

## Competitive and Recreational Sport Structures and Gender: A Test of Their Relationship with Sport Motivation

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*This study examined the relationships between competitive and recreational sport structures, gender and athletes' sport motivation. Subjects completed the Sport Motivation Scale (SMS), a valid and reliable measure of sport motivation which assesses 3 types of intrinsic motivation (intrinsic motivation to know, to accomplish things, and to experience stimulation), 3 types of extrinsic motivation (external, introjected, and identified regulation), and amotivation. Results revealed that competitive athletes demonstrated less intrinsic motivation to experience stimulation and less intrinsic motivation to accomplish things than recreational athletes, while exhibiting more identified regulation and more amotivation than this group. Gender differences also emerged. Female athletes were more intrinsically motivated to accomplish things and exhibited more identified regulation than male athletes, while displaying less external regulation and less amotivation than this group. Results are discussed in light of Cognitive Evaluation Theory, and future research avenues are offered.*

KEY WORDS: Motivation, Sport Structures, Gender.

In the last two decades, a keen interest in the concept of intrinsic versus extrinsic motivation has taken place (see Condry, 1977; Deci & Ryan, 1985, 1991 for reviews). Intrinsic motivation can be defined as doing an activity for itself, out of interest, and for the pleasure and satisfaction derived simply from performing it (Deci & Ryan, 1985). An example of intrinsic motivation toward sport would be athletes who go to practice because they find it interesting and satisfying to learn more about their sport, or athletes who practice their sport for the pleasure of constantly surpassing themselves.

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Contrary to intrinsic motivation, extrinsic motivation pertains to a wide variety of behaviors where the goals of action extend beyond those inherent in the activity itself. Thus, athletes who practice their sport for the prestige associated with being an athlete, or athletes who go to practice to show others how good they are at their sport display extrinsically motivated behaviors. This intrinsic-extrinsic conceptualization of motivation has proven to be ecologically valid in different life domains, including the sport and physical activity domain (Blais, Vallerand, Pelletier, & Mongeau, 1985; Ryan, Vallerand, & Deci, 1984. Vallerand, Deci, & Ryan, 1987; Weiss & Bredemeier, 1983).

Although researchers have generally assumed that only two types of motivation exist, namely intrinsic and extrinsic. Deci and Ryan (1985) have recently suggested that there are several types of motivation that fall at different points along a self-determination continuum (see Table I). At the least self-determined end of the continuum is a motivational construct termed *amotivation*. This concept is quite similar to learned helplessness. Individuals are said to be amotivated when they don't perceive contingencies between their actions and the outcomes of their actions; they are neither intrinsically motivated nor extrinsically motivated, they are amotivated. When athletes are in such a state, they perceive their behaviors as caused by forces out of their own control. They start asking themselves why in the world they practice their sport. Eventually they may even stop practicing it.

Next on the continuum are three different forms of extrinsic motivation. From lower to higher levels of self-determination they are: external regulation, introjected regulation, and identified regulation. *External regulation* corresponds to extrinsic motivation as it generally appears in the literature. That is, behavior is regulated through external means such as rewards and constraints. For example, athletes may participate in their sport in order to receive praise from their coach or because they feel urged to do so by their parents. In this case, the sport is performed not for fun but to obtain rewards (e.g., praise) or to avoid negative consequences (e.g., criticisms from parents).

*Introjected regulation* is present when these external contingencies become internalized and individuals come to pressure themselves to perform the activity. Thus, an athlete might say, «I go to practice because I feel guilty if I don't». Finally, *Identified regulation* is in operation when the individual comes to value and judge the behavior as being important and therefore, performs it out of choice. The athlete might say, for instance: «I've chosen to go to practice today because it is something important for me».

This last type of extrinsic motivation is considered self-determined, whereas the first two types are considered non determined forms of extrinsic motivation.

Finally, at the most self-determined end of the continuum is intrinsic motivation. Recently, the existence of three different types of intrinsic motivation: intrinsic motivation to know, to accomplish things, and to experience stimulation has been postulated (Vallerand, Blais, Brière, & Pelletier, 1989; Vallerand, Pelletier, Blais, Brière, Senécal, & Vallières, 1992, 1993). *Intrinsic motivation to know* can be defined as the fact of performing an activity for the pleasure and the satisfaction that one experiences while learning, exploring, or trying to understand something new. For instance, athletes are intrinsically motivated to know when they try to discover new training techniques for the sheer pleasure they experience while learning something new.

*Intrinsic motivation to accomplish things* can be defined as the fact of engaging in an activity for the pleasure and satisfaction experienced when one attempts to accomplish or create something. Trying to master certain difficult training techniques in order to experience personal satisfaction represents an example of intrinsic motivation toward accomplishments.

Finally, *intrinsic motivation to experience stimulation* is operative when someone engages in an activity in order to experience stimulating sensations (e.g., sensory pleasure, aesthetic experiences, as well as fun and excitement) derived from one's engagement in the activity. Athletes who participate in their sport in order to live exciting experiences represent examples of individuals who are intrinsically motivated to experience stimulation in the sport domain. Overall, this makes a total of 7 motivational constructs that are now studied within this theoretic perspective. The reader is referred to Deci and Ryan (1991) and Vallerand et al. (1992, 1993) for a more elaborate discussion of this multidimensional perspective of motivation.

Over the past two decades a substantial amount of research in this area has investigated the negative effects of various situational factors on intrinsic motivation (see Deci & Ryan, 1985, 1991; Vallerand, 1993 for reviews). For instance, rewards (Deci, 1972; Harackiewicz, 1979), deadlines (Amabile, Dejong, & Lepper, 1976), threats (Deci & Cascio, 1972), and surveillance (Pittman, Davey, Alafat, Wetherill, & Kramer, 1980) have been found to undermine intrinsic motivation. Cognitive Evaluation Theory (Deci & Ryan, 1985, 1991) can account for these decreases in intrinsic motivation. According to this theory, when individuals perceive their behavior as being induced by external agents, there is a shift from an in-

ternal to an external perceived locus of causality. When this occurs, individuals do not participate for the sake of the activity itself anymore but rather for some external entity. This change in perceived locus of causality decreases one's feelings of self-determination and consequently, one's intrinsic motivation toward the activity.

Competition emphasizing winning at all costs represents another situational factor that has been found to decrease intrinsic motivation. Thus, by focusing on winning or beating someone else, something extrinsic to the activity itself, individuals in competition adopt an external locus of causality, thus leading to a decrease in feelings of self-determination and consequently, a loss of intrinsic motivation.

The competition variable has been investigated mostly in laboratory and related settings. The first laboratory study to examine the effects of competition on intrinsic motivation was that of Deci, Betley, Kahle, Abrams, and Porac (1981). In this study, male and female college students solved interesting puzzles in the presence of a same-sex confederate who posed as a second subject doing the same activity. Half the subjects were instructed to compete against each other (competition condition), while half were simply instructed to work as quickly as they could (control condition). Following this puzzle solving period, subjects were observed in an 8 minute free-choice period and time spent on the activity served as the measure of intrinsic motivation. Results revealed a significant main effect in which competition decreased intrinsic motivation. These findings have been replicated in a recent similar study by Vallerand, Hamel and Daoust (1992) and in studies with children on both motor (Vallerand, Gauvin, & Halliwell, 1986), and cognitive tasks (Butler, 1989).

Similar findings have been obtained in sport field studies. These studies have generally explored the relationship between competitive sport structures and either intrinsic motivation, or related concepts. Such research reveals that competitive sport structures are related to an undermining of athletes' intrinsic motivation (Cornelius, Silva, & Molotsky, 1991), a decrease in flow experiences (Kleiber, Larson, & Csikszentmihalyi, 1986), an increase in ego orientation (Chaumeton & Duda, 1988) and a preference for extrinsic rewards relative to intrinsic rewards (Greendorfer & Blinde, 1990).

While sport field studies have generally replicated the negative effect of competition on individuals' intrinsic motivation obtained in laboratory research, two points are in order. First, only one study (Cornelius et al., 1991) directly assessed athletes' intrinsic motivation. The other studies only measured concepts related to intrinsic motivation (Chaumeton & Duda, 1988; Greendorfer & Blinde, 1990; Kleiber et al., 1986). Second, no study

to date has examined the relationship between competitive sport structures, as well as recreational sport structures and the different types of intrinsic and extrinsic motivation, as well as amotivation.

In light of the above, the main purpose of this study was to explore the relationships between competitive and recreational sport structures and intrinsic motivation, extrinsic motivation, and amotivation. This study extends past research in at least three ways. First of all, it goes beyond the unidimensional measurement of sport motivation by using a more multidimensional perspective. Secondly, it uses a valid and reliable measure of sport motivation, the Sport Motivation Scale (SMS - Brière, Vallerand, Blais, & Pelletier, in press). Finally, it extrapolates from cognitive evaluation theory (Deci & Ryan, 1985, 1991) in studying the relationship between competition and other forms of sport motivation than simply intrinsic motivation.

Based on past research and Cognitive Evaluation Theory (Deci & Ryan, 1985, 1991), it was thus hypothesized that competitive athletes would exhibit a less self-determined motivational profile than recreational athletes. More specifically, when compared to recreational athletes, we expected competitive athletes to demonstrate lower levels of self-determined forms of motivation, that is, less intrinsic motivation to know, to accomplish things, and to experience stimulation, as well as less identified regulation. We also expected competitive athletes to display higher levels of non self-determined types of motivation, that is, more amotivation, external regulation, and to a lesser extent more introjected regulation.

A second purpose of our investigation was to assess gender differences in athletes' motivational profiles. Past research has revealed gender differences in motivational orientations in several life domains, including education (Vallerand & Bissonnette, 1992; Vallerand, et al., 1989; Vallerand, et al., 1992), interpersonal relationships (Blais, Vallerand, Brière, & Pelletier, 1992), and recently sports (Brière, et al., in press) using a multidimensional perspective. Such research has shown that females display a more self-determined motivational profile than males.

In line with this research, it was thus hypothesized that female athletes would exhibit a more self-determined motivational profile than male athletes. More specifically, when compared to male athletes, we expected female athletes to demonstrate higher levels of intrinsic motivation to know, to accomplish things, and to experience stimulation, as well as higher levels of identified regulation. We also expected female athletes to display lower levels of amotivation, external regulation, and to a lesser extent lower levels of introjected regulation than male athletes.

## Method

The subjects in this study were 399 French-Canadian athletes from two Montreal Cegeps (Junior colleges in the Quebec educational system). Two hundred and twenty were competitive intercollegiate athletes, including 146 males and 74 females, and 179 were recreational intramural athletes, including 77 males and 102 females. The athletes had a mean age of 19.0 years (range = 17-25 years). They had between 1 and 18 years of sport experience ( $M = 3.8$  years) and participated in 4 different sports: badminton, basketball, volleyball, and soccer.

### QUESTIONNAIRE

The subjects completed the French version of the Sport Motivation Scale (SMS-Brière et al., in press), a measure of motivation toward sport that is composed of 7 subscales assessing the 7 motivational constructs described previously, that is: 3 types of intrinsic motivation (intrinsic motivation to know, to accomplish things, and to experience stimulation), 3 types of extrinsic motivation (external, introjected, and identified regulation), and amotivation. There are 4 items per subscale and thus, a total of 28 items. Each item represents a possible reason why the athlete participates in his/her sport, and subjects must rate the extent to which the item corresponds to one of their participation motives on a 7 point likert scale, ranging from not at all (1) to exactly (7).

The amotivation subscale (e.g., «I used to have good reasons for doing my sport, but now I am asking myself if I should continue doing it») had a standardized Cronbach alpha of .81, as did the external regulation subscale (e.g., «Because it allows me to be well regarded by people that I know»). With respect to the introjected regulation subscale (e.g., «Because it is absolutely necessary to do sports if one wants to be in shape»), and the identified regulation subscale (e.g., «Because it is one of the best ways I have chosen to develop other aspects of myself»), they both had Cronbach alphas of .73. Finally, the intrinsic motivation to know (e.g., «For the pleasure it gives me to know more about the sport that I participate in»), the intrinsic motivation to accomplish things (e.g., «Because I feel a lot of personal satisfaction while mastering certain difficult training techniques»), and the intrinsic motivation to experience stimulation (e.g., «For the pleasure I have in experiencing exciting sensations») subscales had Cronbach alphas of .90, .83, and .76, respectively. Thus, the internal consistency of the various subscales seems adequate.

In previous research (Brière et al., in press), the SMS was also found to have high internal consistency levels, a stable 7 factor structure, as well as an acceptable test-retest reliability. In addition, results from confirmatory factor analyses (e.g. LISREL), as well as correlations between the subscales and various motivational antecedents and consequences also support the construct validity of the SMS.

### PROCEDURES

After obtaining informed consent from the subjects and permission from the coaches, the questionnaire mentioned above was administered to the athletes in group settings before regular scheduled practices for the competitive athletes and before free gym time for the recreational athletes. The subjects were reminded that their participation in the study was voluntary and that all responses would be anonymous. They were also encouraged to ask questions at any time during questionnaire administration. The completion of the questionnaire took around 15 minutes.

## Results

A 2 (sport structure) x 2 (gender) x 7 (type of motivation) analysis of covariance (ANCOVA), using the number of years of sport experience as covariate, with repeated measures on the motivation variable was performed on the data to assess the differences due to sport structure and gender (\*). We performed an analysis of covariance instead of a simple analysis of variance for two reasons, first of all, because female and male athletes, as well as recreational and competitive athletes differed in their number of years of sport experience and secondly, because number of years of sport experience was significantly related to two of the seven types of motivation. It should also be noted that to correct for positively biased F tests due to repeated measures (Kirk, 1982), we used the Greenhouse-Geisser adjustment that adjusts degrees of freedom according to an empirically determined correction factor, epsilon. In light of the large number of subjects in this study ( $n = 399$ ), only main effects and interaction effect significant at  $p < .01$  will be reported in this section. However, follow up tests will be reported at the  $p < .05$  level.

Results revealed a significant main effect for the motivation variable,  $F(4.57, 1806.21) = 734.29, p = .001$ . Newman-Keuls post hoc analyses revealed that the 7 motivational subscales were significantly different from one another ( $p < .05$ ). The most important forms of motivation for the athletes in this sample were in decreasing order: intrinsic-stimulation, intrinsic-accomplishment, introjected regulation, intrinsic-knowledge, identified regulation, external regulation, and amotivation. The total mean of the motivational subscales as well as their standard deviations are presented in Table II.

Results also revealed a significant structure x motivation interaction  $F(4.57, 1806.21) = 4.82, p = .001$ . Simple effect analyses indicated that four of the motivational subscales yielded significant differences ( $p < .05$ ) between the two structure groups. Results showed that competitive athletes displayed less intrinsic motivation to accomplish things and to experience stimulation than recreational athletes, while demonstrating more identified regulation and more amotivation than this group. The means and standard deviations of the motivational subscales as a function of sport structures also appear in Table II.

(\*) We reformed the analysis of covariance on a random subsample which had an equal number of subjects ( $N = 74$ ) in each of the four cells. This analysis revealed the same basic findings as the present analysis.

TABLE I  
The self-determination continuum (adapted from Deci & Ryan, 1985, 1991).

Amotivation		Extrinsic motivation		Intrinsic motivation - to know - to accomplish things - to experience stimulation
Absence of regulation	External regulation	Introjected Regulation	Identified Regulation	Regulation for the pleasure of the activity
-				+
Self-determination				

TABLE II  
Means and Standard Deviations of the Motivation Subscales for the Competitive (220), Recreative (179) and total group of Athletes.

Motivation subscales	Competitive Athletes		Recreative Athletes		All Athletes	
	M	SD	M	SD	M	SD
Intrinsic-Knowledge	18.85	(5.78)	18.78	(6.54)	18.80	(6.34)
Intrinsic-Accomplishment**	21.98	(4.56)	22.56	(4.28)	21.75	(4.96)
Intrinsic-Stimulation*	22.51	(3.96)	23.46	(4.08)	22.91	(4.12)
Identified Regulation*	18.14	(4.57)	16.71	(4.78)	17.34	(4.82)
Introjected Regulation	20.84	(5.22)	20.68	(4.90)	20.65	(5.07)
External Regulation	12.52	(5.43)	12.93	(5.72)	12.68	(5.86)
Amotivation*	6.15	(3.77)	5.45	(3.10)	5.89	(5.21)

\*  $p < .05$ ; \*\*  $p < .001$

A significant gender x motivation interaction was also found,  $F(4.57, 1806.21) = 9.18, p = .001$ . Simple effect analyses indicated that four of the seven motivational subscales yielded significant differences ( $p < .05$ ). As expected, female athletes reported higher levels of intrinsic motivation to accomplish things and identified regulation but lower levels of external regulation and amotivation than male athletes. Finally, the gender x structure interaction was found to be non significant. The mean and standard deviations of the motivational subscales as a function of gender appear in Table III.

TABLE III  
Means and Standard Deviations of the Motivation Subscales for Female (176) and Male (223) Athletes.

Motivation subscales	Females Athletes		Males Athletes		
	M	SD	M	M	SD
Intrinsic-Knowledge	19.03	(5.97)	18.61		(6.34)
Intrinsic-Accomplishment**	22.34	(3.88)	21.30		(4.96)
Intrinsic-Stimulation	23.23	(3.92)	22.74		(4.12)
Identified Regulation*	17.99	(4.52)	16.86		(4.82)
Introjected Regulation	20.74	(5.04)	20.78		(5.07)
External Regulation**	11.36	(5.29)	14.09		(5.86)
Amotivation*	5.33	(2.70)	6.26		(4.16)

\*  $p < .05$ ; \*\*  $p < .001$

## Discussion

The main purpose of this study was to examine the relationships between competitive and recreational sport structures and athletes' intrinsic motivation, extrinsic motivation, and amotivation. In line with the first hypothesis, results revealed that competitive athletes demonstrated less intrinsic motivation to accomplish things, and less intrinsic motivation to experience stimulation than recreational athletes. These findings are in line with studies conducted in the laboratory (Butler, 1989; Deci et al., 1981; Vallerand et al., 1986) and in sport field settings (Chaumeton & Duda, 1988; Cornelius et al., 1991; Greendorfer & Blinde, 1990; Kleiber et al., 1986) which reveal that competition undermines intrinsic motivation.

These findings also corroborate Cognitive Evaluation Theory's (Deci & Ryan, 1985, 1991) analysis of the potential harmful effects of competition on intrinsic motivation. It appears that in competitive structures the focus is more on winning-something extrinsic to the sport than in recreational structure, where athletes probably play for fun rather than to win at all costs. With respect to the present study, this pressure to win in competitive sport structures possibly induced a shift in athletes' perceived locus of causality from internal to external, which diminished their sense of self-determination and consequently, led to a decrease in their intrinsic motivation. This explanation seems plausible because also in line with the first hypothesis, competitive athletes exhibited higher levels of amotivation than

recreational athletes. However, because the design of this study was not experimental, this explanation remains open for debate until experimental evidence can be provided. Also, although the mediating role of feelings of self-determination seems quite probable, athletes' feelings of self-determination were not measured in this study. Future research would do well to focus on these feelings in order to ascertain if they do play a mediating role between competition and sport motivation.

Although the majority of the above findings were in line with the first stated hypothesis, one result ran contrary to our expectations: competitive athletes demonstrated more identified regulation than recreational athletes. This is surprising because identified regulation represents a self-determined form of extrinsic motivation. However, this finding could possibly be due to the fact that competitive athletes are usually quite committed to their sport and therefore, probably come to identify with and accept their choice to participate in this type of structure. Thus, although competitive athletes are less intrinsically motivated than recreational athletes, they may actually be more identified because of their choice to invest in demanding sport activities. In addition, it is possible that the competitive athletes in our sample had more long term sport goals (e.g., such as playing at the University level) than the recreational athletes and this could possibly explain why this group demonstrated the higher levels of identified regulation than the recreational group. Because extrinsic motivation, by definition, pertains to behaviors where the goals of action *extend beyond* those inherent in the activity itself, identified regulation comes more into play for long term goals, whereas intrinsic motivation is associated with the short term goals one ascribes to within the confines of the activity itself. Future research should test the viability of this hypothesis.

The second purpose of this investigation was to assess gender differences in athletes' motivational profiles. In line with the second hypothesis, results revealed that female athletes demonstrated more intrinsic motivation to accomplish things and more identified regulation than male athletes, while displaying less external regulation and less amotivation than this group. These results are in line with past research in the educational, (Vallerand & Bissonnette, 1992; Vallerand et al., 1989; Vallerand et al., 1992), interpersonal (Blais, et al., 1992), and sport domains (Brière et al., in press) showing that women have a more self-determined motivational orientation than men. Given that motivation has a significant influence on important outcomes in the sport domain, such as persistence (Pelletier, Brière, Blais, & Vallerand, 1988), sport satisfaction (Vallerand & Brière, 1990), and mental health (Pelletier, Vallerand, Blais, & Brière, 1990) research on the origins

of gender differences in motivational orientations toward sport appears to represent an important future research avenue.

With respect to gender, another finding that is worth mentioning is the lack of gender by structure interaction found with the present sample. This result is somewhat surprising because certain studies in the sport domain (Vealey, 1988) seem to suggest that gender differences (i.e., in competitive orientation or self-confidence) are only eliminated or reduced with elite athletes. In line with these findings, we should have found gender differences in the recreational sample but not in the competitive sample. The fact that this was not the case in the present study could be due to several factors including the fact that the two groups of athletes in this study may not have been as discrepant as those used in previous studies thereby leading to similar structural effects for both genders. Additionally, it is possible that males' and females' motivation is not affected differently as a function of structure in field settings where they *choose* to engage in various activities such as sport. In line with this latter line of reasoning, Cornelius, Silva and Molotsky (1991) also found no interaction effects of gender and sport structure on motivation toward sport activities. Future research is needed in order to clarify this issue.

A final feature of this study concerns the application of Cognitive Evaluation Theory (Deci & Ryan, 1985, 1991) to the other forms of sport motivation, namely, the different types of extrinsic motivation and amotivation. The present findings seem to justify an extension of this theory so it may explain the effects of external events, such as competition not simply on intrinsic motivation but also on the other forms of motivation. Future research from the Cognitive Evaluation Theory perspective would therefore appear warranted.

In closing, it seems appropriate to underscore two limitations of this study. First, the present study did not use an experimental design or a longitudinal design with changes over time. Thus, it is inappropriate to interpret the results in terms of a causal effect between sport structure and sport motivation. First of all, because a third variable (i.e., goal orientation) could be responsible for the obtained differences. Secondly, because we cannot be sure of the direction of the relationship between sport structure and sport motivation: is it the type of sport structure that influences the type of motivational orientation the athlete will develop, or is it the motivational orientation of the athlete that influences his/her decision to participate in a particular type of sport setting? However, the fact that the results from this study are in line with laboratory studies on competition, seems to give some weight to the possibility that sport structures in-

fluence sport motivation. However, future field research should focus on the relationship between sport structure and motivational orientation in order to determine the direction of causality between competitive structures and sport motivation. This could be done by using a longitudinal design and by using path analyses or structural equation modeling.

A second limitation pertains to the two groups of athletes used in this study. Because the athletes all came from the same setting (CEGEP), it is possible that the recreational and competitive athletes were not that different from each other. This may help explain why some of the differences between the motivation subscales did not achieve significance and why those who achieved significance did not show stronger effects. Future research would do well in comparing athletes that come from highly different sport structures, for instance, professional athletes and recreational athletes. In such instances, motivational profiles may thus be even more discrepant.

In conclusion, results from the present study revealed that competitive athletes display lower levels of intrinsic motivation to accomplish things and to experience stimulation than recreational athletes, while exhibiting higher levels of identified regulation and amotivation than this group. It was also revealed that female athletes demonstrate a more self-determined motivational profile than male athletes. These findings underscore the complex relationship between competition and sport motivation, the potential harmful effects of competition on intrinsic motivation in this particular area, and the importance of considering gender differences in the sport and exercise domain. Finally, these results also provide potential insights of the conduct of future research in this area.

#### RÉSUMÉ

La présente étude avait pour but d'examiner les relations entre la structure sportive (compétitive versus récréative), le genre et la motivation envers les sports. Afin d'accomplir cette tâche, 399 athlètes ont répondu à l'Échelle de Motivation envers les Sports (EMS). L'EMS est formée de 7 sous-échelles mesurant trois types de motivation intrinsèque (motivation intrinsèque à la connaissance, à l'accomplissement et aux stimulations), trois types de motivation extrinsèque (régulation externe, introjectée et identifiée) et l'amotivation. Les résultats ont révélé que les athlètes compétitifs démontraient des niveaux plus faibles de motivation intrinsèque aux stimulations et de motivation intrinsèque à l'accomplissement mais des niveaux plus élevés de régulation identifiée et d'amotivation que les athlètes récréatifs. De plus, les résultats ont indiqué que les athlètes féminins étaient plus motivées intrinsèquement à l'accomplissement et plus identifiées que les athlètes masculins tout en démontrant des niveaux plus faibles de régulation externe et d'amotivation que ces derniers. Les résultats sont discutés en fonction de la théorie de l'évaluation cognitive et des idées de recherches futures sont suggérées.

## RESUMEN

Este ensayo analiza las relaciones entre estructuras deportivas competitivas y de recreo, motivaciones para el deporte de los atletas y diferencias entre los sexos. A los sujetos se ofreció el Sport Motivation Scale (SMS) e considera como una medida eficaz y digna de consideración que evidencia la motivación al deporte y particularmente, permite describir tres modelos de motivación interior (motivación, estímulo a la actividad experimentación) tres modelos de motivación exterior (externa, introspectiva y regulación identificada) y su a-motivación. De los resultados se evidenció que los atletas que desarrollaban una actividad agonística mostraban una motivación interior inferior en relación a la prueba de estimulación y para la realización de hechos respecto a los atletas que practicaban el deporte como recreo.

Además, los atletas competitivos ponieron en evidencia tanteos más elevados de regulación identificada y de a-motivación respecto a los atletas de recreo.

Se evidenciaron también diferencias de género. Las mujeres mostraron una motivación interior mayor que los hombres y además, evidenciaron niveles más bajos de regulación externa y de a-motivación que los hombres. Los resultados se estudian a la luz de la teoría de la valoración de conocimiento (Deci y Ryan, 1985, 1991) y se sugiere búsquedas futuras.

## ZUSAMMENFASSUNG

Die Studie analysiert die Beziehungen zwischen Sport-Strukturen für Wettbewerb und Freizeit, die Motivationen, die den Athleten zum Sport führen und die geschlechtlich bedingten Unterschiede. Den Versuchspersonen wurde die Sport Motivation Scale verabreicht (SMS). Es handelt sich um eine verlässliche Methode zur Bemessung der Motivierung zur sportlichen Aktivität; insbesondere können hier drei verschiedene intrinsische Motivationen (intrinsische Motivierung zur Erfahrung, zum konkreten Realisieren und zur Erprobung von Anreizen) und drei extrinsische Motivationen (externe, Introjektionsmotivierung und Identifikationsregulation) und die A-Motivierung unterschieden werden. Aus den Ergebnissen geht hervor, daß die intrinsische Motivation der Wettkämpfer weniger auf Erprobung von Anreizen und auf konkrete Realisierung ausgerichtet ist als die der Freizeitsportler. Außerdem waren die Punkte der Wettbewerbssportler für Identifikationsregulierung und für A-Motivierung wesentlich höher als die der Freizeitsportler. Auch geschlechtsbedingte Unterschiede konnten festgestellt werden. Mädchen erwiesen sich als stärker motiviert zur konkreten Realisierung und zur Identifikationsregulierung, als die Jungen, während ihre externe Regulation und die A-Motivierung wesentlich niedriger lagen als bei den Jungen.

Die Ergebnisse werden auf der theoretischen Grundlage der Erkenntniswertung (Deci und Ryan, 1985 und 1991) erörtert. Außerdem werden weiterführende Forschungsmöglichkeiten vorgeschlagen.

## RIASSUNTO

Questo studio analizza le relazioni fra strutture sportive competitive e ricreative, motivazioni allo sport degli atleti e differenze intersessuali. Ai soggetti è stato somministrato

lo Sport Motivation Scale (SMS). È una misura valida e attendibile che valuta la motivazione allo sport e, in particolare, consente di descrivere tre tipi di motivazione intrinseca (motivazione intrinseca a conoscere, a realizzare cose, e a sperimentare stimolazione), tre tipi di motivazione estrinseca (esterna, introiettata, e regolazione identificata) e l'a-motivazione. Dai risultati è emerso che gli atleti che svolgevano attività agonistica si sono mostrati meno motivati intrinsecamente a sperimentare stimolazione e a realizzare cose rispetto agli atleti che praticavano sport a livello ricreativo. Inoltre, gli atleti competitivi hanno evidenziato punteggi più elevati di regolazione identificata e di a-motivazione rispetto agli sportivi ricreativi. Sono emerse anche differenze di genere. Le ragazze sono apparse più motivate intrinsecamente a realizzare cose e a esibire regolazione identificata rispetto ai ragazzi, e, inoltre, hanno mostrato livelli più bassi di regolazione esterna e di a-motivazione rispetto ai maschi. I risultati sono discussi alla luce della teoria della valutazione cognitiva (Deci e Ryan, 1985, 1991) e vengono suggeriti futuri percorsi di ricerca.

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