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Intention to be physically active after school graduation and its relationship to three types of intrinsic motivation

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Abstract

In this article the relationships between three different types of intrinsic motivation and students' intention to be physically active after school graduation were examined. The participants were 400 school children aged 14–18 years. The modified version of SMS was used to measure the three different types of intrinsic motivation. The intention scale as a measurement of physical education outcome to be physically active was specially designed for this study. The data were analysed by means of structural equation modelling. The goodness of fit indexes of confirmatory factor model for three types of intrinsic motivation provided the evidence of existing different dimensions of intrinsic motivation among students in the physical education setting. The results of this study indicated that the intrinsic motivation to experience stimulation was the strongest predictor of intention to be physical active after school graduation, beyond the intrinsic motivation to accomplish.

Key-words: intention • intrinsic motivation • physical education • self-determination

Introduction

The most important function of contemporary physical education (PE) is to prepare children for a lifetime of physical activity (Sallis and McKenzie, 1991). Thus, the outcome of the teaching–learning process of PE is a physically active student who also has the intention to be active after graduation. In a review of educational literature, Deci et al. (1991) reported that self-determined motivation has been linked to a number of positive outcomes, such as academic performance, personal adjustment and continuation of studies. It is assumed that when people are intrinsically motivated to exercise they will be physically active for long life periods. Several researchers (Chatzisarantis et al., 1997; Escarti and Gutierrez, 2001; Hagger et al., 2002) have demonstrated that physical activity intentions are formed more on the basis of autonomous than controlling motives. Escarti and Gutierrez (2001) studied the effect of intrinsic motivation on physical activity intention using the subscales from the

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Intrinsic Motivation Inventory, presented by McAuley et al. (1989). They showed that interest-enjoyment and effort-importance had indirect effect whereas perceived competence had a direct effect on physical activity intention. The present study aims to extend our knowledge about the influence of different types of intrinsic motivation proposed by Vallerand et al. (1992) on physical activity intention in line with self-determination theory (SDT).

Types of motivation

One of the widely used theories in the last decade to analyse the motivation in sports and educational contexts has been the self-determination theory (Kowal and Fortier, 2000; Ntoumanis, 2001; Vlachopoulos et al., 2000). Self-determination theory, proposed by Deci and Ryan (1985), is considered to be helpful in understanding the energization and direction of behaviour in compulsory subjects, such as PE (Ntoumanis, 2001). There are different types of behavioural regulations central to self-determination theory. External regulation, introjected regulation and identified regulation are typically viewed as more controlling types of behavioural regulation, whereas intrinsic motivation is characterized as an autonomous type of behavioural regulation. Intrinsic motivation is shown when the individual participates for the activity itself or for fun. Clearly moving towards intrinsically motivated forms of behavioural regulation is advisable for higher levels of intention and sustained adherence in sport and activity, since they are likely to involve stronger feelings of personal investment, autonomy and self-identification. These different types of motivation are placed along a self-determination continuum. The proposed continuum is posited to run from low to high levels of self-determination as one moves from amotivation and extrinsic motivation to intrinsic motivation (Deci and Ryan, 1985). Initially, theorists posited that intrinsic motivation was unidimensional in nature. Later, Vallerand et al. (1992) proposed the existence of three types of intrinsic motivation: intrinsic motivation to know (which involves engaging in activity for the pleasure of learning something new or knowing more about the activity); to accomplish (which results from practising an activity for the pleasure of outdoing oneself, and the process of trying to reach new personal objectives), and to experiencing stimulation (which refers to engaging in activity for the pleasant sensation derived from the activity itself).

Several questionnaires, based on the self-determination theory (Deci and Ryan, 1985, 1991), have developed to measure external, introjected and intrinsic forms of regulation of exercise behaviour. The subscales to measure these types were originally designed by Ryan and Conell (1989) to measure motivation in the classroom. Vallerand et al. (1992) developed the Academic Motivation Scale (AMS) in which, in addition to measuring the extrinsic, introjected and identified regulation, three types of aforementioned intrinsic motivation and also measures of amotivation were added.

Based on the self-determination theory (Deci and Ryan, 1985, 1991), the different motivational types in PE were measured at first by Goudas et al. (1994a). They adapted four subscales for the PE context, measuring intrinsic motivation,

identified regulation, introjected regulation and external regulation. In this study, and in others (Goudas et al., 1994b; Mullan et al., 1997) the intrinsic motivation was examined in unidimensional fashion. Further, within the conceptual framework of self-determination theory, Pelletier et al. (1995) developed and validated the Sport Motivation Scale (SMS). The goodness of fit parameters for confirmatory factor model, based on the responses of 600 different athletes at mean age of 18.4 years, were found to be acceptable (χ^2/d.f. ratio = 1.94, GFI =.94, AGFI =.92, NFI =.92, RMS =.048). Li and Harmer (1996), using a quite similar sample population, confirmed the seven-factor model of SMS. The authors also performed a second-order confirmatory factor analysis to test the appropriateness of combining the three types of intrinsic motivation into a single-scale score. The results indicated that the high-order factor (intrinsic motivation) adequately accounted for the covariations among the three first-order factors (i.e. three IM subscales of SMS). Additionally, these authors tested the validity of the simplix structure of all types of motivation underlying SMS subscales via structural equation modelling. The results showed that the various motivational constructs are empirically organized from low to high self-determination. The SMS is widely used by several researchers (Doganis, 2000; Martens and Webber, 2002; Petherick and Weigand, 2002; Yves and Vallerand, 1995) who investigated the different types of motivation among athletes or adults participating in sport clubs. However, to date, no attempt had been made to apply this instrument to investigate the multifaceted motivational orientations of schoolchildren in PE settings.

Intention to be physically active

According to the theory of planned behaviour, attitude influences intention when one is able to control the behaviour (Ajzen, 1985). Intention is viewed as the most proximal predictor of behaviour and it is supposed to reflect the relative strength of an individual motivation to engage in the behaviour. The intention expressed by children to practise sport or physical activity can be a good indicator of the motivation towards this activity as well as a strong predictor of this behaviour (Goudas et al., 1995). A recent longitudinal study of Greek students showed that a positive attitude towards exercise was a positive predictor of youngsters' exercise behaviour 7 and 14 months later (Papaioannou, 2000). In a study by Chatzisarantis et al. (1997) the intention of 11–15-year-old children to practise leisure-time exercise was assessed in terms of autonomous and controlling forms. The results showed that intentions predict physical activity when they are autonomous rather than controlling. Recently, Escarti and Gutierrez (2001) elaborated a five-item questionnaire to measure the children's intention to practise physical activity in the immediate future and investigated the relationship between intention and intrinsic motivation. In this study intrinsic motivation was estimated using the IMI inventory designed by McAuley et al. (1989). The structural equation model for intention, presented by Escarti and Gutierrez (2001), indicated that the measured three dimensions of intrinsic motivation – interest-enjoyment, perception of competence and effort-importance – had

indirect influence via the dimension of satisfaction on intention. However, Markland and Hardy (1997) have noted that these dimensions did not reflect the tenets of cognitive evaluation theory of Deci and Ryan (1985) from which the IMI was drawn. Hagger et al. (2002) investigated how general motives from self-determination theory influence intentions of children at age 12–14 years to engage in physical activity within the theory of planned behaviour. The results of the structural equation modelling indicated an indirect effect of intrinsic motives on intention mediated by the attitude and perceived behaviour control. These indirect effects were accounted for a large proportion of the factor correlation (r =.71) between intrinsic motivation and intention. The intrinsic motivation was assessed also by the single factor presenting the additional items from the identification scale (Ryan and Conell, 1989). A quite similar construct of intrinsic motivation instrument (one intrinsic motivation dimension with six items) was used by Ferrer-Caja and Weiss (2000) investigating the relationships between motivational climate, goal orientations and intrinsic motivation among students ranged in age from 14 to 19 years.

The review of the literature showed that most researchers so far have investigated the intrinsic motivation of schoolchildren in physical settings in unidimensional fashion. However, by studying different types of the intrinsic motivation, we can contribute to deeper understanding of the psychological processes underlying children's engagement in physical activity. In this study we assumed that more autonomous types of intrinsic motivation may have more effect on the intention of students to participate in physical activity voluntarily than less autonomous types.

The purpose of this study was twofold. The first purpose was to modify the three subscales of SMS to measure different types of intrinsic motivation among students in school PE settings. The second purpose was to investigate the relationships between different types of intrinsic motivation and children's intention to continue to exercise after graduation.

Method

Participants and procedure

The participants were 400 (194 boys and 206 girls) school children aged 14–18 years (M = 15.9, SD = 1.6) from different towns in Estonia; 149 students were studying in Grades 8 and 9 of the basic school and 251 students in high school. Students were taking physical education (PE) as a required course (two times a week). Parental consent was obtained for all children. Permission to carry out the questionnaire in each school was obtained from the headmaster or from teachers. The questionnaire was administered in the classroom. The purpose of the study was explained and the directions were given for completing the questionnaire. It was emphasized that the questionnaire was designed to measure students' general feelings about PE classes and not about one particular class. The questionnaire took approximately 10–12 minutes to complete. The students were assured that their answers would remain confidential.

Measures

The modified version of SMS (Pelletier et al., 1995) was used for measuring the three different types of intrinsic motivation in a PE setting using a five-point Likert scale (1=strongly disagree to 5=strongly agree). In order to construct the Estonian version of SMS, the items were translated into Estonian. Then the items were translated back into English by a bilingual expert. The back-translated items were similar in meaning to the original English items. Responses were made, following the stem 'I take part in physical education classes, because . . .' Additionally, five items for measuring intention to be physically active after graduation were elaborated specifically to this study (see Table 1). Students reported to a five-point Likert-type scale anchored by 1=strongly disagree to 5=strongly agree.

Data analysis

Listwise deletion was used to remove the missing values from the data set. After that, the responses to questionnaire of 396 students were subjected to data analyses. To test the structural construct of the intention subscale the total sample of 396 participants was randomly split to produce two subsamples, one for an exploratory factor analysis (EFA) (n = 198), and other for a confirmatory factor analysis (CFA) (n =198). A principal axis method of exploratory factor analysis was conducted to establish the structural construct for intention items. The factorial validity of the subscales of intention and intrinsic motivation was tested with confirmatory factor analysis using LISREL 8.51. Structural equation modelling procedures were used to test the relationships between dimensions of intrinsic motivation and the items of intention. The internal consistency of all subscales was assessed by Cronbach's alpha.

Results

Preliminary analyses

At first, distribution properties of responses to all the items were examined. The means, standard deviations, skewness and kurtosis for all measures are displayed in Table 1. Skewness values greater than one indicated that not all variables were non-normal in distribution. Also, the normalized estimate of Mardia's coefficient was high (35.52, p<.001) indicating multivariate non-normality. Therefore, for further analyses the polychoric correlations and its asymptotic covariance matrix were provided by PRELIS 2.51. To fit the models maximum likelihood method based on asymptotic covariance matrix was used and standard errors and chi-square were corrected for non-normality. Cronbach alpha coefficients for the subscales of intrinsic motivation to experience stimulation, to know and to accomplish were .73, .75, .74, respectively.

Table 1 Descriptive statistics of the observed variables

	Mean	SD	Skewness	Kurtosis
Intrinsic motivation – to experience stimulation (ES)				
1. For the pleasure I feel in living exciting experiences	3.51	1.14	–.52	–.51
2. For the excitement I feel when I am really involved in the activity	3.64	1.10	–.64	–.22
3. For the intense emotions I feel doing the physical exercises that I like	3.03	1.20	–.09	–.78
4. Because I like the feeling of being totally immersed in the activity	3.46	1.10	–.42	–.49
Intrinsic motivation – to know (KN)				
1. For the pleasure it gives me to know more about physical exercises	3.62	1.12	–.67	–.36
2. For the pleasure of discovering new learning techniques	3.75	1.07	–.72	.00
3. For the pleasure that I feel while learning skills/techniques that I have never tried before	3.70	1.12	–.82	.01
4. For the pleasure of discovering new performance strategies	3.60	1.10	–.54	–.39
Intrinsic motivation – to accomplish (AC)				
1. Because I feel a lot of personal satisfaction while mastering certain difficult tasks	3.98	1.09	–1.06	.48
2. For the pleasure I feel while improving some of my weak points	4.22	.89	–1.27	1.57
3. For the satisfaction I experience while I am perfecting my abilities	4.21	.96	–1.30	1.34
4. For the pleasure that I feel while executing certain difficult movements	3.51	1.08	–.47	–.39
Intention to be physically active (IN)				
1. I'm interested in developing my physical fitness	3.91	1.17	–.96	.04
2. Outside PE lessons I like to do sport	3.67	1.29	–.60	–.84
3. After graduation I would like to take part in sport club training	3.54	1.33	–.48	–.94
4. After graduation I would like to be physically active	3.90	1.10	–.87	.08
5. I often do sport in my free time	3.27	1.33	–.19	–1.18

Main analyses

Instrument to measure intention to be physically active

Initially, seven items were developed to measure physical activity intention among students. For the selection of the items several sources were used. In choosing the

Table 2 Extraction method: principal axis analysis of items for intention to be physically active

The items	Factor loading	Communalities
1. I'm interested in developing my physical fitness	.672	.451
2. Outside PE lessons I like to do sport	.791	.523
3. After graduation I would like to take part in sport club training	.773	.597
4. After graduation I would like to be physically active	.729	.597
5. I often do sport in my free time	.582	.338

Table 3 Goodness of fit statistics for the estimated models

	NFI	NNFI	CFI	AGFI	GFI	RMR	RMSEA	Confidence interval for RMSEA	SB $-\chi^2$ /d.f.
Model 1	.98	.96	.99	.93	.99	.02	.04	.00–.15	2.6/2
Model 2	.88	.87	.90	.84	.89	.07	.07	.05–.08	139.1/51
Model 3	.94	.93	.95	.90	.95	.05	.05	.03–.07	47.3/24

Note. Model 1 = confirmatory factor analysis of the intention to be physically active. Model 2 = confirmatory factor analysis of the initial version of three intrinsic motivation types. Model 3 = confirmatory factor analysis of respecification. NFI = normed fit index, NNFI = non-normed fit index, CFI = comparative fit index, AGFI = adjusted goodness of fit index, GFI = goodness of fit index, RMR = root mean square residual, RMSEA = root mean square error of approximation, SB $-\chi^2$/d.f. = the ratio of Sattora-Bentler scaled chi-square value and degrees of freedom.

items, the researchers looked at studies of theories of planned behaviour, where the results indicated a strong relation between attitude and intention (Ajzen, 2001; Hagger et al., 2002; Hausenbals et al., 1997). The content validity of the items was evaluated by the two internationally acknowledged sport psychologists. They indicated three of the questions with which there might be some problems. Two of them were excluded before the exploratory analysis. The data from 396 students were randomly split to produce two subsamples, one for EFA (n = 198) and the other for CFA (n = 198). The results of the exploratory factor analysis showed that all five items loaded on one factor. Considering the lower factor loading and communality of the item 'I often do sport in my free time' in the developed scale and also the previously obtained view of sport psychologists about the content validity of this item, it was removed. The results of the EFA are reported in Table 2. Four items emerged in one factor with strong factor loading over .60. The internal consistency of four items measured by Cronbach alpha was .80. A principal component factor analysis resulted in one factor solution accounting for 48.8 percent of the variance. In confirmatory factor analysis to standardize the latent variable, the variance of a factor was fixed to equal a constant (1.0). Fixing the variance of a factor to 1.0 has the advantage of simplicity. The goodness of fit statistics of the confirmatory factor model are presented in Table 3 (see model 1).

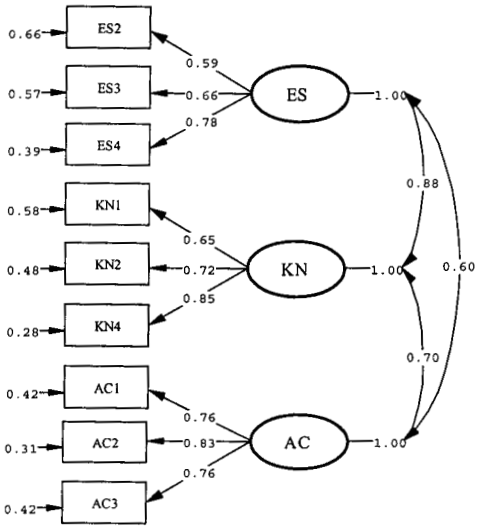

Figure 1 Confirmatory factor model for three types of intrinsic motivation (ES = intrinsic motivation – to experience stimulation; KN = intrinsic motivation – to know; AC = intrinsic motivation – to accomplish)

Instrument to measure intrinsic motivation

The confirmatory factor analysis was used to test the three-factor structure of intrinsic motivation (to experience stimulation, to accomplish, to know) with four items in each (see Table 1). The previously identified indexes of confirmatory factor model are presented in Table 3 (see model 2). The confirmatory factor analysis was conducted with the total sample (N = 396). The goodness of fit index (GFI), the comparative fit index (CFI) and the non-normed fit index (NNFI) did not exceed the .90 criterion proposed initially by Bentler (1990) and recently presented a cut of value of .95 (Hu and Bentler, 1999). Also, RMSEA was not lower than the criterion of .05 proposed for good fit by Loehlin (1992).Therefore the respecification of the model considering the low factor loading and high measurement errors of some items (measurement errors in CFA models can be seen as unmeasured exogenous variables) was taken to approach better fit (Kline, 1998). Based on this consideration, item 1 'For the pleasure I feel in living exciting experiences' from the subscale intrinsic motivation – to experience stimulation, item 3 'For the pleasure that I feel while learning skills/techniques that I have never tried before' from the subscale intrinsic motivation/to know and item 4 'For the pleasure that I feel while executing certain difficult movements' from the subscale intrinsic motivation/to accomplish were removed. The results of the reidentified indexes of confirmatory factor model are presented in Table 3 (model 3) and the structural model in Figure 1. As can be seen the respecification of the model resulted in essential improvement of the goodness of fit parameters.

Table 4 Goodness of fit statistics for the estimated models

	NFI	NNFI	CFI	AGFI	GFI	RMR	RMSEA	Confidence interval for RMSEA	SB $-\chi^2$ /d.f.
Model 1	.90	.90	.92	.86	.91	.06	.06	.04–.07	125.9/59
Model 2	.91	.90	.93	.87	.92	.06	.06	.04–.07	78.8/32

Note. Model 1 = structural equation modelling of intrinsic motivation and intention. Model 2 = modification of the structural equation modelling of intrinsic motivation and intention. NFI = normed fit index, NNFI = non-normed fit index, CFI = comparative fit index, AGFI = adjusted goodness of fit index, GFI = goodness of fit index, RMR = root mean square residual, RMSEA = root mean square error of approximation, SB $-\chi^2$/d.f. = the ratio of Sattora-Bentler scaled chi-square value and degrees of freedom.

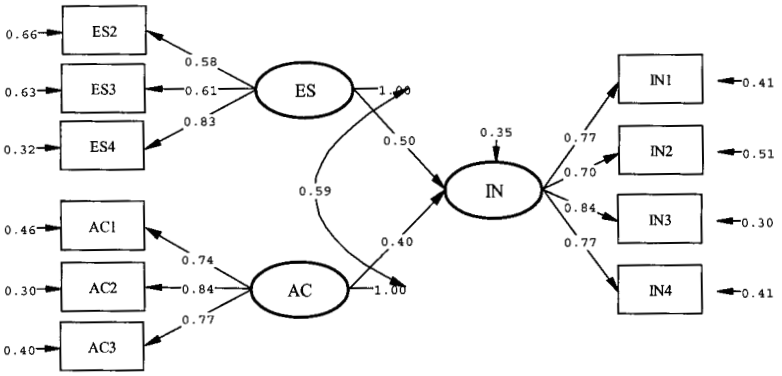

Figure 2 Structural model for intrinsic motivation and intention to be physically active (ES = intrinsic motivation – to experience stimulation; AC = intrinsic motivation – to accomplish; IN = intention to be physically active)

Structural equation model

The main idea of structural modelling was to test the hypothesis that different types of intrinsic motivation may have a different effect on outcomes of PE, characterized by the intention of students to participate in physical activity voluntarily. The goodness of fit statistics of the initial and re-estimated structural equation models are reported in Table 4. The re-estimated structural model is shown in Figure 2. The results of the initial structural equation model showed that the intention to be physically active was significantly predicted by intrinsic motivation to experience stimulation (standardized coefficient =.63, $p<0.01$ with the 95 percent confidence intervals from .22 to 1.03) and intrinsic motivation to accomplish (standardized coefficient =.46, $p<0.01$ with the 95 percent confidence intervals from .26 to .66), whereas the association with intrinsic motivation to know was not statistically significant. The measurement error of variance was .35, which may be viewed as the proportion of

unexplained variance in the structural equation. Thus, the three types of intrinsic motivation accounted for 65 percent of the variance in intention to be physically active.

Further, the model was re-estimated. The subscale intrinsic motivation to know was excluded due to there being no statistically significant relationship. It turned out that the proportion of unexplained variance in structural equation did not decrease, remaining the same at 35 percent. Also the goodness of fit statistics did not improve significantly. The values of standardized coefficient of intrinsic motivation to experience stimulation (.50, $p<0.01$ with the 95 percent confidence intervals from .35 to .65) and intrinsic motivation to accomplish (.40, $p<0.01$ with the 95 percent confidence intervals from .24 to .56) were different from those reported in the initial model. However, the overlap of confidence intervals for both factors may follow. This provides evidence that the exclusion of intrinsic motivation to know from the model does not attenuate these paths. So, the intrinsic motivation to experience stimulation was the strongest predictor of intention to be physically active after school graduation beyond the intrinsic motivation to accomplish.

Discussion

The current study can be considered of some importance from two perspectives. First, it examined the psychometric properties of an instrument that may have a potential for adding to the existing knowledge of the role of intrinsic motivation in a more than unidimensional fashion in a PE setting. Second, PE teachers considering the different impact of intrinsic motivation types on PE outcome, that is to be physically active after school graduation, may be more effective in their teaching.

The results of this study provide some support for the reliability and validity of SMS in respect of three types of intrinsic motivation with a sample of Estonian school children aged 14–18 years. Alpha scores for the three subscales were adequate, with values similar to those reported in original validation study of the instrument (Pelletier et al., 1995). The results of CFA generally supported the existence of differentiated intrinsic motivation types developed by Pelletier et al. (1995). Furthermore, the goodness of fit indexes were quite similar to those reported by Martens and Webber (2002), who tested separately the construct validity of intrinsic and extrinsic motivation types of SMS on a sample of college athletes in the US. The values of chi-square statistic χ^2 (51) = 142.74 and NFI (.89), CFI (.93), NNFI (.90), RMSEA (.08) reported by them for the intrinsic motivation types are consistent to a great extent with those obtained in our study (see Table 3, model 2). However, when one item from each of the subscales was removed, the goodness of fit indices improved (Table 3, model 3). An explanation for the respecification of the model beyond the low factor loadings and high measurement errors of some items may be that these were not particularly salient for the PE domain. For instance, for children to respond to the item 'For the pleasure that I feel while learning skills/techniques that I have never tried before' of the subscale intrinsic motivation to know is complicated as the

teachers obviously do not frequently provide new skills techniques during PE classes. The words 'difficult movements' in the fourth item of the subscale intrinsic motivation to accomplish are more abstract in comparison with the words 'difficult task' in the same subscale and may therefore not be well interpreted by children. Corbin (2002) has noted that children are concrete, rather than abstract, thinkers. Therefore, this was a reason why the fourth item from the intrinsic motivation to accomplish subscale was excluded. The expression of the first item 'For the pleasure I feel in living exciting experiences' in subscale intrinsic motivation to experience stimulation was considered to be very general. In addition to the generality of this item was the high value of measurement error correlation with items from other factors. Therefore, it was removed from this subscale.

The results of structural equation modelling showed that the intention to be physically active was significantly predicted by the intrinsic motivation to experience stimulation and intrinsic motivation to accomplish whereas the association with intrinsic motivation to know was not statistically significant. Furthermore, after the exclusion of the subscale of intrinsic motivation to know from the model the goodness of fit parameters of the model did not deteriorate.

This finding is consistent to some extent with several studies indicating a lack of association between physical activity and knowledge of health exercise (see McAuley et al., 1994). However, an explanation for the no significance effect of the intrinsic motivation to know on intention in the presented model is that teachers obviously provide a small amount of knowledge about new performance techniques and learning skills in PE classes. As a consequence, the formation of the intrinsic motivation to know as one of the autonomous motives is restricted among students. Therefore, the teachers should think about inspiring students to learn more new skills and giving them the desire to want to know more about exercise.

The results of the structural equation modelling presented by Hagger et al. (2002) indicated the indirect effect of external, introjected and intrinsic types of motivation on intention mediated by the attitude and perceived behaviour control. An important finding was that the presence of autonomous motives resulted in the effects of the controlling motives close to zero in the model. However, intrinsic motivation was assessed by the single factor presenting the additional items from the identification scale (Ryan and Conell, 1989). The results of the present study showed that when intrinsic motivation was measured in a multidimensional fashion the direct relations between students' intention to be physically active and motivation to experience stimulation and intrinsic motivation to accomplish exist. Therefore, PE teachers in a teaching process directed to achieve lifelong physical activity among students should consider the fact that, besides the intrinsic motivation type to experience stimulation, the intrinsic motivation to accomplish is also essential.

In conclusion, the results of this study provide some support for the reliability and validity of the SMS for measuring different types of intrinsic motivation of school children in the PE setting. Also, by assessing the different types of intrinsic motivation and knowing the different impact of those on intention to be physically active,

PE teachers might be able to design interventions that allow certain types of intrinsic motivation to be enhanced among students. Although intention is a good predictor of exercise practice, it would be desirable in future to test how closely the effects we found in the present research correspond to the real practice of physical activity in adolescence after school graduation.

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Résumé

L'intention d'être physiquement actif après la période scolaire obligatoire et ses relations avec trois types de motivation intrinsèque

Les relations entre trois types différents de motivation intrinsèque et l'intention des élèves d'être physiquement actifs après leur scolarité obligatoire ont été étudiées. Les participants étaient 400 élèves âgés de 14 à 18 ans. Une version modifiée du SMS (Pelletier et al., 1995) a été utilisée pour mesurer les types de motivation. Une Echelle d'Intention comme instrument de mesure de l'intention d'être physiquement actif en éducation physique a été conçue spécialement pour cette étude. Les données ont été analysées au moyen de la procédure Structural Equation Modelling. L'adéquation des indices confirmatoires pour les trois types de motivation a mis en évidence l'existence de dimensions différentes de motivation intrinsèque chez les élèves en éducation physique. Les résultats de cette étude indiquent que la motivation à faire des expérience stimulantes est, parmi les autres indicateurs de motivation intrinsèque, le prédicteur le plus fort de l'intention d'être physiquement actif après la période de scolarisation.

Zusammenfassung

Intention zu sportlicher Aktivität nach dem Schulabschluss und der Zusammenhang mit drei Typen intrinsischer Motivation

Die Studie untersucht die Bedeutung von drei verschiedenen Typen intrinsischer Motivation für die Intention von Schüler/innen, nach ihrem Schulabschluss sportlich aktiv zu sein. An der Untersuchung nahmen 400 Schüler/innen im Alter von 14 bis 18 Jahren teil. Die modifizierte Version von SMS (Pelletier et al., 1995) wurde eingesetzt, um die drei verschiedenen Typen der intrinsischen Motivation zu erfassen. Um die Folgen des Sportunterrichts in Bezug auf die sportliche Aktivität zu ermitteln, wurde eine spezielle Intentions-Skala entwickelt. Die Daten wurden mit Hilfe des '*Structural Equation Modelling*' analysiert. Die Qualität der Indizes für die drei Typen intrinsischer Motivation ermöglichte es nachzuweisen, dass verschiedene

Dimensionen intrinsischer Motivation bei Schüler(inne)n existieren. Die Ergebnisse der Studie zeigen auf, dass – abgesehen von dem Motiv der Leistung – das Motiv, eine Stimulation zu erfahren, der stärkste Prädiktor für den Vorsatz, nach dem Schulabschluss sportlich aktiv zu sein, ist.

Resumen

La intención de los estudiantes, en cuanto mantenerse fisicamente activos después de la escolaridad obligatoria

El trabajo examina las relaciones existentes entre tres tipos diferentes de motivaciones intrínsecas sobre la intención de los estudiantes, en cuanto a mantenerse fisicamente activos después de la escolaridad obligatoria. El trabajo se realizó sobre 400 escolares de entre 14 y 18 años, empleándose una versión modificada de SMS (Pelletier et al., 1995), para medir los tres tipos de motivación intrínseca. La escala para medir la intención de mantenerse fisicamente activo, fue especialmente diseñada para este estudio y los datos fueron analizados desde la interpretación facilitada por *Structural Equation Modelling*. La calidad de este trabajo se confirma por la verificación de la evidencia de encontrar tres dimensiones distintas en la motivación de los estudiantes sobre la educación física. Los resultados de este estudio muestran que la motivación intrínseca para estimular la práctica fue el mejor indicativo de la intención de mantenerse fisicamente activo tras la finalización de los estudios, por delante de otros tipos de motivaciones.

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