spain
- Department of Didactics of Musical, Plastic and Corporal Expression, University of Granada, 18071 Granada, Spain; ggvalero@ugr.es (G.G.-V.); jlubago@ugr.es (J.L.U.-J.)
- ³ La Inmaculada Teacher Training Centre, 18013 Granada, Spain
- * Correspondence: emelguizo@ugr.es

Abstract: Currently, many combat sports are pedagogically conceived as uneducational and unreliable for the development of young people. The present research aims to investigate the influence of a Judo intervention programme on the motivational climate towards sport, aggressive behaviour, emotional intelligence, and self-concept in secondary school students and to establish the relationships between them. This objective was broken down into (a) developing an explanatory model of the variables mentioned above and (b) testing the model equations through a multi-group analysis in terms of pre-test and post-test. The present study conducted a pre-post-test quasi-experimental design with a single experimental group. The sample consisted of a total of 139 adolescents (12.67 \pm 1.066), 50.4% of whom were male (n = 70) and 49.6% female (n = 69). The results show that the intervention decreased all types of aggression and increased levels of emotional intelligence. An increase in social, physical and academic self-concept and decreases in the family and emotional areas were also observed. Finally, for the motivational climate, a tendency towards the ego climate to the detriment of the task climate was observed. It is concluded that the Judo intervention programme is effective in decreasing aggressive behaviour and effective in increasing levels of emotional intelligence and self-concept.

Keywords: Judo; sport motivation; self-concept; emotional intelligence; aggressive behaviour



Citation: Lindell-Postigo, D.; Zurita-Ortega, F.; Melguizo-Ibáñez, E.; González-Valero, G.; Ortiz-Franco, M.; Ubago-Jiménez, J.L. Effectiveness of a Judo Intervention Programme on the Psychosocial Area in Secondary School Education Students. *Sports* 2023, 11, 140. https://doi.org/ 10.3390/sports11080140

Academic Editor: Antonio Tessitore

Received: 27 May 2023 Revised: 12 July 2023 Accepted: 26 July 2023 Published: 28 July 2023



Copyright: © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

1. Introduction

Violence is said to be a construct deeply included in people's life, which leads the causes of death worldwide for people aged 15–44 years [1]; it is associated with disruptive and harmful behaviours [2], and has a negative impact on people's welfare [3,4]. Also, it is correlated to psychosocial factors, as Turner et al. [5] concluded in the longitudinal study they conducted, in which they found a negative association between poly-victimisation and youth mental health. Thus, despite its uncertain origin [6,7], it is essential to address it to enhance society's welfare [2,8], also considering the possible savings in health systems due to the impact of violence during childhood on adulthood [2,9].

Following on from the foregoing, violence seems to improve the aggressor's physical self-concept, whereas it is detrimental for all the dimensions of a victim's self-concept [4]. Nevertheless, improving individual's self-concept seems to buffer aggression, since it reduces both violence [5,10,11] and victimisation [12]. Lastly, Blakely-McClure and Ostrov [13] concluded that relational aggression reduces academic self-concept but has a positive impact on the physical one, albeit higher levels of self-concept may also lead to decreased relational aggression.

Plus, motivational climate also influences disruptive behaviours, since a task-oriented climate is positively correlated to prosocial behaviours, reducing violence, whereas an ego-oriented (EC) is positively associated with antisocial behaviours, increasing violence [14–17],

Sports 2023, 11, 140 2 of 14

just like victimisation [18]; Castro-Sánchez et al. [18] pointed out that this association is stronger in sedentary children. Miller et al. [19] explained this association as being due to predictions based on a lower capacity for moral judgment within the goal-oriented climate.

Regarding the relationship between violence and emotional intelligence (EI), the systematic review conducted by Estévez et al. [4] confirmed the negative association between both constructs regardless of the type of violence, which was explained by them and Kokkinos and Kipritsi [20] as being because children able to manage emotions are prone to being more socially accepted by their peers. Moreover, Kokkinos and Kipritsi [20] found that EI becomes a predictor of victimisation. Further, Baroncelli and Ciucci [21] found that low levels of EI are linked to cybebullying, especially in terms of the regulation of emotions. In line with this, Castillo et al. [22] successfully implemented a Socio-Emotional Learning programme to reduce aggressive behaviours in adolescents, especially with regard to the emotional aspects of aggression, which highlights the buffering role played by this construct in reductions in violence.

There is a scarcity of studies concerning how all these constructs are associated with each other, although some articles shed light on the association among self-concept, EI and violence. For instance, Cañas et al. [23] found a negative association of cyberbullying with SC—especially family and academic dimensions—and with emotional intelligence—especially emotional regulation and emotional comprehension. Further, Cañas et al. [3] found the moderating effect that EI has in the harmful relationship between victimisation and SC.

Another factor to consider in this study is the practice of physical activity and its relationship with these psychosocial factors, specifically the role of Physical Education and martial arts. As a matter of fact, some pieces of research have revealed the positive effects of this practice on disruptive behaviours [24,25] or task climate [26], the latter enabling individuals to develop more adaptive motivational patterns [26] and engaging people in sport more favorably due to enjoyment [27]. On the other hand, despite it being unclear whether physical activity improves individuals' self-concept or whether people with higher levels of self-concept engage more often in physical activity [28], physical self-concept seems to be crucial in people's engagement in physical exercise [28–30], even in harmful situations such as a lockdowns [29,31]; this was confirmed by Conant et al. [32] and Rivera et al. [33], who conducted two different studies using martial arts with people with special needs, with positive effects shown on their self-concept. Regarding violence, Zillmann et al. [34] claimed that the intensity of physical exercise is positively correlated to aggressive behaviours, while Viner et al. [35] confirmed the mediating effect of physical exercise on cyberbullying and mental health.

Additionally, Judo is conceived as a martial art and combat sport, with a philosophy initially built around violence [36], and it is a physical activity attracting increasing interest among people [37]. These disciplines are said to be violent activities undertaken by aggressive people [38]. However, this violence in modern martial arts is powered by competitiveness [39]. Indeed, experts usually recommend the practice of martial arts due to its benefits on people's health [40,41], even as a form of psychotherapy [2,42,43].

Regarding the association between the practice of martial arts and these constructs, martial artists tend to have higher levels of self-concept, especially physically [31]. Further, Judokas tend to have higher emotional intelligence in all its dimensions except emotional attention [44], although no significant differences exist between Judo and other martial arts [45]. Additionally, Zurita-Ortega et al. [46] found a tendency to shift the motivational climate towards EC as the level of competition increases, which leads to an increase in aggression, as Iwasaki et al. [47] reported. Overall, a task climate addressed through Judo has been effective in reducing bullying and attitudes towards violence [48].

Consequently, conducting an intervention programme is essential to estimating the effectiveness of the theoretical framework, especially in terms of educational programmes, in which experts need to sift through several hypothetical methodologies. Hence, researchers have produced many articles in this field over the years, aimed at shedding light on how

Sports 2023, 11, 140 3 of 14

school-based intervention programmes positively affect individuals' welfare [49], especially in primary schools, since this is the stage at which violent behaviours begin [50]. In this line, it is explained that a proactive intervention is much more useful to reducing bullying, especially when it is focused on the role of bystanders and peer tutoring [51]. Plus, some research found a positive impact of intervention programmes at school on individuals' welfare by reducing violence [52].

Little research exists regarding how conducting a Judo intervention programme may influence these constructs; on this matter, Montero-Carretero et al. [48] successfully undertook one throughout ten PE sessions, twice a week, to reduce bullying. Nevertheless, widening the field of research, a martial art intervention has been proven to be effective to this end, especially in terms of reducing disruptive behaviours [41].

Therefore, this study aims to further investigate the influence of a Judo intervention programme on self-concept, motivational climate, emotional intelligence and aggressive behaviours in secondary school students in a Spanish school, and to establish the relationships between them. The last goal breaks down the task into (a) developing an explanatory model of the variables mentioned above and (b) testing the model equations through multigroup analysis in terms of pre-test and post-test.

2. Materials and Methods

2.1. Participants

The present study exhibits a pre–post-test quasi-experimental design with a single experimental group. The sample comprised 70 (50.4%) male and 69 (49.6%) female adolescents aged 11–16 (12.67 \pm 1.06), who attended a secondary school in Andalusia, specifically in Malaga city (Spain). Voluntary response sampling to select participants was conducted, ensuring that they had no unsolved questions and understood how to code themselves. Lastly, the inclusion criteria were for the participants to be in full control of their mental faculties and to possess informed consent given by their parent/guardian.

2.2. Instruments and Variables

This section describes the instruments used to collect the variables.

An ad-hoc questionnaire was used to collect socio-demographic characteristics, which included gender (male/female), age, whether subjects regularly practised physical activity (that is, more than three hours a week according to World Health Organization recommendations [53]), whether that practice involved martial arts, whether they competed and level of competition (local, regional, national, or international).

Self-concept Form-5 was used to evaluate the self-concept variable. Based on Shavelson et al. [54], this instrument was created by Garcia and Musitu [55], yet we used an adaptation for Judoists developed by Zurita-Ortega et al. [56]. Thus, it comprises 24 items grouped into five dimensions: academic self-concept (AC: items 1, 6, 11, 16, 21, 26), social self-concept (SO: items 2, 7, 12, 17, 22, 27), emotional self-concept (EM: items 3, 8, 13, 18, 23, 28), familiar self-concept (FA: items 4, 9, 14, 19, 24, 29) and physical self-concept (PH: items 5, 10, 15, 20, 25, 30). It measures SC using a five-level Likert scale (1 = never and 5 = always). For the pre-test a reliability level of α = 0.731 was obtained, while for the post-test a value of α = 0.769 was achieved.

Perceived Motivational Climate in Sport Questionnaire-2 (PMCSQ-2) was used to evaluate motivational climate among students. This questionnaire was designed by Newton et al. [57], yet we used the adapted version proposed by Gonzalez-Cutre et al. [58], made up of 33 items rated on a five-level Likert scale (1 = totally disagree and 5 = totally agree), which evaluates motivation within two dimensions: TC (which comprises three sub-dimensions: effort, improvement and cooperative learning), and EC (which is composed of three sub-dimensions: unequal recognition, punishment for mistakes and intra-team rivalry). During the pre-test, the Cronbach's alpha obtained a value of 0.954 for the task climate and 0.962 for the ego climate. In the post-test, Cronbach's alpha obtained a value of 0.939 for the task climate and a value of 0.949 for the ego climate.

Sports 2023, 11, 140 4 of 14

Schutte Self-Report Inventory (SSRI) was used to evaluate emotional intelligence. Specifically, we employed the Spanish adaptation from García-Coll et al. [59] of the test created by Schutte et al. [60]. The adaptation removed three items due to their negative formulation, finally resulting in 30 items. Hence, the questionnaire measures five dimensions of emotional intelligence using a five-level Likert scale (1 = totally disagree and 5 = totally agree), specifically focusing on emotion perception (EP: items 2, 3, 9, 11, 13, 20 and 29), self-emotional management (SEM: items 8, 14, 17, 18, 21, 24, 27 and 30), heteroemotional management (HEM: items 1, 4, 5, 7, 10, 12, 15, 23, 25 and 28), emotion utilisation (EU: items 6, 16, 19 and 26) and general emotional intelligence (sum of all items). In the pre-test, the following internal reliabilities were estimated: emotion perception α = 0.885, self-emotional management α = 0.863, self-emotional management α = 0.863, self-emotional management α = 0.889. In the post-test the following internal reliabilities were estimated: emotion perception α = 0.834, self-emotional management α = 0.869, self-emotional management α = 0.849, emotion utilisation α = 0.837 and general emotional intelligence α = 0.882.

The School Violence Scale was employed to evaluate individuals' aggressive behaviours. We used the Spanish version employed by Musitu et al. [61] from the School Violence Scale (SVS), which was designed by Little et al. [62]. This questionnaire evaluates two types of violence using a four-level Likert scale (1 = Never and 4 = Always), namely, over/direct aggression (OA) and relational/indirect aggression (RA); for this aim, the questionnaire comprises 25 items. In the pre-test, the following internal reliabilities were estimated: over/direct aggression α = 0.929, relational/indirect aggression α = 0.919 and general violence α = 0.921. In the post-test, the following internal reliabilities were estimated: over/direct aggression α = 0.920, relational/indirect aggression α = 0.925 and general violence α = 0.926

2.3. Procedure

Prior to running the intervention programme, which fulfils the requirements of the Research Ethics Committee of the University of Granada, coded 2966/CEIH/2022, and the Declaration of Helskinki, the researchers contacted the Principal and Physical Education teachers to fully explain both its aims and purposes. After obtaining their authorisation to perform the research at school, students were contacted through their physical education teachers. Anonymously, the voluntariness of participation was given, and data treatment only for scientific purposes was assured. Then, a booklet with all the instruments, which was created by the Department of Didactics of Musical, Plastic and Corporal expression of the University of Granada, was distributed before and after the intervention programme. Moreover, two-thirds of the teachers were trained to teach a Judo topic by one of the researchers, who is a Judo Master, due to their lack of knowledge.

The training received by teachers focused on the techniques and dynamics of Judo classes. The training period for the teachers lasted three months. Regarding the technical training, the teachers were trained in the analysis and performance of different keys (O-Soto-Gari, Yoko-Shiho-Gatame, Tate-Shiho-Gatame and Uki-Goshi). Regarding class dynamics, the teachers were trained in Judo didactics, receiving classes from a second Dan belt, specialised in the didactics of this sport. The teachers also received three hours of Judo training per week. The first month was focused on knowledge related to ground immobilisations and ground Judo sparring. The second month was focused on the teaching of falling and throwing techniques. During the second month, one hour was dedicated per week to reminding the participants of the knowledge of ground Judo. Finally, the third and last month focused on Judo foot and Judo ground sparring. It is also worth mentioning that during the last month, one hour a week was dedicated to creating checklists together with the Judo teaching expert to evaluate the students during the intervention programme. The teachers were trained in a gymnasium in the province of Granada, which had its own tatami. Likewise, the intervention programme was based on the curriculum that governs compulsory secondary education in Spain, so that this intervention programme

Sports 2023, 11, 140 5 of 14

was contextualised within Spanish educational law. The implementation of the topic took eight lessons, lasting two months, and was supervised by researchers to ensure that it was carried out correctly. Data were collected before and after the intervention, during one of the students' PE lessons.

The intervention programme was based on regular Judo lessons, beginning with a warm-up consisting of pulse-raiser games to improve mobility and displacements (5 min), followed by technique drills/games (in which individuals practiced fall techniques, holding techniques, gripping, and displacing the opponent and throwing techniques), and finishing with matches (40 min), questions and answers and stretching (5 min). During the week, two sessions of 50 min each were held. All sessions were held on the Tatami of the school. Previously, it was observed that the Tatami was in good condition and guaranteed a reliable degree of safety. Due to the type of sport that Judo is, three legal guardians did not authorize their children to participate in this intervention programme. The inclusion criteria established consisted of being between 11 and 16 years of age and being authorised by the legal guardians to participate in this intervention program.

The time distribution of the intervention programme was ensured as follows:

- **Session 1 to Session 4:** Games related to immobilising the opponent on the ground were carried out.
- Session 4 to Session 10: Ground Judo techniques were taught. Also, during session 9 and session 10 the students practiced randori on the ground using some immobilisation.
- **Session 11:** A day of technical evaluation of the immobilisations. The assessment consisted of performing two ground immobilisations on a colleague.
- Session 12 to Session 16: Playing games to teach the different falls.
- Session 16 to Session 20: Teaching Judo foot techniques.
- **Session 20 to Session 23:** Randori on foot applying the techniques seen from session 16 to session 20.
- **Session 24:** Evaluation of the technical execution of falls and Judo foot. The assessment consisted of performing a drop and a Judo foot technique.
 - This intervention programme had the following objectives:
- To learn the techniques of the main ground Judo and foot Judo keys;
- To apply Judo ground and Judo foot techniques to randori situations.

However, due to national restrictions related to the COVID pandemic, all students had to always wear masks during the intervention to ensure their welfare. Finally, this intervention programme was carried out in a school in the province of Malaga, during the months of January and March 2022.

2.4. Data Analysis

Data were processed with IBM SPSS Statics 25.0 (IBM Corp., Armonk, NY, USA). A correlational study was carried out by performing the Student T-test to find statistically significant differences between pre-intervention and post-intervention results; statistical differences were estimated through Pearson's Chi-square test ($p \le 0.05$). The magnitude of difference in effect size (ES) was obtained with Cohen's standardised d-index [63], interpreted as null (0.0–0.19), small (0.20–0.49), medium (0.50–0.79), and large (≥ 0.80). Normality and homogeneity variance were estimated by performing the Kolmogorov–Smirnov test, in which a normal distribution was found.

Structural equation modeling (SEM) was undertaken via IBM SPSS Amos 26.0 (IBM Corp., Armonk, NY, USA) to establish the association among the variables that compound the theoretical model (Figure 1). In this study, a structural equation model was created regarding pre-test and post-test situation. Each one is made up of two exogenous variables (TC; EC) and eighteen endogenous (AC; SO; FA; EM; PH; ROA; POA; IOA; IRA; RRA; PRA; EU; HM; SEM; EP; SC; VI; EI). The latter group was causally explained considering the observed associations between index and measurement reliability, so a measurement error was included. Similarly, the unidirectional arrows represent the influence lines between

Sports 2023, 11, 140 6 of 14

latent variables and are interpreted from regression weight. Pearson's Chi-squared test established a significance level of 0.05.

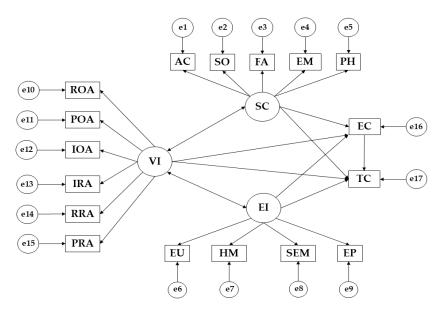


Figure 1. Proposed structural equational modeling. Note: Family Self-Concept (FA); Social Self-Concept (SO); Physical Self-Concept (PH); Emotional Self-Concept (EM); Academic Self-Concept (AC); Task Climate (TC); Ego Climate (EC); Reactive Over Aggression (ROA); Pure Over Aggression (POA); Instrumental Over Aggression (IOA); Pure Relational Aggression (PRA); Reactive Relational Aggression (RRA); Instrumental Relational Aggression (IRA); Emotional Perception (EP); Self-Emotional Management (SEM); Heteroemotional Management (HM); Emotional Utilisation (EU); Emotional Intelligence (EI); Violence (VI); Self-Concept (SC).

Lastly, the model was evaluated by estimating the component parameters. According to the established criteria [64,65], the Chi-squared goodness-of-fit test was performed and indicated the good adjustment of the model. The comparative fit index (CFI) has a value over 0.95, which indicates a good adjustment to the model. The goodness-of-fit index (GFI) took a value over 0.900, which indicates an acceptable adjustment. The incremental fit index (IFI) took a value over 0.90, which indicates an acceptable adjustment. Root mean square error of approximation (RMSEA) took a value below 0.100, which indicates an acceptable adjustment to the model.

3. Results

Table 1 displays the descriptive analysis of the sample, which was made up of 50.4% (n=70) male and 49.6% (n=69) female students. Whilst 77% of the sample regularly practised physical activity according to WHO recommendations [53], 23% did not. Further, 14.4% of individuals practised martial arts before the implementation of the intervention programme, whereas 85.6% of them had never practised any type of martial arts.

Table 2 displays the effects of the intervention programme, demonstrating statistically significant differences ($p \le 0.05$). Regarding self-concept, there is a detrimental effect in family self-concept ($p \le 0.05$) and emotional self-concept ($p \le 0.05$), although there is an improvement in social self-concept, physical self-concept ($p \le 0.05$) and academic self-concept. Regarding motivational climate in sports, task climate was reduced after the intervention and ego climate levels increased. Furter, there was a decrease in reactive over aggression, pure over aggressiveness, instrumental relational aggression, pure relational aggression ($p \le 0.05$), reactive relational aggression and instrumental relational aggression. Regarding emotional intelligence, there was an increase in emotional perception, self-emotional management, heteroemotional management and emotional utilisation.

Sports **2023**, 11, 140 7 of 14

Table 1. Descriptive data of the sample.

		n	%
Gender —	Male	70	50.4%
	Female	69	49.6%
Do you practice more than 3 h of PA per	Yes	107	77.0%
week outside school hours?	No	32	23.0%
Do you practice any kind of martial arts?	Yes	20	14.4%
Do you practice any kind of martial arts.	No	119	85.6%

 Table 2. Comparative pre-test post-test study.

Variable	Test	Mean \pm Standard Deviation	T	р	d	95% Confidence Interval
Family Self-Concept —	Pre	3.61 ± 0.46	0.224	≤0.05	0.022	[0.213; 0.257]
	Post	3.60 ± 0.46		≤0.05		
Social Self-Concept –	Pre	3.53 ± 0.46	-1.481	> 0.05	0.137	[0.098; 0.372]
	Post	3.59 ± 0.40		>0.05		
Physical Self-Concept –	Pre	3.48 ± 0.86	-3.248	≤0.05	0.181	[0.055; 0.416]
	Post	3.63 ± 0.79	-3.246			
Emotional Solf-Concent	Pre	2.77 ± 0.87	2.322	< 0.05	0.125	[0.111; 0.36]
Emotional Self-Concept —	Post	2.66 ± 0.89	2.322	≤0.05		
A 1 : C 16 C :	Pre	3.96 ± 0.60	0.5//	0.05	0.032	[0.203; 0.267]
Academic Self-Concept —	Post	3.98 ± 0.64	-0.566	>0.05		
Task Climate –	Pre	4.08 ± 0.51	1 5/1	. 0.05	0.123	[0.113; 0.358]
	Post	4.01 ± 0.62	1.561	>0.05		
Ego Climate –	Pre	2.30 ± 0.61	1.022	0.05	0.149	[0.086; 0.385]
Ego Cliniate –	Post	2.40 ± 0.71	-1.933	>0.05		
Reactive Over Aggression	Pre	1.09 ± 0.52		>0.05	0.059	[0.177; 0.294]
	Post	1.08 ± 0.50	0.707			
Pura Ovar Agarassian	Pre	1.52 ± 0.35	0.406	>0.05	0.033	[0.202; 0.269]
Pure Over Aggression –	Post	1.49 ± 0.22				
Instrumental Over	Pre	1.39 ± 0.42	1.919	>0.05	0.149	[0.086; 0.385]
Agression	Post	1.33 ± 0.37				
Pure Relational	Pre	1.60 ± 0.49	0.110	≤0.05	0.258	[0.022; 0.494]
Aggression	Post	1.48 ± 0.43	3.112			
Reactive Relational	Pre	1.17 ± 0.34		>0.05	0.065	[0.17; 0.3]
Aggression	Post	1.15 ± 0.26	0.503			
Instrumental Relational	Pre	1.29 ± 0.39	0.201	>0.05	0.026	[0.209; 0.261]
Aggression	Post	1.28 ± 0.38	0.301			
E	Pre	2.82 ± 0.51	1.005	>0.05	0.077	[0.158; 0.312]
Emotional Perception –	Post	2.86 ± 0.52	-1.007			
Self-Emotional _ Management	Pre	2.59 ± 0.38	-0.647	>0.05	0.048	[0.187; 0.284]
	Post	2.61 ± 0.43				
Heteroemotional _ Management	Pre	2.95 ± 0.37	-0.276	>0.05	0.027	[0.208; 0.263]
	Post	2.96 ± 0.35		>0.05		
T (1770) (Pre	2.30 ± 0.45	-0.052	>0.05	0.004	[0.231; 0.239]
Emotional Utilisation –	Post	2.34 ± 0.43				

Sports **2023**, 11, 140 8 of 14

Table 3 displays the regression weights of the proposed theoretical model (pre-test), with statistically significant associations shown as $p \le 0.05$ and $p \le 0.001$. Self-concept is positively associated with academic dimension ($\beta = 0.612$), social area ($p \le 0.001$; $\beta = 0.507$), family dimension ($p \le 0.001$; $\beta = 0.520$), physical dimension ($p \le 0.001$; $\beta = 0.668$) and task climate ($p \le 0.05$; $\beta = 0.880$); nevertheless, it is negatively correlated with ego climate ($\beta = -0.580$), violence ($p \le 0.05$; $\beta = -0.384$) and emotional intelligence ($p \le 0.001$; $\beta = -0.487$). Further, emotional intelligence is positively associated with ego climate ($\beta = 0.283$), emotional utilisation ($\beta = 0.186$), heteroemotional management ($p \le 0.05$; β = 0.674) self-emotional management ($p \le 0.05$; β = 0.791) and emotional perception $(p \le 0.05; \beta = 0.863)$, although it is negatively correlated with task climate ($\beta = -0.038$) and violence ($\beta = -0.298$). Regarding this last variable, it is positively associated with ego climate ($\beta = 0.080$), reactive over aggressiveness ($p \le 0.001$; $\beta = 0.711$), instrumental over aggressiveness ($p \le 0.001$; $\beta = 0.855$), pure relational aggression ($p \le 0.001$; $\beta = 0.569$), reactive relational aggression ($p \le 0.001$; $\beta = 0.846$), instrumental relational aggression ($\beta = 0.729$), pure relational aggression ($p \le 0.001$; $\beta = 0.855$) and task climate ($\beta = -0.509$). Lastly, there is a negative association between both motivational climates ($p \le 0.05$; $\beta = -0.286$).

Table 3. Regression weights before applying the intervention programme.

Dimetion		Regression Weig	Standardised Regression Weight		
Direction —	Estimation	Estimation Error	Critical Ratio	р	Stimations
$EC \leftarrow SC$	-1.055	0.558	-1.891	0.059	-0.580
EC ← EI	2.500	2.697	0.927	0.354	0.283
EC ← VI	0.206	0.266	0.775	0.438	0.080
$AC \leftarrow SC$	1.000				0.612
$SO \leftarrow SC$	0.519	0.103	5.031	***	0.507
$FA \leftarrow SC$	-1.100	0.226	-4.869	***	-0.487
$EM \leftarrow SC$	0.608	0.118	5.141	***	0.520
$PH \leftarrow SC$	1.351	0.216	6.249	***	0.668
EU ← EI	1.000				0.186
$HM \leftarrow EI$	2.902	1.432	2.026	**	0.674
$\overline{\text{SEM} \leftarrow \text{EI}}$	4.251	2.077	2.047	**	0.791
$EP \leftarrow EI$	5.589	2.722	2.053	**	0.863
$IRA \leftarrow VI$	1.000				0.729
$RRA \leftarrow VI$	0.798	0.084	9.526	***	0.846
$PRA \leftarrow VI$	0.993	0.139	7.146	***	0.636
$IOA \leftarrow VI$	1.154	0.120	9.618	***	0.855
$ROA \leftarrow VI$	0.566	0.071	8.021	***	0.711
$POA \leftarrow VI$	1.034	0.162	6.390	***	0.569
$TC \leftarrow SC$	1.584	0.576	2.748	**	0.880
TC ← EI	-3.892	2.958	-1.316	0.188	-0.509
$TC \leftarrow VI$	0.084	0.216	0.389	0.697	0.038
$TC \leftarrow EC$	-0.248	0.086	-2.881	**	-0.286
$VI \leftarrow \rightarrow EI$	-0.007	0.004	-1.682	0.093	-0.298
$VI \leftarrow \rightarrow SC$	-0.042	0.013	-3.126	**	-0.384

Note: Family Self-Concept (FA); Social Self-Concept (SO); Physical Self-Concept (PH); Emotional Self-Concept (EM); Academic Self-Concept (AC); Task Climate (TC); Ego Climate (EC); Reactive Over Aggression (ROA); Pure Over Aggression (POA); Instrumental Over Aggression (IOA); Pure Relational Aggression (PRA); Reactive Relational Aggression (RRA); Instrumental Relational Aggression (IRA); Emotional Perception (EP); Self-Emotional Management (SEM); Heteroemotional Management (HM); Emotional Utilisation (EU); Emotional Intelligence (EI); Violence (VI); Self-Concept (SC). Note: ** $p \le 0.05$; *** $p \le 0.001$.

Sports 2023, 11, 140 9 of 14

To focus on the designed model as regards the post-test, the Chi-squared analysis indicates a significant value ($X^2 = 39.764$; df = 20; pl = 0.007). CFI had a value of 0.939, NFI scored 0.996, IFI scored 0.943, and the Tucker–Lewis index (TLI) was 0.934. Lastly, the RMSEA scored 0.049.

Table 4 shows the regression weights of the proposed theoretical model (post-test), with statistically significant associations shown as $p \le 0.05$ and $p \le 0.001$. Self-concept was positively associated with academic area ($\beta = 0.606$), social dimension ($p \le 0.001$; $\beta =$ 0.512), family area ($p \le 0.001$; $\beta = 0.581$), physical dimension ($p \le 0.001$; $\beta = 0.658$) and task climate ($p \le 0.001$; $\beta = 0.549$); nevertheless, it was negatively correlated with emotional self-concept ($p \le 0.001$; $\beta = -0.438$), violence ($\beta = -0.130$) and ego climate ($p \le 0.05$; β = -0.340). Emotional intelligence was positively associated with ego climate ($\beta = 0.018$), emotional utilisation ($\beta = 0.166$), heteroemotional management ($\beta = 0.694$), self-emotional management ($\beta = 0.849$), emotional perception ($\beta = 0.801$) and task climate ($\beta = 0.005$). On the other hand, it has a negative association with violence ($p \le 0.05$; $\beta = -0.304$). Further, violence is positively correlated with pure over aggression ($p \le 0.001$; $\beta = 0.704$), instrumental over aggression ($p \le 0.001$; $\beta = 0.851$), pure relational aggression ($p \le 0.001$; β = 0.562), reactive relational aggression ($p \le 0.001$; β = 0.841), instrumental relational aggression ($\beta = 0.723$), pure relational aggression ($p \le 0.001$; $\beta = 0.629$) and ego climate $(\beta = 0.098)$. In opposition, violence is negatively related to task climate ($\beta = 0.013$). Lastly, a negative association was found between both motivational climates ($p \le 0.05$; $\alpha = -0.336$).

Table 4. Regression weights after applying the intervention programme.

		Regression Weights			
Direction	Estimation	Estimation Error	Critical Ratio	Estimation	Estimation Error
$EC \leftarrow SC$	-0.626	0.205	-3.046	**	-0.340
$EC \leftarrow EI$	0.259	0.246	1.050	0.294	0.018
$EC \leftarrow VI$	0.181	0.887	0.204	0.839	0.098
$AC \leftarrow SC$	1.000				0.606
$SO \leftarrow SC$	0.530	0.114	4.643	***	0.512
$FA \leftarrow SC$	0.685	0.135	5.086	***	0.581
$EM \leftarrow SC$	-0.997	0.243	-4.099	***	-0.438
$PH \leftarrow SC$	1.342	0.244	5.505	***	0.658
EU ← EI	1.000				0.166
$HM \leftarrow EI$	3.362	1.889	1.780	0.75	0.694
$SEM \leftarrow EI$	5.135	2.866	1.792	0.73	0.849
$\mathrm{EP} \leftarrow \mathrm{EI}$	5.842	3.263	1.790	0.073	0.801
$IRA \leftarrow VI$	1.000				0.723
$RRA \leftarrow VI$	0.797	0.086	9.309	***	0.841
$PRA \leftarrow VI$	0.994	0.142	6.998	***	0.629
$\text{IOA} \leftarrow \text{VI}$	1.155	0.123	9.404	***	0.851
$ROA \leftarrow VI$	0.566	0.072	7.844	***	0.704
$POA \leftarrow VI$	1.035	0.165	6.258	***	0.562
$TC \leftarrow SC$	0.873	0.181	4.819	***	0.549
$TC \leftarrow EI$	0.040	0.596	0.067	0.947	0.005
$TC \leftarrow VI$	0.030	0.171	0.176	0.860	0.013
$TC \leftarrow EC$	-0.290	0.063	-4.621	***	-0.336
$VI \leftarrow \rightarrow EI$	-0.032	0.013	-2.582	**	-0.304
$VI \leftarrow \rightarrow SC$	-0.003	0.002	-1.081	0.280	-0.130

Note: Family Self-Concept (FA); Social Self-Concept (SO); Physical Self-Concept (PH); Emotional Self-Concept (EM); Academic Self-Concept (AC); Task Climate (TC); Ego Climate (EC); Reactive Over Aggression (ROA); Pure Over Aggression (POA); Instrumental Over Aggression (IOA); Pure Relational Aggression (PRA); Reactive Relational Aggression (RRA); Instrumental Relational Aggression (IRA); Emotional Perception (EP); Self-Emotional Management (SEM); Heteroemotional Management (HM); Emotional Utilisation (EU); Emotional Intelligence (EI); Violence (VI); Self-Concept (SC). Note: ** $p \leq 0.05$; *** $p \leq 0.001$.

Sports 2023, 11, 140 10 of 14

4. Discussion

This research shows the results of an intervention programme based on Judo for the improvement of psychosocial aspects. The reasons for the application of this sport lie in the mental benefits and increased motivation towards sport [48].

The eminently descriptive data show that the adolescent population analysed was more active than other populations analysed (66.2% practice more than 3 h of physical activity per week) [31]. It is observed that some of the students surveyed practice martial arts, which highlights the increased levels of contact sports in the adolescent population (14.5% practice martial arts) [31]. Even though a large part of the population conceived contact sports as highly injurious, the adequate teaching of falls in the initiation stage helps to prevent injuries [31,66,67].

Continuing with the comparative analysis of the intervention programme, it is observed that the Judo intervention is beneficial for increasing the social, physical and academic areas of self-concept. These results suggest that the practice of Judo helps to improve some dimensions of self-concept. It has been observed that the regular practice of sport helps to improve social recognition [67]. It has also been observed that the regular practice of physical exercise helps to improve the physical image of the person, and these results coincide with others already received [37]. Also, the academic area has been improved, affirming that the regular practice of physical exercise helps to improve the academic perspective [31,33].

On the contrary, a decrease in the levels of the family and emotional area has been observed. These results are quite novel, since the family area promotes the practice of physical activity during the adolescent stage [31]; however, there may be a prior notion that Judo is a dangerous sport that is harmful [66,67]. Continuing with the effects of the motivational climate, a decrease in the task climate and an increase in the levels of the ego climate were observed. These results are due to the sport modality practiced [37], since, as an individual sport that requires contact to defeat the opponent, it requires a high degree of technique and competence [11,31,50].

The decrease in the levels of the emotional area suggests results very distant from those of other investigations, since Judo is characterised as a sport that requires a high level of emotional management [37,68]. The intervention programme has been effective in improving all dimensions of emotional intelligence. Given these findings, it has been observed that other students show an improvement in emotional intelligence through contact sports [68].

Through contact sports, the improvement in emotional intelligence is due to the importance of emotional intelligence during the practice of this type of sport [69]. The comparative analysis suggests a decrease in the levels of violence in all its dimensions. In view of these findings, Antoñanzas [69], Bibi et al. [70] and Estévez-Casellas et al. [4] explained the buffering effect of emotional intelligence on aggressive behaviours in adolescents; in addition, Alvarado et al. [71] and Segura et al. [72] stated that children with higher emotional intelligence tend to show a reduced probability of aggressive behaviours.

Continuing with the analysis based on structural equation modeling, the intervention programme reduced the effect of student violence on emotional intelligence and task climate. This finding is in line with many studies that have studied the reducing effect of the intervention on disruptive behaviours [52,67,73], and it effect of increasing task climate [66] and emotional intelligence [74]. Focusing on martial arts-based intervention programmes, the results are in line with those of Montero-Carretero et al. [48] and Twemlow et al. [7], who also found a reductive effect on aggressive behaviours after their interventions.

Focusing on the practical and legal feasibility of this intervention programme, the current curriculum of the secondary education stage suggests that sports initiation should be carried out through games [75]. Likewise, it is important to achieve the development not only of the motor competence of young people, but also critical analysis is necessary to strengthen attitudes and values related to the body, movement, and the relationship with the environment. The characteristics of a game centred on sports involve the integral

Sports 2023, 11, 140 11 of 14

development of the person, since different areas of the psychosocial profiles of young people are promoted [76–78].

Although the research has fulfilled the proposed objectives, it is not free of limitations. The first limitation is related to the sample, since the intervention programme was developed in only one educational center. Also, although the teachers were trained in Judo teaching and evaluation, they were not experts. It should be noted that a control group and an experimental group were not used, but only one intervention group. Despite this, the results are completely reliable, since fully validated instruments adapted to the sample were used. Regarding future perspectives, this study allows us to understand that Judo is not a sport that encourages violent behaviour, but a sport that allows us to improve the psychosocial area. It would be interesting to repeat this intervention programme including a control group and an experimental group. It would be convenient to carry out the intervention in other schools. This research shows that Judo has a place in the secondary school curriculum. Although this sport can be taught in public schools, it is advisable to check whether the equipment in the school offers safety during the learning of the sport. If this element is fulfilled, it would be interesting to develop a one-term learning situation through which elements related to ground Judo and standing Judo can be taught.

Finally, regarding the practical applications of this research, it can be highlighted that from these results a learning situation can be designed that includes the primary and secondary education stages. In the primary education stage, Judo contents would be approached through games involving grappling and ground Judo. Subsequently, in the secondary school stage, we will begin to practice Judo foot through games and the approach of basic and elementary keys. For future intervention programmes, it would be interesting to add breakfalls.

5. Conclusions

This intervention programme has shown that Judo is a sport that can be used to improve the psychosocial environment of Spanish adolescent high school students.

It has been observed that a Judo programme contextualised within the current educational regulations is useful to improve self-concept, specifically the physical dimension of self-concept. Variations have been observed in the motivational climate towards which the sport practice is oriented, since after the intervention the effects of the task climate increased positively, decreasing the effects of the ego climate. Moreover, improvements were also obtained in the emotional area of the participants. In addition, the levels of aggressiveness of the students decreased.

As a general result, it has been observed that Judo is a very useful sport for achieving the integral education of the students and reducing aggressive behaviour in this population.

Author Contributions: Conceptualisation, D.L.-P. and M.O.-F.; methodology, G.G.-V. and F.Z.-O.; software, G.G.-V.; validation, M.O.-F., J.L.U.-J. and E.M.-I.; formal analysis, E.M.-I.; investigation, D.L.-P.; resources, E.M.-I.; data curation, J.L.U.-J.; writing—original draft preparation, D.L.-P.; writing—review and editing, D.L.-P.; visualisation, F.Z.-O.; supervision, G.G.-V.; project administration, F.Z.-O.; funding acquisition, D.L.-P. and M.O.-F. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki and approved by the Research Ethics Committee of the University of Granada; the approval date is 27 September 2022.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The data used to support the findings of current study are available from the corresponding author upon request.

Conflicts of Interest: The authors declare no conflict of interest.

Sports **2023**, 11, 140 12 of 14

References

 Vílchez-Polo, I.; Ramírez-Granizo, I.A.; Ubago-Jiménez, J.L. SLOC, as a new inclusive sport: A didactic approach. ESHPA 2019, 3, 324–335.

- 2. Fung, A.L.C. Adolescent reactive and proactive aggression, and bullying in Hong Kong: Prevalence, psychosocial correlates, and prevention. *J. Adolesc. Health* **2019**, *64*, 65–72. [CrossRef]
- 3. Cañas, E.; Estévez, J.F.; Estévez, E.; Aparisi, D. The role of emotional intelligence on psychological adjustment and peer victimization in a sample of Spanish adolescents. *Front. Psychol.* **2020**, *11*, 600972. [CrossRef]
- 4. Estévez, E.; Estévez, J.F.; Segura, L.; Suárez, C. The influence of bullying and cyberbullying in the psychological adjustment of victims and aggressors in adolescence. *Int. J. Environ. Res. Public Health* **2019**, *16*, 2080. [CrossRef]
- 5. Turner, H.A.; Shattuck, A.; Finkelhor, D.; Hamby, S. Effects of poly-victimization on adolescent social support, self-concept, and psychological distress. *J. Interpers. Violence* **2017**, *32*, 755–780. [CrossRef]
- 6. Blanchard, D.C.; Blanchard, R.J. What can animal aggression research tell us about human aggression? *Horm. Behav.* **2003**, 44, 171–177. [CrossRef]
- 7. Twemlow, S.W.; Sacco, F.C.; Fonagy, P. Embodying the mind: Movement as a container for destructive aggression. *Am. J. Psychother.* **2008**, 62, 1–33. [CrossRef]
- 8. Arseneault, L. Annual Research Review: The persistent and pervasive impact of being bullied in childhood and adolescence: Implications for policy and practice. *J. Child Psychol. Psychiatry* **2018**, *59*, 405–421. [CrossRef]
- 9. Fry, D.; Fang, X.; Elliott, S.; Casey, T.; Zheng, X.; Li, J.; Florian, L.; McCluskey, G. The relationships between violence in childhood and educational outcomes: A global systematic review and meta-analysis. *Child Abus. Negl.* **2018**, 75, 16–28. [CrossRef]
- 10. Carrascosa, L.; Cava, M.J.; Buelga, S. Perfil psicosocial de adolescentes españoles agresores y víctimas de violencia de pareja. *Univ. Psychol.* **2018**, *17*, 183–193. [CrossRef]
- 11. Castro-Sánchez, M.; Zurita-Ortega, F.; García-Marmol, E.; Chacón-Cuberos, R. Motivational climate towards the practice of physical activity, self-concept, and healthy factors in the school environment. *Sustainability* **2019**, *11*, 999. [CrossRef]
- 12. González-García, A. Factores de riesgo en el ciberacoso: Revisión sistemática a partir del modelo del triple riesgo delictivo (TRD). IDP Rev. Internet Derecho Política 2016, 22, 62–81. [CrossRef]
- 13. Blakely-McClure, S.J.; Ostrov, J.M. Relational aggression, victimization and self-concept: Testing pathways from middle childhood to adolescence. *J. Youth Adolesc.* **2016**, *45*, 376–390. [CrossRef]
- 14. Al-Yaaribi, A.; Kavussanu, M. Consequences of prosocial and antisocial behaviors in adolescent male soccer players: The moderating role of motivational climate. *Psychol. Sport Exerc.* **2018**, *37*, 91–99. [CrossRef]
- 15. González-Valero, G.; Zurita-Ortega, F.; Martínez-Martínez, A. Panorama motivacional y de actividad física en estudiantes: Una revisión sistemática. *ESHPA* **2017**, *1*, 48961.
- Melguizo-Ibáñez, E.; Zurita-Ortega, F.; Ubago-Jiménez, J.L.; López-Gutiérrez, C.J.; González-Valero, G. An explanatory model of the relationships between sport motivation, anxiety and physical and social self-concept in educational sciences students. *Curr. Psychol.* 2022, 42, 15237–15247. [CrossRef]
- 17. Sage, L.D.; Kavussanu, M. Goal orientations, motivational climate, and prosocial and antisocial behaviour in youth football: Exploring their temporal stability and reciprocal relationships. *J. Sports Sci.* **2008**, *26*, 717–732. [CrossRef]
- Castro-Sánchez, M.; Lara-Sánchez, A.J.; García-Mármol, E.; Chacón-Cuberos, R. Motivational climate is associated with use of video games and violence in schoolchildren: A structural equation model according to healthy behaviors. *Int. J. Environ. Res. Public Health* 2020, 17, 1272. [CrossRef]
- Miller, B.W.; Roberts, G.C.; Ommundsen, Y. Effect of perceived motivational climate on moral functioning, team moral atmosphere perceptions, and the legitimacy of intentionally injurious acts among competitive youth football players. *Psychol. Sport Exerc.* 2005, 6, 461–477. [CrossRef]
- 20. Kokkinos, C.M.; Kipritsi, E. The relationship between bullying, victimization, trait emotional intelligence, self-efficacy and empathy among preadolescents. *Soc. Psychol. Educ.* **2012**, *15*, 41–58. [CrossRef]
- 21. Baroncelli, A.; Ciucci, E. Unique effects of different components of trait emotional intelligence in traditional bullying and cyberbullying. *J. Adolesc.* **2014**, *37*, 807–815. [CrossRef] [PubMed]
- 22. Castillo, R.; Salguero, J.M.; Fernández-Berrocal, P.; Balluerka, N. Effects of an emotional intelligence intervention on aggression and empathy among adolescents. *J. Adolesc.* **2013**, *36*, 883–892. [CrossRef] [PubMed]
- 23. Cañas, E.; Estévez, E.; Marzo, J.C.; Piqueras, J.A. Psychological adjustment in cybervictims and cyberbullies in secondary education. *An. Psicol.* **2019**, *35*, 434–443. [CrossRef]
- 24. Carriedo, A. Satisfacción, Aprendizaje y Valoraciones de Escolares de Primaria ante las Actividades de Lucha con Agarre. *Sport. Sci. J. Sch. Sport Phys. Educ. Psychomot.* **2019**, *5*, 133–150. [CrossRef]
- 25. Menéndez-Santurio, J.I.; Fernández-Río, J. Violence, Responsibility, Friendship and Basic Psychological Needs: Effects of a Sport Education and Teaching for Personal and Social Responsibility Program. *Rev. Psicodidáct.* **2016**, 21, 245–260. [CrossRef]
- 26. Ntoumanis, N.; Biddle, S.J. A review of motivational climate in physical activity. J. Sports Sci. 1999, 17, 643–665. [CrossRef]
- 27. Jaakkola, T.; Yli-Piipari, S.; Barkoukis, V.; Liukkonen, J. Relationships among perceived motivational climate, motivational regulations, enjoyment, and PA participation among Finnish physical education students. *Int. J. Sport Exerc. Psychol.* **2017**, 15, 273–290. [CrossRef]

Sports 2023, 11, 140 13 of 14

28. Babic, M.J.; Morgan, P.J.; Plotnikoff, R.C.; Lonsdale, C.; White, R.L.; Lubans, D.R. Physical activity and physical self-concept in youth: Systematic review and meta-analysis. *Sports Med.* **2014**, *44*, 1589–1601. [CrossRef]

- 29. González-Valero, G.; Zurita-Ortega, F.; Lindell-Postigo, D.; Conde-Pipó, J.; Grosz, W.R.; Badicu, G. Analysis of Self-Concept in Adolescents before and during COVID-19 Lockdown: Differences by Gender and Sports Activity. *Sustainability* **2020**, *12*, 7792. [CrossRef]
- 30. Jekauc, D.; Wagner, M.O.; Herrmann, C.; Hegazy, K.; Woll, A. Does Physical Self-concept mediate the relationship between motor abilities and physical activity in adolescents and young adults? *PLoS ONE* **2017**, *12*, e0168539. [CrossRef]
- 31. Lindell-Postigo, D.; Zurita-Ortega, F.; Ortiz-Franco, M.; González-Valero, G. Cross-Sectional Study of Self-Concept and Gender in Relation to Physical Activity and Martial Arts in Spanish Adolescents during the COVID-19 Lockdown. *Educ. Sci.* **2020**, *10*, 210. [CrossRef]
- 32. Conant, K.D.; Morgan, A.K.; Muzykewicz, D.; Clark, D.C.; Thiele, E.A. A karate program for improving self-concept and quality of life in childhood epilepsy: Results of a pilot study. *Epilepsy Behav.* **2008**, *12*, 61–65. [CrossRef] [PubMed]
- 33. Rivera, P.; Renziehausen, J.; Garcia, J.M. Effects of an 8-week Judo program on behaviors in children with Autism Spectrum Disorder: A mixed-methods approach. *Child. Psychiatry Hum. Dev.* **2020**, *51*, 734–741. [CrossRef] [PubMed]
- 34. Zillmann, D.; Katcher, A.H.; Milavsky, B. Excitation transfer from physical exercise to subsequent aggressive behavior. *J. Exp. Soc. Psychol.* **1972**, *8*, 247–259. [CrossRef]
- 35. Viner, R.M.; Gireesh, A.; Stiglic, N.; Hudson, L.D.; Goddings, A.L.; Ward, J.L.; Nicholls, D.E. Roles of cyberbullying, sleep, and physical activity in mediating the effects of social media use on mental health and wellbeing among young people in England: A secondary analysis of longitudinal data. *Lancet Child. Adolesc. Health* **2019**, *3*, 685–696. [CrossRef]
- 36. Lu, C. Eastern martial arts and violence prevention: Reversing a stereotype. Arch. Budo 2008, 4, 32–36.
- 37. Vertonghen, J.; Theeboom, M. The social-psychological outcomes of martial arts practise among youth: A review. *J. Sports Sci. Med.* **2010**, *9*, 528–537.
- 38. Tadesse, M.E. Benefits and challenges of practicing taekwondo to adolescents in Addis Ababa City. *Ethiopia. Rev. Artes Marciales Asiát.* **2016**, *11*, 1–17. [CrossRef]
- 39. Trulson, M.E. Martial arts training: A novel "cure" for juvenile delinquency. Hum. Relat. 1986, 39, 1131–1140. [CrossRef]
- 40. Theeboom, M.; De Knop, P.; Vertonghen, J. Experiences of children in martial arts. Eur. J. Sport Soc. 2009, 6, 19–35. [CrossRef]
- 41. Twemlow, S.W.; Sacco, F.C. The application of traditional martial arts practice and theory to the treatment of violent adolescents. *Adolescence* **1998**, *33*, 505–518.
- 42. Bird, N.; McCarthy, G.; O'Sullivan, K. Exploring the effectiveness of an integrated mixed martial arts and psychotherapy intervention for young men's mental health. *Am. J. Men Health* **2019**, *13*, 1557988319832121. [CrossRef] [PubMed]
- 43. Moore, B.; Woodcock, S.; Dudley, D. Developing Wellbeing Through a Randomised Controlled Trial of a Martial Arts Based Intervention: An Alternative to the Anti-Bullying Approach. *Int. J. Environ. Res. Public Health* **2019**, *16*, 81. [CrossRef] [PubMed]
- 44. Acebes-Sánchez, J.; Blanco-García, C.; Diez-Vega, I.; Mon-López, D.; Rodriguez-Romo, G. Emotional intelligence in physical activity, sports and Judo: A global approach. *Int. J. Environ. Res. Public Health* **2021**, *18*, 8695. [CrossRef] [PubMed]
- 45. Fernández, M.M.; Brito, C.J.; Miarka, B.; Díaz-de-Durana, A.L. Anxiety and emotional intelligence: Comparisons between combat sports, gender and levels using the trait Meta-Mood Scale and the inventory of situations and anxiety response. *Front. Psychol.* **2020**, *11*, 130. [CrossRef] [PubMed]
- 46. Zurita-Ortega, F.; Zafra-Santos, E.O.; Valdivia-Moral, P.; Rodríguez-Fernández, S.; Castro-Sánchez, M.; Muros-Molina, J.J. Analysis of resilience, self-concept and motivation in Judo as gender. *Rev. Psicol. Deporte* **2017**, *26*, 71–81.
- 47. Iwasaki, S.; Sogabe, A.; Iredale, F.; Sasaki, T. An assessment of Australian Judo practitioners' perceptions of motivational climate, mindfulness, aggression, and social skills. *Med. Sci. Sports Exerc.* **2016**, *48*, 842. [CrossRef]
- 48. Montero-Carretero, C.; Roldan, A.; Zandonai, T.; Cervelló, E. *A-Judo*: An Innovative Intervention Programme to Prevent Bullying Based on Self-Determination Theory—A Pilot Study. *Sustainability* **2021**, *13*, 2727. [CrossRef]
- Coker, A.L.; Bush, H.M.; Clear, E.R.; Brancato, C.J.; McCauley, H.L. Bystander program effectiveness to reduce violence and violence acceptance within sexual minority male and female high school students using a cluster RCT. Prev. Sci. 2020, 21, 434

 [CrossRef]
- 50. Ramirez-Granizo, I.A.; Sánchez-Zafra, M.; Zurita-Ortega, F.; Puertas-Molero, P.; González-Valero, G.; Ubago-Jiménez, J.L. Multidimensional Self-Concept Depending on Levels of Resilience and the Motivational Climate Directed towards Sport in Schoolchildren. *Int. J. Environ. Res. Public Health* **2020**, *17*, 534. [CrossRef]
- 51. Ferrer-Cascales, R.; Albaladejo-Blázquez, N.; Sánchez-SanSegundo, M.; Portilla-Tamarit, I.; Lordan, O.; Ruiz-Robledillo, N. Effectiveness of the TEI program for bullying and cyberbullying reduction and school climate improvement. *Int. J. Environ. Res. Public Health* **2019**, *16*, 580. [CrossRef] [PubMed]
- 52. Carrasco, C.; Alarcón, R.; Trianes, M.V. Social adjustment and cooperative work in primary education: Teacher and parent perceptions. *Rev. Psicodidáct.* **2018**, 23, 56–62. [CrossRef]
- 53. World Health Organization. WHO Guidelines on Physical Activity and Sedentary Behaviour: At a Glance; World Health Organization: Geneva, Switzerland, 2020.
- 54. Shavelson, R.J.; Hubner, J.J.; Stanton, G.C. Self-concept: Validation of construct interpretations. *Rev. Edu. Res.* 1976, 4, 407–441. [CrossRef]
- 55. García, F.; Musitu, G. Autoconcepto Forma 5; TEA Ediciones: Madrid, Spain, 1999.

Sports 2023, 11, 140 14 of 14

56. Zurita-Ortega, F.; González-Gonzalez de Mesa, C.; Martinez-Martinez, A.; Zafra-Santos, E.O.; Valdivia Moral, P.A. Análisis psicométrico y adaptación del test Autoconcepto Forma 5 hacia el Judo en una muestra chilena. *Univ. Psychol.* **2018**, *17*, 1–10. [CrossRef]

- 57. Newton, M.; Duda, J.L.; Yin, Z. Examination of the psychometric properties of the perceived motivational climate in sport questionnaire-2 in a sample of female athletes. *J. Sports Sci.* **2000**, *18*, 275–290. [CrossRef] [PubMed]
- González-Cutre, D.; Sicilia, A.; Moreno, J. Modelo cognitivo-social de la motivación de logro en educación física. Psicothema 2008, 20, 642–651.
- García-Coll, V.; Graupera-Sanz, J.L.; Ruiz-Pérez, L.M.; Palomo-Nieto, M. Inteligencia Emocional en el Deporte: Validación española del Schutte Self Report Inventory (SSRI) en deportistas españoles. Cuad. Psicol. Deporte 2013, 13, 25–36. [CrossRef]
- 60. Schutte, N.S.; Malouff, J.M.; Hall, L.E.; Haggerty, D.J.; Cooper, J.T.; Golden, C.J.; Dornheim, L. Development and validation of a measure of emotional intelligence. *Pers. Individ. Dif.* **1998**, 25, 167–177. [CrossRef]
- 61. Musitu, G.; Estévez, E.; Emler, N. Adjustment problems in the family and school contexts, attitude towards authority and violent behaviour at school in adolescence. *Adolescence* **2007**, *42*, 779–794.
- 62. Little, T.D.; Henrich, C.C.; Jones, S.M.; Hawley, P.H. Disentangling the "whys" from the "whats" of aggressive behaviour. *Int. J. Behav. Dev.* **2003**, 27, 122–133. [CrossRef]
- 63. Cohen, J. A power primer. *Psychol. Bull.* **1992**, 112, 155–159. [CrossRef]
- 64. Kyriazos, T.A. Applied psychometrics: Sample size and sample power considerations in factor analysis (EFA, CFA) and SEM in general. *Psychology* **2018**, *9*, 2207–2230. [CrossRef]
- 65. McDonald, R.P.; Marsh, H.W. Choosing a multivariate model: Noncentrality and goodness of fit. *Psychol. Bull.* **1990**, *107*, 247–255. [CrossRef]
- 66. Barkoukis, V.; Tsorbatzoudis, H.; Grouios, G. Manipulation of motivational climate in physical education: Effects of a seven-month intervention. *Eur. Phy. Educ. Rev.* **2008**, *14*, 367–387. [CrossRef]
- 67. Benítez-Sillero, J.D.; Corredor-Corredor, D.; Córdoba-Alcaide, F.; Calmaestra, J. Intervention programme to prevent bullying in adolescents in physical education classes (PREBULLPE): A quasi-experimental study. *Phys. Educ. Sport Pedagog.* **2021**, 26, 36–50. [CrossRef]
- 68. Baudson, T.G.; Weber, K.E.; Freund, P.A. More than only skin deep: Appearance self-concept predicts most of secondary school students' self-esteem. *Front. Psychol.* **2016**, *7*, 1568. [CrossRef] [PubMed]
- 69. Antoñanzas, J.L. The relationship of personality, emotional intelligence, and aggressiveness in students: A study using the Big Five Personality Questionnaire for Children and Adults (BFQ-NA). Eur. J. Investig. Health Psychol. Educ. 2020, 11, 1. [CrossRef] [PubMed]
- 70. Bibi, A.; Saleem, A.; Khalid, M.A.; Shafique, N. Emotional intelligence and aggression among university students of Pakistan: A correlational study. *J. Aggress. Maltreat. Trauma* **2020**, 29, 1189–1203. [CrossRef]
- 71. Alvarado, J.M.; Jiménez-Blanco, A.; Artola, T.; Sastre, S.; Azañedo, C.M. Emotional intelligence and the different manifestations of bullying in children. *Int. J. Environ. Res. Public Health* **2020**, *17*, 8842. [CrossRef]
- 72. Segura, L.; Estévez, J.F.; Estévez, E. Empathy and Emotional Intelligence in Adolescent Cyberaggressors and Cybervictims. *Int. J. Environ. Res. Public Health* **2020**, *17*, 4681. [CrossRef]
- 73. Casper, D.M.; Witte, T.; Stanfield, M.H. "A person I cared about was involved": Exploring bystander motivation to help in incidents of potential sexual assault and dating violence. *J. Interpers. Violence* **2021**, *36*, 4406–4430. [CrossRef] [PubMed]
- 74. Rivera-Pérez, S.; Fernandez-Rio, J.; Iglesias Gallego, D. Effects of an 8-Week Cooperative Learning Intervention on Physical Education Students' Task and Self-Approach Goals, and Emotional Intelligence. *Int. J. Environ. Res. Public Health* **2021**, *18*, 61. [CrossRef]
- 75. Zamorano-García, M.; Gil-Madrona, P.; Prieto-Ayuso, A.; Zamorano-García, D. Generated Emotions by Various Types of Games in Physical Education. *RIMCAFD* **2018**, *18*, 1–26. [CrossRef]
- 76. GIl-Madrona, P.; Samalot-Rivera, A.; Kozub, F.M. Acquisition and transfer of values and social skills through a physical education program focused in the affective domain. *Motricidade* **2016**, 12, 32–38. [CrossRef]
- 77. Gil-Madrona, P.; Pascual-Francés, L.; Jordá-Espí, A.; Mujica-Johnson, F.; Fernández-Reveles, A.B. Affectivity and Motor Interaction in Popular Motor Games at School. *Apunts. Educ. Fís. Depor.* **2020**, *139*, 42–48. [CrossRef]
- 78. Brasil, I.; Monteiro, W.; Lima, T.; Seabra, A.; Farinatti, P. Effects of Judo training upon body composition, autonomic function, and cardiorespiratory fitness in overweight or obese children aged 8- to 13 years. *J. Sports Sci.* **2020**, *38*, 2508–25016. [CrossRef]

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.