



## Article

# Motivational Antecedents of Young Players' Intentions to Drop Out of Football during a Season

Priscila Fabra <sup>1</sup>, Lorena González-García <sup>2,\*</sup>, Isabel Castillo <sup>2</sup>, Joan L. Duda <sup>3</sup> and Isabel Balaguer <sup>2</sup><sup>1</sup> Department of Psychology, Universidad Europea de Valencia, 46010 Valencia, Spain<sup>2</sup> Department of Social Psychology, Faculty of Psychology and Speech Therapy, University of Valencia, 46010 Valencia, Spain<sup>3</sup> School of Sport, Exercise and Rehabilitation Sciences, University of Birmingham, Birmingham B15 2TT, UK

\* Correspondence: lorena.gonzalez@uv.es

**Abstract:** Grounded in self-determination theory (SDT), the major aim of this study was to examine the social, environmental, and motivational predictors of adolescent football players' intentions to drop out of their sport over the course of a season. Participants were 552 players ( $M_{age} = 11.23$ ,  $SD = 1.14$ ). A longitudinal model was tested which hypothesized changes in the coach's interpersonal style (autonomy supportive, controlling) perceived by the players to predict changes in the players' motivation (autonomous, controlled and amotivation) which subsequently predicted changes in their intentions to drop out at the season's end. The results of the longitudinal path analysis presented an adequate fit to the data. Consistent with SDT, findings suggest that increases in autonomy-supportive coaching is promotive of increases in players' autonomous motivation, which negatively predicted dropout intentions. Over time, more perceived controlling coaching behaviors positively predicted higher levels of controlled motivation and amotivation, with positive changes in the latter corresponding to stronger intentions to dropout.

**Keywords:** intention to drop out; motivation; motivational climate; longitudinal; football



**Citation:** Fabra, P.; González-García, L.; Castillo, I.; Duda, J.L.; Balaguer, I. Motivational Antecedents of Young Players' Intentions to Drop Out of Football during a Season. *Sustainability* **2023**, *15*, 1750. <https://doi.org/10.3390/su15031750>

Academic Editor: Delia Virgă

Received: 31 October 2022

Revised: 23 December 2022

Accepted: 13 January 2023

Published: 17 January 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

Research has shown that sport participation in childhood and adolescence has potential physical, social, and psychological benefits in young participants [1–3]. However, in recent decades, a tendency to drop out of sports has been observed in young athletes [4], which deprives them of receiving these benefits. Therefore, it is important to know what factors contribute to children and young people dropping out of sports participation, in order to avoid this trend and promote their intentions to continue in the sport.

One of the most important factors in the intention to drop out of sport participation is motivation. In self-determination theory (SDT [5–8]), motivation is considered the reason why a person invests time and effort in an activity. According to this theory, different reasons or motives “are not just different in magnitude; they vary in the phenomenal sources that initiate them, the affects and experiences that therefore accompany them, and their behavioral consequences, including the quality of persistence, performance, and health benefits (or costs) they yield” [8]. SDT suggests that human behavior can be ordered along a continuum of self-determination, ranging from non-self-determined to self-determined behavior, by varying the degree to which behaviors are volitional, that is, the degree to which people perform their actions at the highest level of reflection and engage in actions with a sense of choice [9].

On the self-determination continuum proposed by SDT, intrinsic motivation is the highest level of self-determination [10], and it is reflected in involvement in an activity because of the inherent pleasure and satisfaction of the activity itself [9]. For athletes who feel intrinsically motivated, the practice of the sport itself is the goal and the gratification. The other types of motivation on the self-determination continuum are extrinsic motivation

and amotivation [9,11]. Extrinsic motivation is determined by rewards or external agents; actions are driven by something as the external rewards or someone and not due to the activity itself. Deci and Ryan [6,9] argue that people can have different extrinsic reasons that vary depending on their relative autonomy or self-determination, and they propose four types of regulation, from a lesser to a greater degree of autonomy: (1) External regulation refers to behaviors that are performed to satisfy an external demand, to receive prizes or rewards, or to avoid punishment, so that individuals perform the behavior while feeling controlled or alienated [6]; (2) introjected regulation represents behaviors that are carried out because of internal pressures stemming from the possible internal or external consequences the behaviors may have; the person performs the activity to avoid feelings such as guilt or shame, or to improve the ego and feelings of self-esteem [12]; (3) identified regulation occurs when people judge the behavior as important, and although it is still performed for extrinsic reasons, they carry it out based on their own decisions; (4) integrated regulation represents the most self-determined form of extrinsic motivation, and it occurs when the behavior or activity is not only considered important, but it is also consistent with other values and needs of the individual. External and introjected regulation are considered controlled forms of regulation, whereas identified and integrated regulation are considered autonomous forms of extrinsic motivation [12]. Finally, Ryan and Deci [13] also proposed amotivation, which is characterized by a lack of motivation and corresponds to the lowest degree of self-determination. Athletes who play a sport without motivation do not see any reason to continue to engage in this activity or know why they continue to do so. Previous research has combined the different dimensions of the continuum in a self-determination index [14], calculating the weight that each type of motivation has according to its position in the continuum of self-determination and adding the product. Intrinsic motivation has the highest weight (+2), identified regulation a lower weight (+1), external regulation receives a negative weight (−1) and amotivation receives the most negative weight (−2). Introjected regulation represents the midpoint of the self-determination continuum and is therefore not considered in the calculation of the self-determination index.

The SDT [9] argues that the degree to which motivation emanates from the self will influence athletes, and it highlights the importance of developing intrinsic motivation and/or a high degree of self-determination to achieve cognitive, affective, and behavioral adaptive patterns [15]. Thus, autonomous motivation could help to maintain sports adherence, whereas athletes with controlled motivation, who act in a certain way due to the pressure that something or someone exerts on them, will be more likely to drop out because, when that pressure disappears, the behavior will probably also disappear.

Ryan and Deci [8] argue that when people engage in an activity, there are aspects of the context that play an important role in the initiation and regulation of their behavior. Among such aspects, the behaviors of significant others stand out, which can act in supporting or controlling people's autonomy and, in turn, favor their intrinsic motivation, extrinsic motivation, or amotivation.

Focusing on the context of grassroots football in which this study is developed, some authors have argued that coaches influence the psychological experiences athletes obtain from their participation in sports [16]. Vallerand and Losier [17] suggested that coaches' behaviors in the sporting context can be viewed in terms of two interpersonal styles called the autonomy-supportive interpersonal style and the controlling interpersonal style. On the one hand, the autonomy-supportive interpersonal style refers to the coach who actively supports athletes' initiatives and creates conditions for them to experience a sense of volition, choice, and personal development [18,19]. Coaches who support the autonomy of their players explain the reasons for the tasks, the limitations, and the rules, they try to know how the athletes feel and give them opportunities to take initiative and work independently, they try to provide feedback about their players' competence in a non-controlling way, they avoid criticism that makes the players feel guilty, and they avoid talking to them in a controlling or intimidating way [20].

On the other hand, the coach with a controlling interpersonal style acts in a coercive and authoritarian manner with the athletes to impose a specific and preconceived way of thinking, feeling, and behaving through pressure [21]. Through this control, coaches can achieve short-term goals, such as getting players to behave the way they want them to at that moment, but these behaviors will not be internalized by the players and, thus, will not last over time [22]. Bartholomew et al. [22] differentiated four dimensions of the controlling interpersonal style: controlling use of rewards (using extrinsic rewards to control team behavior), negative conditional attention (failing to pay attention or show affection to players when they behave in an inadequate way from the coach's point of view or when players do not have the desired skills), intimidation (pressuring through shouting, belittling, threats, or the use of physical punishment), and excessive personal control (excessive control over the lives of the athletes).

Drawing on SDT, some authors have hypothesized [23,24] that contexts that support autonomy, where one is encouraged to behave in a volitional way, will maintain or enhance intrinsic motivation, whereas controlling contexts, where there is pressure to do something in a particular way, will impair it, leading to a variety of negative consequences. For example, if in their interactions with athletes, coaches are able to arouse curiosity and interest by promoting their initiatives, they will be favoring involvement and, consequently, benefiting athletes' intrinsic motivation or self-determination in their motivation. However, if they offer external reinforcements that are contingent upon behavior, they will harm intrinsic motivation, and the locus of causality will shift from internal to external, manifesting what we know as extrinsic motivation.

In accordance with these postulates, previous research carried out in the sports context has shown that athletes' perceptions of the coach's interpersonal style affect their motivation in sports. Specifically, studies show that the perception of coach autonomy support positively predicts the most self-determined types of motivation [25–30] and negatively predicts amotivation [25,28–31], whereas different results have been found regarding the relationship between the perceived coach autonomy support and the extrinsic forms of motivation. Some studies have defended the negative relationship between coach autonomy support and controlled motivation [31], other studies found a positive relationship between coach autonomy support and some forms of regulations as the integrated, identified, or introjected forms [25,28–30], and other studies found no significant relationship between coach autonomy support and external regulation [25,26,28,30]. On the other hand, the perception of a controlling style positively predicts controlled motivation, external regulation, and amotivation [26,30].

Accordingly, one of the objectives of this paper is to analyze the role of motivation in predicting the intention to drop out of football in young players. Results of previous studies have shown that the intention to not continue to practice a sport or drop out is associated with less self-determined motivation. For example, Dias, Corte-Real, Barreiros, Brustad and Fonseca [32] found that adolescent athletes who intended to drop out had significantly lower scores on intrinsic, identified, and introjected motivation than athletes who intended to continue. A classic study is the one carried out by Sarrazin et al. [33], who also showed differences in motivation between athletes who dropped out and those who did not. Dropouts were less intrinsically motivated and more externally regulated and amotivated. In addition, the results of the posited model showed that the self-determination index negatively predicted the intention to drop out, which in turn positively predicted dropout behavior 21 months later. Other investigations have found that self-determined motivation negatively predicts the intention to drop out [34], whereas amotivation positively predicts the intention to drop out [35]. There is also research that did not find any relationship between self-determined motivation and the intention or behavior of dropping out of sport or continuing to practice it [36,37].

Except for the study by Sarrazin et al. [33], the studies reviewed are cross-sectional. However, longitudinal studies on sports dropout are of great importance in providing a deeper theoretical understanding of the processes that favor dropout, and they contribute

to designing practical interventions that promote quality motivation and change the antecedents of dropout in order to increase the continuity of sports practice. In addition, no previous studies were found that tested the model proposed in this work. In order to further examine this question, the relationship between the coach's interpersonal style, forms of motivation, and the intention to drop out of sport will be studied from a longitudinal approach, including various time points during a sports season.

### Objective

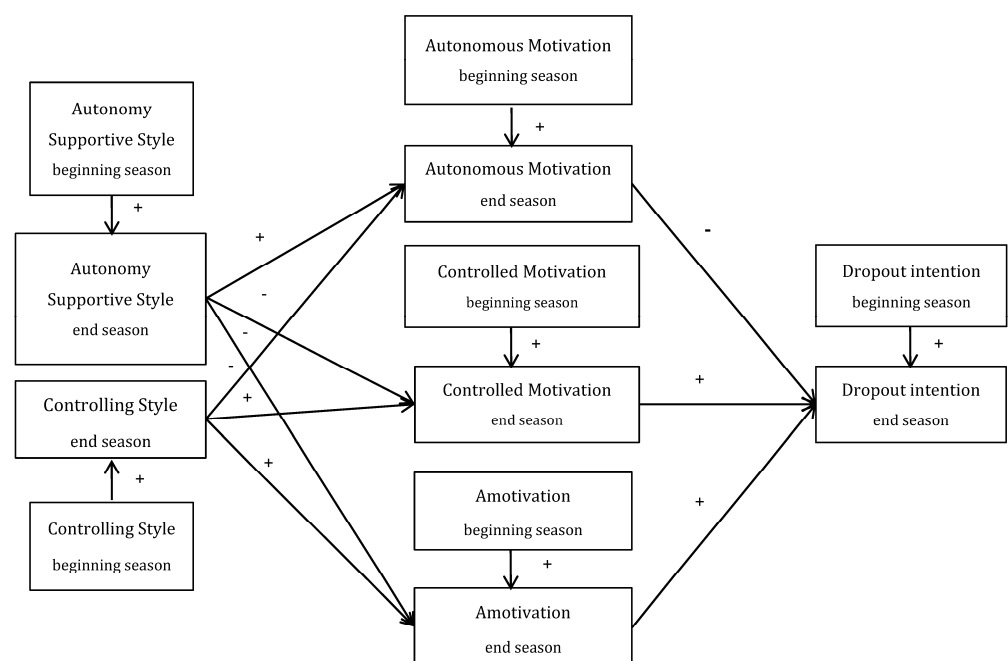
Grounded in the SDT framework, the objective was to explore whether changes during the season in the players' perceptions of an autonomy-supportive and controlling interpersonal style of the coach predict changes in autonomous, controlled, and amotivation of the players, and whether, in turn, changes in autonomous, controlled, and amotivation predict changes in the intention to drop out at the end of the season. The sequence followed will be as follows: Perception of the coach's interpersonal style (autonomy-supportive and controlling style) → Autonomous, controlled, and amotivation → Intention to drop out.

The analyses are expected to confirm a good fit of the hypothesized model. Specifically, it is expected that at Time 2 (at the end of the season), once the variable is controlled at Time 1 (at the beginning of the season):

**Hypothesis 1 (H1).** *Changes in the perception of the autonomy-supportive interpersonal style will positively predict changes in autonomous motivation and negatively predict changes in controlled motivation and amotivation.*

**Hypothesis 2 (H2).** *Changes in the perception of the controlling interpersonal style will negatively predict changes in autonomous motivation and positively predict changes in controlled motivation and amotivation.*

**Hypothesis 3 (H3).** *Changes in autonomous motivation will negatively predict changes in dropout intentions, and changes in controlled motivation and amotivation will positively predict changes in intentions to drop out of football (see Figure 1).*



**Figure 1.** Hypothesized structural model of the relationship model, at Time 2 controlling Time 1, between the perception of the coaches' interpersonal styles, the forms of motivation, and the intention to drop out of football.

## 2. Materials and Methods

### 2.1. Participants

The participants in the study were 552 players (508 men and 44 women) between nine and 13 years old ( $M = 11.23$ ;  $SD = 1.14$ ) from 15 Spanish youth football clubs or schools. The sample was selected through a random, stratified by gender and competitive level and proportional process with respect to the total number of federated football players within the aforementioned ages. This sample is part of a larger sample within the European project PAPA (Promoting Adolescent Physical Activity) [38].

The mean number of seasons the participants have been in the same club is 3.02 ( $SD = 2.21$ ), with a minimum of one season and a maximum of nine. The number of hours the players spent per week training or playing with their respective teams varies between two and eight hours ( $M = 4.31$ ;  $SD = 1.01$ ).

### 2.2. Instruments

The following instruments were administered, in addition to the sociodemographic variables of gender, age, category level, seasons they have been in the same club, and hours per week practicing football.

Coach's autonomy support interpersonal style. The athletes' perception of the degree of autonomy support offered by their coach was assessed using five items adapted from the Sport Climate Questionnaire (SCQ; <http://selfdeterminationtheory.org/> (accessed on 30 October 2022)) in its Spanish version [25]. When indicating their level of agreement with each item, players were asked to think about what their first coach had usually done or said during the past 3–4 weeks. An example item is: "My coach gives players choices and options". Previous studies have supported the validity of the instrument in its Spanish version [31].

Controlling interpersonal style of the coach. The athletes' perception of the coach's controlling interpersonal style was assessed using nine items from the Spanish version [39], adapted for this study, of the Coach's Controlling Behavior Scale (CCBS) [21]. When indicating their level of agreement with each item, players were asked to think about what their first coach had usually done or said during the past 3–4 weeks. An example item is "My coach is less friendly with players if they don't make the effort to see things his or her way". The validity and reliability of the scale has been confirmed in previous studies [21,40].

Players' motivation. To assess players' motivational regulations to participate in football, an adaptation for young football players composed of 20 items [41] from the Behavioral Regulation in Sport Questionnaire (BRSQ) [12] was used. The players were asked to indicate to what extent each of the reasons given in the different items explained why they play football, indicating their degree of agreement or disagreement with each of them to measure five dimensions (four items for each): Amotivation (e.g., "I play football, but I question why I am playing this sport"); external regulation (e.g., "I play football because people push me to play"); introjected regulation (e.g., "I play football because I would feel ashamed if I quit"); identified regulation (e.g., "I play football because the benefits are important to me [e.g., developing as a player, getting fit, playing with my teammates]"); and intrinsic motivation (e.g., "I play football because I enjoy it"). As in previous studies [42], the items from the subscales of intrinsic motivation and identified regulation were combined to create the variable Autonomous Motivation, and the items from the subscales of introjected regulation and external regulation were combined to create the variable Controlled Motivation. In addition to these forms of motivation, amotivation is also analyzed in this study. Previous studies in the sport domain have shown the scale's adequate reliability and validity [12,41].

Players' future intention to drop out. The players' intention to drop out of sports at the end of the season was evaluated with five items adapted to football [43], based on the items used by Sarrazin et al. [33] in a study with handball players. The football players were asked to indicate their agreement or disagreement according to what they



thought at the time of answering the questionnaire. Three of the items refer to the intention to continue (e.g., “I plan to play football next season”), whereas two items refer to the intention to drop out (e.g., “I intend to drop out of football at the end of this season”). The intention to drop out was obtained after inverting the three items referring to the intention to continue. This scale has been validated in the Spanish population [44], showing acceptable internal consistency.

### 2.3. Procedure

Before collecting the data, ethical approval was secured from the Institutional Review Board of the University of Valencia (beneficiary no 3 of grant agreement 223600). This research was conducted in accordance with international ethical standards aligned with the guidelines of the American Psychological Association (APA) and the Declaration of Helsinki.

An informative letter was sent to club managers, coaches, parents, and players, inviting them to participate in the study on a voluntary basis. Those who agreed to participate signed an informed consent form. Data were collected at the beginning and end of one competitive football season with similar procedures followed at both time points. Questionnaires were completed by the players at their respective football clubs or schools in a dedicated space. A minimum of two investigators were present who requested participants to answer honestly, confirmed that their responses would be kept confidential and encouraged the participants to ask any question they might have if instructions or item wording were confusing. No one else except the investigator was present during the data collection to make it less likely that the coach or some significant other might influence responses.

### 2.4. Data Analysis

The reliability and factorial structure of the instruments used in this research were explored. Internal consistency of each scale was ascertained via determination of a Cronbach’s alpha coefficient. Values between 0.60 and 0.80 indicate good and acceptable reliability, and values greater than 0.80 indicate very good reliability [45–49]. The factor structure of the questionnaires was verified with confirmatory factor analysis (CFA) [50,51] using the Maximum Likelihood (ML) method. As input for the data analysis, both the polychoric correlation matrices and the asymptotic covariance matrices were used to correct the possible lack of normal distribution. Various goodness-of-fit indices were used to ascertain the fit of the data to the hypothesized model, including the root mean error of approximation (RMSEA), nonnormative fit index (NNFI), and comparative fit index (CFI). CFI and NNFI values above 0.90 indicate an acceptable fit [52]. For the RMSEA, values less than 0.10 are considered acceptable (ideally equal to or less than 0.08) [53].

Time of assessment mean differences (beginning and end of season) analyses were performed using Student’s *t*-test for related samples (IBM SPSS Statistics version 20).

Path analysis examined the hypothesized relationships between the variables. In each case, the relationships between the variables at Time 2 were tested, controlling for the effect of each respective variable at Time 1 in the model. Because the model includes two measurements for each variable (Time 1 and Time 2), the parameters proposed in the model were too high given the sample of participants available. Thus, analyses were run with latent variables instead of using the observed indicators. For this reason, once the measurement models had been verified by the CFAs carried out for each scale, showing that the observed indicators were satisfactorily related to their latent factors, the mean scores were used as indicators of the variables. Subsequently, the structural relationships model was tested using the Maximum Likelihood estimation method, given that it is the most appropriate estimation method in these circumstances. As in the CFAs of the questionnaires, to measure the fit of the model, the RMSEA, NNFI, and CFI goodness-of-fit indices were used.

For the CFA of the questionnaires and the path analysis, the LISREL version 8.80 program [54] was used. In all cases, the hypothesis tests were established at a significance level of 5%.

### 3. Results

The young football players perceived a high autonomy-supportive interpersonal style in their coaches and a low-medium controlling style at Time 1. At Time 2, the perception of the autonomy support decreased, and the perception of the controlling style increased. There were no statistically significant differences in any of the three forms of motivation in the participants between the beginning and the end of the season. The young players in this study demonstrated the highest mean score in autonomous motivation, followed by controlled motivation with a medium-low score and, finally, a low score on amotivation. Intention to drop out, which starts from a low average score, increased significantly at the end of the season (Table 1). Satisfactory internal consistency was found for all the scales over time.

**Table 1.** Mean scores, standard deviations, reliabilities, and difference between times for all the study variables.

	Time 1			Time 2			<i>t</i>
	<i>M</i>	<i>SD</i>	Alpha	<i>M</i>	<i>SD</i>	Alpha	
Coach's interpersonal style							
Autonomy-supportive style	4.18	0.68	0.62	4.09	0.71	0.72	2.64 **
Controlling style	2.31	0.69	0.66	2.38	0.76	0.76	−2.07 *
Players' motivation							
Autonomous motivation	4.43	0.53	0.69	4.39	0.63	0.79	1.45
Controlled motivation	2.32	0.89	0.79	2.29	0.90	0.81	0.59
Amotivation	1.75	1.02	0.80	1.74	1.00	0.82	0.24
Players' dropout intention	1.51	0.69	0.71	1.74	0.80	0.73	−6.54 **

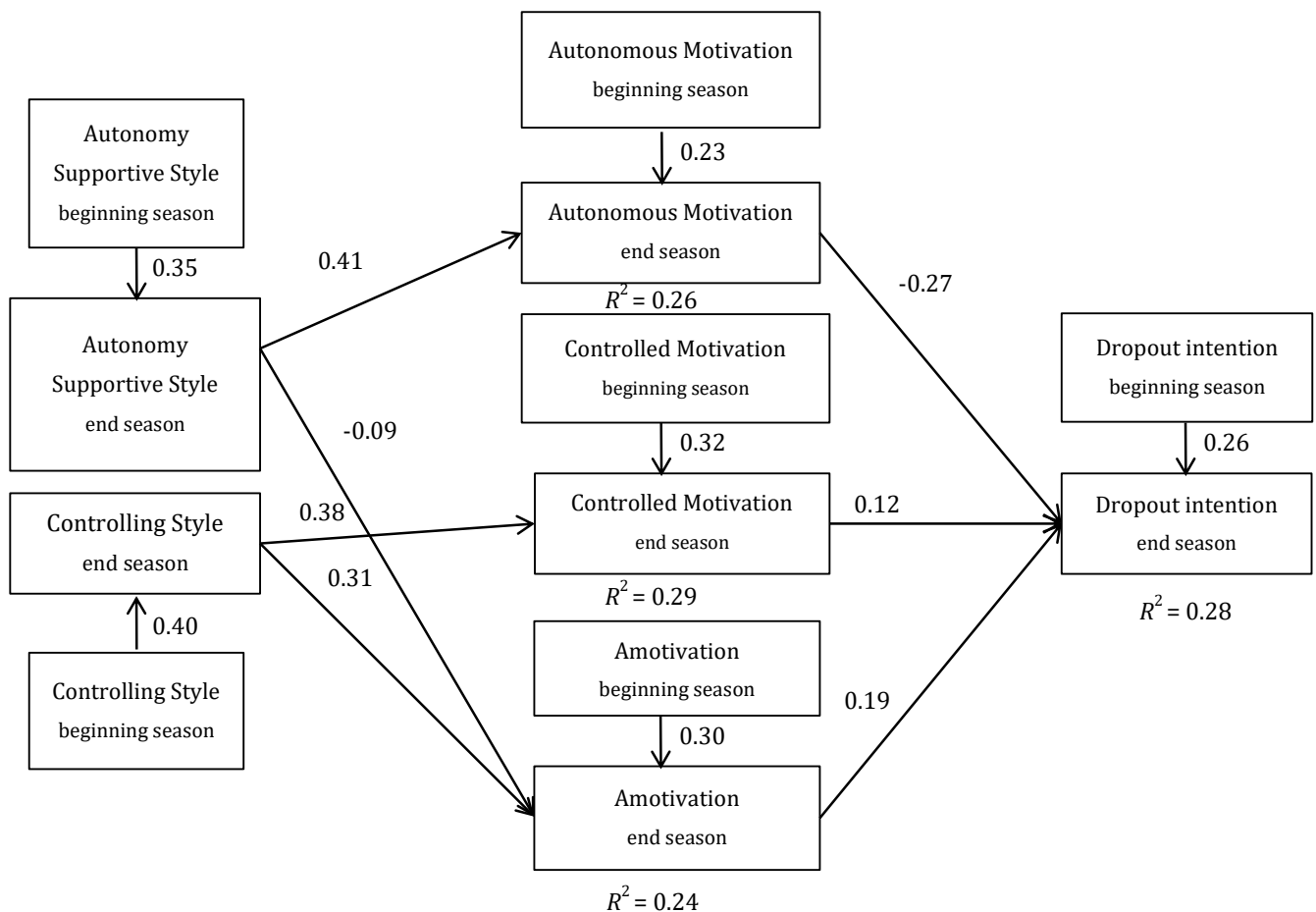
Note. All range variables = 1–5. \*\*  $p < 0.01$ ; \*  $p < 0.05$ .

The factorial structure of the instruments used in this study showed an adequate fit to the data (see Table 2).

**Table 2.** Goodness-of-fit indices for the study instruments.

	$\chi^2$	<i>df</i>	RMSEA	NNFI	CFI
Autonomy-supportive style Time 1	7.14	5	0.028	0.993	0.996
Autonomy-supportive style Time 2	12.55	5	0.053	0.985	0.993
Controlling style Time 1	90.03	27	0.039	0.976	0.982
Controlling style Time 2	86.44	27	0.064	0.963	0.972
Players' motivation Time 1	1563.99	167	0.060	0.969	0.973
Players' motivation Time 2	846.11	167	0.090	0.912	0.932
Players' dropout intention Time 1	25.87	5	0.087	0.969	0.984
Players' dropout intention Time 2	33.13	5	0.100	0.945	0.972

The results of the hypothesized model (see Figure 1) presented acceptable goodness-of-fit indices:  $\chi^2 (34) = 159.63$ ,  $p < 0.01$ ; RMSEA = 0.082; NNFI = 0.919; CFI = 0.958. The standardized parameter estimates are shown in Figure 2. The coach's autonomy-supportive style positively predicted changes in the players' autonomous motivation and negatively predicted changes in their amotivation, whereas changes in the coach's controlling style positively predicted changes in the players' controlled motivation and amotivation. In addition, changes in the players' autonomous motivation negatively predicted changes in their intentions to drop out of football, and changes in the players' controlled motivation and amotivation positively predicted their intentions to drop out (see Figure 2). As a whole, the proposed model explained 26% of the variance in the players' autonomous motivation, 29% of their controlled motivation, 24% of amotivation, and 28% of their intention to drop out of football.



**Figure 2.** Standardized solution of the relationship model, at Time 2 controlling Time 1, between the perception of the coaches' interpersonal styles, the forms of motivation, and the intention to drop out of football. Note. All the coefficients shown are significant at  $p < 0.05$ . To simplify the reading, non-significant relationships and the error terms between autonomy support and controlling style ( $-0.28$ ,  $p < 0.01$ ) and between controlled motivation and amotivation ( $0.36$ ,  $p < 0.01$ ) are not visualized.

#### 4. Discussion

Employing a longitudinal design, the social environmental (coaches' interpersonal style) and motivational processes that contribute to young footballers' (9–13 years of age) reported intentions to drop out of their sport were examined in the present study. A theoretical model, grounded in the SDT, was tested. With prediction of the intention to drop out of football as the major outcome, we explored whether changes in the players' perceptions of the coach's autonomy-supportive interpersonal style and controlling interpersonal style over the course of the season would predict changes in the autonomous, controlled, and amotivation of the players during the same time period. The model also considered whether changes in these three motivation variables would predict changes in the intention to drop out of football at the end of the season.

Overall, the analyses supported a good fit of the data to the theoretical model and indicated that changes in players' perceptions of the coach's autonomy-supportive interpersonal style positively predicted changes in the players' autonomous motivation. Contrary to our hypothesis, perceived autonomy support did not emerge as a negative predictor of changes in controlled motivation and amotivation (H1).

Previous sport research has obtained results that are in line with these findings [25,28,29,40,55]. According to the postulates of the SDT and past studies, when coaches allow players to choose and involve them in decision making, give arguments for the demands and limitations they present to the players (e.g., reasons for particu-



lar aspects of their training routines), and take their perspective into account, they promote more self-determined forms of motivation (autonomous) in their athletes. On the other hand, inconsistent results have been found in the literature regarding the relationship between coach autonomy support and the controlled forms of motivation or amotivation [25,26,28–30]. In essence, positive features of the social environment tend to correspond to more positive and adaptive types of motivation than negatively predict controlled motivation or players' reporting having no motivation at all. Taken in their totality, such findings highlight the importance of studying the specific relationships between perceived coach autonomy support and the more or less self-determined forms of motivation regulations.

We expected changes in coaches' perceived controlling interpersonal style to negatively predict changes in players' autonomous motivation and positively predict changes in their controlled motivation and amotivation (H2). This hypothesis was only partially confirmed, given that the results show that changes in the perception of the coach's controlling style positively predicted changes in players' controlled motivation and amotivation only, but not negative changes in their autonomous motivation. That is, when players perceive that their coach is using coercive strategies, such as employing a controlling use of rewards, negative conditional attention, intimidation, or excessive control, players report less self-determined motives or even no motivation for participating in football.

Aligned with the point made above drawing from recent research, more negative features of the social environment (such as controlling coach behaviors) are more likely to significantly predict more maladaptive forms of motivation (and ensuing outcome) than significantly and negatively predict self-determined motivation and positive outcomes [26,30]. At best, the latter relationships tend to be weaker [26,40]. Overall, our findings are consistent with previous cross-sectional research, where the observed relationships between the perceived coach's controlling style and each of the types of motivation are not always significant. For example, there are studies in which athletes' perceptions of controlling coach behaviors positively predicted their controlled motivation, but, as in our study, these perceptions did not significantly, negatively predict autonomous motivation [26]. However, other studies found that the controlling interpersonal style of the coach was negatively related to autonomous motivation, but not to controlled motivation [40]. This last study also included amotivation, and, as in the present study, they also found a positive relationship between athletes' perceptions of the coach's controlling style and amotivation.

Third, changes in autonomous motivation were expected to negatively predict changes in dropout intention, and changes in controlled motivation and amotivation were expected to positively predict changes in dropout intention (H3). As expected, the results suggest that the degree to which athletes practice football by choice and feel that their behaviors are self-determined holds implications for their intention to leave their sport. Specifically, we found changes in players' intention to drop out when the season was drawing to a close to be negatively predicted by changes in autonomous motivation and positively predicted by changes in controlled motivation and amotivation. These results are consistent with those reported in previous studies [33–35].

As suggested in SDT, people who participate in an activity for autonomous reasons are more likely to want to continue to participate in that activity, either because they are having fun or because they think participation is good for them, brings personally valued benefits or reflects who they are as individuals. However, the main motivation of the participants who present less self-determined levels of motivation is not the practice of and the experience of the activity itself, but rather because they feel they have to or because of some external reward or contingency. Over time, it is not surprising that such individuals would be more prone to ceasing their participation.

In summary, the results of this study offer support for the potential positive as well as negative influence of the coach's interpersonal style (i.e., autonomy-supportive style and controlling style), as perceived by the athletes, on the quality of their motivation and, in

turn, intention to drop out of sports. More research is needed to test the theoretical model examined in this study because the existing evidence on the interplay between the targeted variables for promoting sustained and optimal (or compromised) sports practice is limited, and particularly so when analyzing these processes from a longitudinal approach.

The present results provide further evidence regarding the social environmental and motivation-related factors predicting behavioral intention as a proxy for dropout behavior [56]. This research could be extended in future studies by identifying objectively occurred cases of dropout following the season in question and including the analysis of the players' reasons for doing so. Moreover, future research could try to further test the theoretical model (via longitudinal data) in samples of athletes of different ages, both sexes, representing different competitive levels, and from different countries or cultural backgrounds. The fact that the present sample is mainly made up of young male football players keeps us from generalizing the results to other types of populations, particularly girls who participate in youth football.

## 5. Conclusions and Applied Implications

In general, the results of our study support the importance of coaches in encouraging forms of motivation in young players that contribute to the continuity of sports practice or make dropping out more likely. With the objective of promotive sustained engagement, it is essential that coaches use autonomy-supportive strategies, such as encouraging players to take initiative, ask questions, give their opinion, and participate in decision-making whenever possible (for example, when establishing operating rules), trying to make athletes feel understood and valued (for example, taking into account their emotions after making a mistake), and providing meaningful reasons when asking for things to be done in a certain way or when setting limits.

However, coaches not only need to exhibit such autonomy-supportive behaviors, but present findings imply that they should also avoid carrying out the typical behaviors and strategies indicative of a controlling interpersonal style. By so doing, they are more likely to mitigate the risk of young football players feeling that their reasons for playing football are controlled or that they are unable to find reasons to continue to play. To avoid using a controlling style, coaches can refrain from the use of controlling rewards, not reject athletes when they do not see things their way or when they think players are not training or playing well enough, avoid intimidating and exerting excessive personal control over athletes, and refrain from yelling at them or threatening them with punishment.

**Author Contributions:** Conceptualization, P.F., I.C., J.L.D. and I.B.; methodology, P.F., I.C., J.L.D. and I.B.; software, P.F., I.C. and I.B.; validation, P.F., I.C., L.G.-G., J.L.D. and I.B.; formal analysis, P.F. and I.C.; investigation, P.F., I.C., J.L.D. and I.B.; resources, I.B.; data curation, P.F. and I.C.; writing—original draft preparation, P.F., I.C., L.G.-G., J.L.D. and I.B.; writing—review and editing, P.F., I.C., L.G.-G., J.L.D. and I.B.; visualization, P.F. and I.C.; supervision, J.L.D. and I.B.; project administration, J.L.D. and I.B.; funding acquisition, P.F., J.L.D. and I.B. All authors have read and agreed to the published version of the manuscript.

**Funding:** The research leading to these results has received funding from the European Community's Seventh Framework Programme FP7/2007–2013 under grant agreement n° 223600, and by the Generalitat Valenciana through the VALi+d program (2012/5541).

**Institutional Review Board Statement:** The study was conducted according to the guidelines of the Declaration of Helsinki and approved by the Institutional Review Board (or Ethics Committee) of Universitat de València (protocol code 223600 approved on 21 December 2009).

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

**Data Availability Statement:** All data used in this study are presented in the manuscript.

**Conflicts of Interest:** The authors declare no conflict of interest. The funders had no role in the design of the study, in the collection, analyses, or interpretation of the data, in the writing of the manuscript, or in the decision to publish the results.

## References

1. Barbosa, S.; Urrea, A. Influencia del deporte y la actividad física en el estado de salud físico y mental: Una revisión bibliográfica. *Rev. Katharsis* **2018**, *25*, 141–159.
2. Eime, R.M.; Young, J.A.; Harvey, J.T.; Charity, M.J.; Payne, W.R. A systematic review of the psychological and social benefits of participation in sport for children and adolescents: Informing development of a conceptual model of health through sport. *Int. J. Behav. Nutr. Phys. Act.* **2013**, *10*, 98. [[CrossRef](#)] [[PubMed](#)]
3. Faude, O.; Kerper, O.; Mulhaupt, M.; Winter, C.; Beziel, K.; Junge, A.; Meyer, T. Football to tackle overweight in children. *Scand. J. Med. Sci. Sports* **2010**, *20*, 103–110. [[CrossRef](#)] [[PubMed](#)]
4. Back, J.; Johnson, U.; Svedberg, P.; McCall, A.; Ivarsson, A. Drop-out from team sport among adolescents: A systematic review and meta-analysis of prospective studies. *Psychol. Sport Exerc.* **2022**, *61*, 102205. [[CrossRef](#)]
5. Deci, E.L.; Ryan, R.M. Human autonomy: The basis for true self-esteem. In *Efficacy, Agency, and Self-Esteem*; Kemis, M., Ed.; Plenum: New York, NY, USA, 1995.
6. Deci, E.L.; Ryan, R.M. The “what” and “why” of Goal Pursuits: Of Behavior Human Needs and the Self-determination. *Psychol. Inq.* **2000**, *11*, 227–268. [[CrossRef](#)]
7. Ryan, R.M.; Deci, E. Active human nature: Self-determination theory and the promotion, and maintenance of sport, exercise and health. In *Intrinsic Motivation and Self-Determination in Sport and Exercise*; Hagger, M.S., Chatzisarantis, N.L.S., Eds.; Human Kinetics: Champaign, IL, USA, 2007; pp. 1–22.
8. Ryan, R.M.; Deci, E.L. *Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness*; Guilford Publications: New York, NY, USA, 2017.
9. Deci, E.L.; Ryan, R.M. *Intrinsic Motivation and Self-Determination in Human Behavior*; Plenum Press: New York, NY, USA, 1985; Volume 39, ISBN 0306420228.
10. Ryan, R.M.; Connell, J.P. Perceived locus of causality and internalization: Examining reasons for acting in two domains. *J. Pers. Soc. Psychol.* **1989**, *57*, 749. [[CrossRef](#)]
11. Deci, E.L. *Intrinsic Motivation*; Plenum Press: New York, NY, USA, 1975.
12. Lonsdale, C.; Hodge, K.; Rose, E.A. The development of the Behavioral Regulation in Sport Questionnaire (BRSQ): Instrument Development and Initial Validity Evidence. *J. Sport Exerc. Psychol.* **2008**, *30*, 323–335. [[CrossRef](#)]
13. Ryan, R.M.; Deci, E.L. Overview of Self-Determination Theory: An organismic dialectical perspective. In *Handbook of Self-Determination Research*; Deci, E.L., Ryan, R.M., Eds.; The University of Rochester Press: Rochester, NY, USA, 2002; pp. 3–33.
14. Blais, M.R.; Sabourin, S.; Boucher, C.; Vallerand, R. Toward a motivational model of couple happiness. *J. Pers. Soc. Psychol.* **1990**, *59*, 1021. [[CrossRef](#)]
15. Sarrazin, P.; Boiché, J.; Pelletier, L. A self-determination theory approach to dropout in athletes. In *Intrinsic Motivation and Self-Determination in Exercise and Sport*; Hagger, M.S., Chatzisarantis, N.L.D., Eds.; Human Kinetics: Champaign, IL, USA, 2007; pp. 229–241.
16. Smoll, F.L.; Smith, R.E. Coaching behavior research and intervention in youth sports. In *Children and Youth in Sport: A Biopsychosocial Perspective*; Smoll, F.L., Smith, R.E., Eds.; Kendall/Hunt: Dubuque, IA, USA, 2002; pp. 211–233.
17. Vallerand, R.J.; Losier, G.F. An integrative analysis of intrinsic and extrinsic motivation in sport. *J. Appl. Sport Psychol.* **1999**, *11*, 142–169. [[CrossRef](#)]
18. Black, A.E.; Deci, E.L. The effects of instructors’ autonomy support and students’ autonomous motivation on learning organic chemistry: A self-determination theory perspective. *Sci. Educ.* **2000**, *84*, 740–756. [[CrossRef](#)]
19. Reeve, J.; Bolt, E.; Cai, Y. Autonomy-supportive teachers: How they teach and motivate students. *J. Educ. Psychol.* **1999**, *91*, 537–548. [[CrossRef](#)]
20. Mageau, G.A.; Vallerand, R.J. The coach–athlete relationship: A motivational model. *J. Sports Sci.* **2003**, *21*, 883–904. [[CrossRef](#)] [[PubMed](#)]
21. Bartholomew, K.J.; Ntoumanis, N.; Thøgersen-Ntoumani, C. The Controlling Interpersonal Style in a Coaching Context: Development and Initial Validation of a Psychometric Scale. *J. Sport Exerc. Psychol.* **2010**, *32*, 193–216. [[CrossRef](#)] [[PubMed](#)]
22. Bartholomew, K.J.; Ntoumanis, N.; Thøgersen-Ntoumani, C. A review of controlling motivational strategies from a self-determination theory perspective: Implications for sports coaches. *Int. Rev. Sport Exerc. Psychol.* **2009**, *2*, 215–233. [[CrossRef](#)]
23. Deci, E.L.; Ryan, R.M. The empirical exploration of intrinsically motivated processes. In *Advances in Experimental Social Psychology*; Berkowitz, L., Ed.; Academic Press: New York, NY, USA, 1980; pp. 39–80.
24. Deci, E.L.; Schwartz, A.J.; Sheinman, L.; Ryan, R.M. An instrument to assess adults’ orientations toward control versus autonomy with children. *J. Educ. Psychol.* **1981**, *73*, 642–650. [[CrossRef](#)]
25. Balaguer, I.; Castillo, I.; Duda, J.L.; Tomás, I. Análisis de las propiedades psicométricas de la versión española del Cuestionario de Clima en el Deporte. *Rev. Psicol. Deport.* **2009**, *18*, 73–83.
26. Fenton, S.A.M.; Duda, J.L.; Quedest, E.; Barret, T. Coach autonomy support predicts autonomous motivation and daily moderate-to-vigorous physical activity and sedentary time in youth sport participants. *Psychol. Sport Exerc.* **2014**, *15*, 453–463. [[CrossRef](#)]

27. Gillet, N.; Vallerand, R.J.; Amoura, S.; Baldes, B. Influence of coaches' autonomy support on athletes' motivation and sport performance: A test of the hierarchical model of intrinsic and extrinsic motivation. *Psychol. Sport Exerc.* **2010**, *11*, 155–161. [[CrossRef](#)]
28. Jakobsen, A.M. The relationship between motivation, perceived Motivational Climate, Task and Ego Orientation, and Perceived Coach Autonomy in young ice hockey players. *Balt. J. Health Phys. Act.* **2021**, *13*, 79–91. [[CrossRef](#)]
29. Mossman, L.H.; Slemp, G.R.; Lewis, K.J.; Colla, R.H.; O'Halloran, P. Autonomy support in sport and exercise settings: A systematic review and meta-analysis. *Int. Rev. Sport Exerc. Psychol.* **2022**, 1–24. [[CrossRef](#)]
30. Pelletier, L.G.; Fortier, M.S.; Vallerand, R.J.; Brière, N.M. Associations Among Perceived Autonomy Support, Forms of Self-Regulation, and Persistence: A Prospective Study. *Motiv. Emot.* **2001**, *25*, 279–306. [[CrossRef](#)]
31. Balaguer, I.; Castillo, I.; Duda, J.L.; Quested, E.; Morales, V. Predictores socio-contextuales y motivacionales de la intención de continuar participando: Un análisis desde la SDT en danza. *RICYDE. Rev. Int. Cienc. Deport.* **2011**, *7*, 305–319. [[CrossRef](#)]
32. Dias, C.; Corte-Real, N.; Barreiros, A.; Brustad, R.; Fonseca, A.M. Como distinguir jovens atletas que tencionam continuar a praticar desporto dos que não tencionam continuar a fazê-lo? *Cuad. Psicol. Deport.* **2015**, *15*, 27–40. [[CrossRef](#)]
33. Sarrazin, P.; Vallerand, R.; Guillet, E.; Pelletier, L.; Cury, F. Motivation and dropout in female handballers: A 21-month prospective study. *Eur. J. Soc. Psychol.* **2002**, *32*, 395–418. [[CrossRef](#)]
34. Castillo-Jiménez, N.; López-Walle, J.M.; Tomás, I.; Tristán, J.; Duda, J.L.; Balaguer, I. Empowering and Disempowering Motivational Climates, Mediating Psychological Processes, and Future Intentions of Sport Participation. *Int. J. Environ. Res. Public Health* **2022**, *19*, 896. [[CrossRef](#)]
35. Trbojević Jocić, J.; Petrović, J. Understanding of dropping out of sports in adolescence-testing the hierarchical model of intrinsic and extrinsic motivation. *Kinesiology* **2021**, *53*, 245–256. [[CrossRef](#)]
36. Boiché, J.S.C.; Sarrazin, P.G. Proximal and distal factors associated with dropout versus maintained participation in organized sport. *J. Sports Sci. Med.* **2009**, *8*, 9–16.
37. Lukwu, R.M.; Guzmán, J.F. Sport commitment and adherence: A social-cognitive analysis. *Int. J. Sport Sci.* **2011**, *8*, 277–286. [[CrossRef](#)]
38. Duda, J.L.; Quested, E.; Haug, E.; Samdal, O.; Wold, B.; Balaguer, I.; Castillo, I.; Sarrazin, P.; Papaioannou, A.; Ronglan, L.T.; et al. Promoting Adolescent health through an intervention aimed at improving the quality of their participation in Physical Activity (PAPA): Background to the project and main trial protocol. *Int. J. Sport Exerc. Psychol.* **2013**, *11*, 319–327. [[CrossRef](#)]
39. Castillo, I.; Tomás, I.; Ntoumanis, N.; Bartholomew, K.; Duda, J.L.; Balaguer, I. Psychometric properties of the Spanish version of the Controlling Coach Behaviors Scale in the sport context. *Psicothema* **2014**, *26*, 409–414. [[CrossRef](#)]
40. Cantú-Berrueto, A.; Castillo, I.; López-Walle, J.; Tristán, J.; Balaguer, I. Estilo interpersonal del entrenador, necesidades psicológicas básicas y motivación: Un estudio en futbolistas universitarios mexicanos. *Rev. Iberoam. Psicol. Ejerc. Y Deport.* **2016**, *11*, 263–270.
41. Viladrich, C.; Appleton, P.R.; Quested, E.; Duda, J.L.; Alcaraz, S.; Heuzé, J.-P.; Fabra, P.; Samdal, O.; Ommundsen, Y.; Hill, A.P.; et al. Measurement invariance of the Behavioural Regulation in Sport Questionnaire when completed by young athletes across five European countries. *Int. J. Sport Exerc. Psychol.* **2013**, *11*, 384–394. [[CrossRef](#)]
42. Chan, D.K.-C.; Hagger, M.S.; Spray, C.M. Treatment motivation for rehabilitation after a sport injury: Application of the trans-contextual model. *Psychol. Sport Exerc.* **2011**, *12*, 83–92. [[CrossRef](#)]
43. Quested, E.; Ntoumanis, N.; Viladrich, C.; Haug, E.; Ommundsen, Y.; Van Hove, A.; Mercé, J.; Hall, H.K.; Zourbanos, N.; Duda, J.L. Intentions to drop-out of youth soccer: A test of the basic needs theory among European youth from five countries. *Int. J. Sport Exerc. Psychol.* **2013**, *11*, 395–407. [[CrossRef](#)]
44. Fabra, P.; Castillo, I.; González-García, L.; Duda, J.L.; Balaguer, I. Changes in Drop Out Intentions: Implications of the Motivational Climate, Goal Orientations and Aspects of Self-Worth across a Youth Sport Season. *Sustainability* **2021**, *13*, 13850. [[CrossRef](#)]
45. Bland, J.M.; Altman, D.G. Statistics notes: Cronbach's alpha. *Br. Med. J.* **1997**, *314*, 572. [[CrossRef](#)]
46. Dugard, P.; Todman, J.; Staines, H. *Approaching Multivariate Analysis: A Practical Introduction*, 2nd ed.; Routledge: Hove, UK; Sussex, UK; New York, NY, USA, 2010.
47. Field, A. Exploratory Factor Analysis. In *Discovering Statistics Using SPSS*, 3rd ed.; SAGE Publications Ltd.: London, UK, 2009; pp. 619–680.
48. Schmitt, N. Uses and abuses of coefficient alpha. *Psychol. Assess.* **1996**, *8*, 350–353. [[CrossRef](#)]
49. Streiner, D.; Norman, G. *Health Measurement Scales: A Practical Guide to Their Development and Use*, 2nd ed.; Oxford University Press: Oxford, UK, 1995.
50. Byrne, B.M. *Structural Equation Modeling with AMOS: Basic Concepts, Applications, and Programming*, 2nd ed.; Routledge Academy: New York, NY, USA, 2010.
51. Kline, R.B. *Principles and Practice of Structural Equation Modeling*, 3rd ed.; Guilford Press: New York, NY, USA, 2011.
52. Hu, L.T.; Bentler, P.M. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Struct. Equ. Model. A Multidiscip. J.* **1999**, *6*, 1–55. [[CrossRef](#)]
53. Cole, D.A.; Maxwell, S.E. Multitrait-Multimethod Comparisons Across Populations: A Confirmatory Factor Analytic Approach. *Multivar. Behav. Res.* **1985**, *20*, 389–417. [[CrossRef](#)]
54. Jöreskog, K.G.; Sörbom, D. *LISREL 8.80 [Computer Software]*; Scientific Software International, Inc.: Lincolnwood, IL, USA, 2006.

55. Jõesaar, H.; Hein, V.; Hagger, M.S. Peer influence on young athletes' need satisfaction, intrinsic motivation and persistence in sport: A 12-month prospective study. *Psychol. Sport Exerc.* **2011**, *12*, 500–508. [[CrossRef](#)]
56. Ajzen, I.; Fishbein, M. *Understanding Attitudes and Predicting Social Behavior*; Prentice-Hall: Englewood Cliffs, NJ, USA, 1980.

**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.