

PROGNOSTIC OF THE PERCEIVED COMPETENCE THROUGH MOTIVATION IN PRACTITIONERS OF PHYSICAL EXERCISE

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ABSTRACT

Introduction: The main objective of this work was to prove the prognostic power of the motivational atmosphere, the dispositional orientation and the self-determined motivation about the perceived competence in physical exercises practitioners in fitness centers. **Materials and Methods:** We measured, on 727 physical practitioners of exercises, the motivational atmosphere, the orientation, the disposal, self-determined motivation and the perceived motor competence. **Results:** The results showed that the perception of an atmosphere that implied to the ego presented a negative and significant relation with the perception of an atmosphere which implied the task, and a negative and significant relation with the motivational orientation of approximation to efficiency. It was also found a positive and significant association between the perception of an atmosphere that implied the mastery and the motivational orientation of approximation to the mastery and avoidance to efficiency. **Discussion:** The analysis of the regression perceived that both the orientation to the approximation to efficiency and the mastery and the intrinsic regulation were the factors that better predicted the perceived motor competence. Concerning the sex, men presented a greater atmosphere and approximation to the ego, a better competence perception, while women got greater values in the atmosphere task and intrinsic motivation. The results regarding the prognostic of the perceived competence in practitioners of physical exercise were discussed.

KEYWORDS

Motivation, Exercise, Fitness Centers.

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PROGNÓSTICO DA COMPETÊNCIA PERCEBIDA ATRAVÉS DA MOTIVAÇÃO EM PRATICANTES DE EXERCÍCIO FÍSICO

RESUMO

Introdução: O objetivo principal deste trabalho foi comprovar o poder de prognóstico do clima motivacional, a orientação disposicional e a motivação autodeterminada sobre a competência percebida em praticantes de exercício físico em centros de *fitness*. **Materiais e Métodos:** Foram medidos sobre 727 praticantes de exercício físico, o clima motivacional, a orientação, a disposição, motivação autodeterminada e a competência motora percebida. **Resultados:** Os resultados mostraram que a percepção de um clima que implicava ao ego apresentou uma relação negativa e significativa com a percepção de um clima que implicava à tarefa, e uma relação negativa e significativa com a orientação motivacional de aproximação ao rendimento. Também foi encontrada uma associação positiva e significativa entre a percepção de um clima que implicava à mestria e as orientações motivacionais de aproximação à mestria e evitação do rendimento. **Discussão:** A análise de regressão percebeu que tanto a orientação de aproximação ao rendimento como à mestria e o regulamento intrínseco foram os fatores que predisseram com maior força a competência motora percebida. Por sexo, os homens apresentavam um maior clima e aproximação ao ego, maior percepção de competência, enquanto as mulheres obtiveram maiores valores no clima tarefa e motivação intrínseca. Foram discutidos os resultados em relação ao prognóstico da competência percebida em praticantes de exercício físico.

PALAVRAS-CHAVE

Motivação, Exercício, Academias de Ginástica.

PREDICCIÓN DE LA COMPETENCIA PERCIBIDA SEGÚN LA MOTIVACIÓN EN PRACTICANTES DE EJERCICIO FÍSICO

RESUMEN

Introducción: El objetivo principal de este trabajo ha sido comprobar el poder de predicción del clima motivacional, la orientación disposicional y la motivación autodeterminada sobre la competencia percibida en practicantes de ejercicio físico en centros de *fitness*. **Materiales y Métodos:** Se midieron sobre 727 practicantes de ejercicio físico el clima motivacional, la orientación, la disposición, motivación autodeterminada y la competencia motriz percibida. **Resultados:** Los resultados mostraron que la percepción de un clima que implicaba al ego presentó una relación negativa y significativa con la percepción de un clima que implicaba a la tarea, y una relación negativa y significativa con la orientación motivacional de aproximación al rendimiento. También se encontró una asociación positiva y significativa entre la percepción de un clima que implicaba a la maestría y las orientaciones motivacionales de aproximación a la maestría y evitación al rendimiento. **Discusión:** El análisis de regresión halló que tanto la orientación de aproximación al rendimiento como a la maestría y la regulación intrínseca fueron los factores que predijeron con mayor fuerza la competencia motriz percibida. Por sexo, los hombres presentaban un mayor clima y aproximación al ego, mayor percepción de competencia, mientras que las mujeres obtuvieron mayores valores en el clima tarea y motivación intrínseca. Se discutieron los resultados en relación a la predicción de la competencia percibida en practicantes de ejercicio físico.

PALABRAS CLAVE

Motivación, Ejercicio, Centros de Acondicionamiento.

INTRODUCTION

Nowadays, one of the social phenomena that characterize advanced societies is the increasing practice of physical exercise and its generalization in several population segments¹. Besides, the achievement of physical exercise practiced on a regular basis with adequate intensity, duration and rest, produces significant benefits, at both physical and psychological levels^{2,3}. So, the physical self-concept is considered a good indicator of mental and social state of practicing person^{4,5,6}. Nevertheless, the research indicated that the people's motivation could manage and regulate the way that they realize themselves⁷. Based in these lines, it is interesting to understand the motivational processes that guide users of sports facilities and inquire

about the possible effects that the motivation has on the physical self-perception. Thus, the Self-Determination Theory^{8,9} and the Achievement Goal Theory^{10,11,12,13,14,15} were used in this study to prove their relationship with the sport competence.

To explain the physical-sport motivation, the researchers were primarily based on two major contemporary theories, the Achievement Goal Theory¹⁵ and the Self-Determination Theory^{8,16,17}. Self-Determination Theory^{8,16} is based on the idea that human behavior is motivated by three primary and universal psychological needs: autonomy, competence and relationship with others. In short, we can say that the self-determination refers to the experience of being free to start behaviors⁸. Inside the motivation, there are different levels

of self-determination, as this is considered a continuum. From the smallest to the greatest self-determination, appear to motivation or intrinsic regulation, identified motivation, the introduced motivation, the extrinsic motivation and demotivation^{9,17}.

The intrinsic motivation is produced when the individual performing the task by own enjoyment and pleasure during the same, i.e., where the activity is an end in itself⁸. In regulation, the subject is identified with the importance that has the activity for himself, even if the practice is a tool to achieve something¹⁷. The introduced regulation refers to a motivation to sports practice, to avoid guilt feelings⁹, ie, if "has" or "should" do something¹⁸.

Within the continuum of self-regulation, after the introduced regulation is the extrinsic regulation, which is traditionally known as external motivation. Here, the individual acts by an external incentive¹⁷, such as the recognition achieving of others or a social approval. Finally, the disincentive is usually in the extreme of the continuum because it means the absence of any kind of motivation. It is characterized because the individual has no intention of doing the task or in our case, sports practice. Typically, is accompanied by feelings of frustration and a feeling that the activity is a waste of time^{9,16}.

On that basis, the Achievement Goal Theory was the other major theory that the researchers used for the study of motivation in sportive field. Under this theory, the individual is perceived as an intentional organism, headed by some objectives for a goal that operates from a rational way¹⁴. In this sense, the goals of the individual are based on the effort that they have to do to demonstrate competency and skill in goal contexts^{13,14}. It is understood by those contexts of goals contexts in which the subject are participating and that can get to influence the direction of his goals. Thus, people differ in their definitions of success or failure when they are in goal climates¹⁹, and it largely depends on their ability perception¹⁵. Depending on the skills concept acquired by individuals, these provide a greater involvement to artistry (or also called task) or to performance (also referred as ego). This involvement will crucially depend on two factors: dispositional and climate.

Dispositional factor refers to personal characteristics of the individual that makes him define success according to different criteria, which reflect the different orientation or motivational perspective he have. Traditionally, this theory had identified two clear perspective which the subject defines his success. On the one hand, there are subjects who believe there had success when shown a personal improvement as a result of their efforts. It is said that individuals who have this kind of guidance have an orientation towards the task or skill, considering that they guide the success definition by a clear reference criterion to themselves. On the other hand, there are subjects that

define their success based on a constant comparison with others. In this latter case, they say that the subjects have an orientation for the ego or the performance, as these individuals usually show successful only when they show that they do equal or better than the others.

Recently, authors such as Elliot²⁰ and Elliot & McGregor²¹ indicated that it is interesting to also take into account the degree or direction that the subject is directed. In this sense, the subject does not always focus on showing their competence (and is geared for the task or the ego), but they may also be interested in avoiding their incompetence. Therefore, it is worth examining not only when users are directed to one or another kind of motivation, but if they avoid to prevent any of them. In this study, it was decided to consider a proposal that was performed by Elliot²⁰ and Elliot & McGregor²¹. Thus, within the Achievement Goal Theory, and taking into account the orientation degree, there are four possible orientations: approach to the task or skill, the avoidance task, approach to the ego or performance and ego avoidance. It is said that when the subject has an orientation to the ego or performance, their skills concept correspond with an innate and fixed entity, where judges his capacity in relation and comparison with others. The success or failure depends on the subjective valuation that results from comparing their ability with others¹⁴. If the orientation of the individual is to the task or skill, the design that is the subject of his skill is usually modifiable, improvable and trained. Therefore, there is a concern about learning, where the perceptions of ability are self-referential and depend on the staff's progress¹⁴.

On the other hand, the climate factor, acted by the motivational environment, can modify the peculiar state of subject's involvement¹⁵. Like this, a motivational environment that seeks the apprenticeship, instead of the performance, positively relates to the oriented goals to the task, satisfaction, amusement, interest and intrinsic motivation^{22,23}. On the contrary, a motivational environment that seeks the performance are positively relate with the orientation to the ego, with a negative effectiveness and with pressure feelings^{22,23}. The self-concept and the self-esteem are variables that are clearly linked to the motivation⁸. In fact, the incompetence perception and low physical perception could take to lack of motivation⁹. Therefore, the perception that one has of himself is another decisive factor of the deceit situations. The investigation suggested that the people that perceived themselves with high competence level in a certain domain (could be cognitive, physical or social), are more intrinsically motivated to continue an activity, and it is more probable than they are willing to accomplish larger effort during the accomplishing of the same^{24,25,26}.

Particularly, the research inside of the physical activity field shows evidences that support the existence of a rela-

tionship between the perceived competence and the motivational processes²⁷. The people with high competence perception would have more probability in choosing defiant tasks, of amusing during the apprenticeship process, higher self-esteem, they would use internal criteria to judge the success, they would develop more effort for the accomplishing of the activity and they would be more persistent when they had some difficulty to overcome^{8,24,28}.

The theoretical structure that surrounds, as much the Achievement Goal Theory as the Determination, indicated that the subject's motivational disposition is strongly related with the form which this builds his competence level in situations of deceit^{8,14,15}. A person intrinsically motivated, or with an orientation to the task, tends to focus in the activity that accomplishes, does more for solving the problems that were presented to him, and tries to improve and to do better than the last time. On the contrary, a person externally motivated, or with an oriented motivation for the ego, tends to focus in aspects that are distant of the task, such as to show larger ability front to other persons or to avoid to do worse than others. Therefore, the people intrinsically motivated and with an orientation centered in the task is probable that build their self-conception on different criteria than people with an external motivation, or a disposition more oriented to the ego and the performance.

In function of the theories and investigations revised about the motivation for the practice of physical exercise, the main objective of the study was to investigate the effect of prognosis of the Theory of Goals of Fraud and the Determination Motivation on the perceived competence. A secondary objective was to analyze the gender differences in the considered variables. Starting from the revision of the different research studies, this study expect to find that the users that present a larger motivational orientation for the task, larger intrinsic motivation and an environment task perception, will have a higher increase perception of his motive competence.

MATERIALS AND METHODS

Participants

The sample was composed by 727 subjects (402 men and 325 women), of ages understood between 14 years and 78 years (mean=32.57, standard deviation=11.40), participants of public sport facilities of a Spanish city.

Tools

Questionnaire of Measure of the Motivational Strategies in the classes of Physical education (CMEMEF) - This questionnaire of Cervelló *et al.*²⁹ was used, adapted

apprentices of physical exercise. It was composed by a total of 12 items for the environment task (for instance, "encourage us to help ourselves, among friends, during the tasks") and 12 items for the ego environment (for instance, "only the final result is evaluated, giving no importance to the progress, referred to how was made before"). It was headed the statement "In the sportive center..." and it used a Likert scale type from 1 (totally in disagreement) to 7 (totally of agreement). The reliability analysis presented a value of alpha of Cronbach, 0.77 for the climate-task and 0.78 for the climate-ego.

Achievement Goal Scale 2 X 2 - To evaluate the users' motivational disposition, the Spanish version was used from the adaptation to the physical education³⁰ of the *Achievement Goal Questionnaire 2 X 2*²¹. This was composed by 12 items divided in four factors with three items each one: put approach-mastery (example, I "want to learn or to improve the possible maximum"); mastery approximation goal (example, "Sometimes I am afraid to not understand or to get better as much as would please me"); performance approximation goal (example, "is important to me that I do better than others"); and avoidance approximation goal (example, "my goal is to avoid to do it badly"). The analysis of Cronbach presented a value of 0.61, 0.74 0.73 and 0.68, for each one of these four factors, respectively.

*Behaviour Regulation in Exercise Questionnaire-2*³² (BREQ-2) - was used the spanish translation version by Moreno *et al.*³¹. It was composed by 19 items in the whole, divided in five factors (from the most to the least self-determined): intrinsic regulation, composed by four items (example, "I exercise myself because I believe that the exercise is enjoyable"); identified regulation, composed by four items (example, "I exercise myself because I value the benefits that it brings"); introduced regulation, divided in three items (example, "I exercise myself because I feel guilty when I don't practice it"); external regulation, formed by four items (example, "I exercise myself because others tell me that I should do it"); and the demotivation, composed by four items (example, I don't see why should I do this"). That scale is Likert type that starts from 0 (no true) to 4 (totally true). The reliability analysis presented an alpha value of Cronbach of 0.76 for the intrinsic regulation, 0.59 for the identified regulation, 0.61 for the introduced regulation, 0.76 for the external regulation and 0.60 for the demotivation.

Sport competence - To measure the perceived competence was used the sport competence factor of the Spanish version³³ of the Physical Self-Perception Profile³⁴. That factor has six items (example, "I am very good in almost all of the sports"), that they are answered by a scale Likert type that starts from 1, corresponding value to totally in disagreement, to 4, that indicated that the student was

totally in agreement with was proposed by himself. The reliability was of $\alpha=0.85$.

Several factors showed a reliability inferior to what is recommended, that is 0.70³⁵. However, face to the small number of items that compose the factors, the observed internal validity can be marginally accepted^{36,37}.

Procedure

The permission to develop this research was received by the sporting centers. The subjects were informed about the objectives of the study and of their rights as participants. All voluntarily participated in the development of the research. The necessary instruments to measure the variables of the study were administered in the main access of the centers, in the presence of two researchers, previously formed in investigation surveys methodology. The instruments occurred, in all of the cases, in the same order. Besides, for each case, was accomplished a small briefing about the objectives of the study, was informed the questions about the instrument and, and if necessary, were solved the possible doubts that rise during the process. It was also insisted to maintain the anonymity of the responses, to answer with honesty and that was used the necessary time to correctly answer all the questions. The average time requested to fill the complete questionnaire was of 20min, varying according to the age of the users of the sporting facilities. Were not found relevant problems to answer or to understand the proposed queries.

Data analysis

Took place descriptive statistics of all the variables and their respective correlation analyses. Later, took place regression analysis to prove the power of prognosis of the motivational climate, of the motivational orientation and the self-determined motivation of the perceived motive competence. To prove the possible differences of all of the variables, according to the apprentice's gender, a variance analysis (ANOVA) was accomplished.

RESULTS

Descriptive statistics and correlation analyses

As can be seen in the Table 1, the users punctuated higher the perception of a motivational climate implicated to the task than an ego climate. Considering the four possible motivational dispositions that contemplate the Achievement Goal Theory, the users obtained a larger punctuation in the approach to the mastery, following by the avoidance to the performance, avoidance to the mastery and the approach to the performance. With regard to the self-determined motivation, presented a high intrinsic motivation, following by the identified motivation, of the introduced regulation, of the external regulation and with a smaller punctuation to the demotivation.

As for the correlations (Table 1), can be seen that the climate to the ego presented a negative and significant correlation with the task climate, the approach to the mastery, the intrinsic regulation and the perceived competence. On the other hand, the ego climate maintained a positive and significant relationship with the performance approach, with the performance avoidance, the mastery avoidance, introduced regulation, external regulation and demotivation. The task climate, however, presented a positive and significant relationship with the approach to the mastery, the performance avoidance, the avoidance to the mastery, the intrinsic motivation, the identified regulation and the perceived competence.

Regression analysis

Was accomplished a regression analysis in three stages to examine how the perceived climate, the motivational disposition and the self-determined motivation allocate the perceived motive competence (Table 2). The perceived competence was negatively predicted by the avoidance to the mastery, the extrinsic regulation and the demotivation. However, the task climate, the performance approach, the mastery approach, the intrinsic regulation and the

Table 1 - Descriptive analysis, internal consistence and correlation of all variables.

	M	DT	Alfa	1	2	3	4	5	6	7	8	9	10	11	12
1. Ego climate	2.59	0.87	0.78	-	-0.26**	0.27**	-0.14**	0.18**	0.13**	-0.15**	-0.30	0.15**	0.20**	0.22**	-0.09*
2. Task climate	4.81	0.85	0.77	-	-	0.02	0.37**	0.08*	0.13**	0.27**	0.24**	0.02	-0.02	-0.06	0.24**
3. Performance Approach	3.28	1.60	0.73	-	-	-	0.24**	0.42**	0.41**	0.01	0.07	0.26**	0.12**	0.18**	0.15**
4. Mastery Approach	5.60	1.09	0.61	-	-	-	-	0.18**	0.27**	0.30**	0.31**	0.12**	-0.10**	-0.80*	0.31**
5. Performance avoidance	3.69	1.59	0.69	-	-	-	-	-	0.56**	0.01	0.01	0.21**	0.15**	0.19**	0.04
6. Mastery avoidance	3.68	1.56	0.75	-	-	-	-	-	-	0.03	0.05	0.26**	0.18**	0.12**	-0.03
7. Intrinsic regulation	3.15	0.75	0.76	-	-	-	-	-	-	-	0.49**	0.01	-0.21**	-0.18**	0.40**
8. Identified regulation	2.85	0.57	0.60	-	-	-	-	-	-	-	-	0.24**	-0.10**	-0.14**	0.31**
9. Introduced regulation	1.03	0.94	0.61	-	-	-	-	-	-	-	-	-	0.37**	0.26**	0.00
10. External regulation	0.41	0.67	0.76	-	-	-	-	-	-	-	-	-	-	0.52**	-0.15**
11. Demotivation	0.36	0.60	0.60	-	-	-	-	-	-	-	-	-	-	-	-0.01**
12. Perceived competence	3.57	0.73	0.86	-	-	-	-	-	-	-	-	-	-	-	-

* $p < 0.05$; ** $p < 0.001$

identified regulation predicted positive and significantly the perceived competence, explaining 26% of the total variance.

Variance analysis according to the gender

Finally, to examine the differences for gender in each one of the variables considered in this study, took place a variance analysis (Table 3). Were obtained significant differences in the ego climate ($F=34.09$, $p<0.001$), task climate ($F=10.89$, $p<0.001$), performance approach ($F=34.05$, $p<0.001$), intrinsic regulation ($F=10.12$, $p<0.001$), demotivation ($F=8.38$, $p<0.001$), and perceived competence ($F=5.43$, $p<0.005$). Like this, the men showed larger values in orientation to the ego, approach to the performance, demotivation and perceived competence, than women did. On the contrary, the women punctuated higher than men did in the perception of the task climate and intrinsic regulation.

DISCUSSION

The main objective of the study was to prove the prognosis effect of the Achievement Goal Theory and the Self-Determined Motivation on the perceived competence, besides analyzing the differences for gender in the considered variables.

Our results showed a negative and significant relationship between the perception of ego climate and task climate, as already indicated in other studies^{38,39,40,41}. The perception of the ego climate showed, besides, positive and significant relationship with the performance approach, in comparison with the results found by White & Duda⁴¹, that thought the subjects oriented to the ego showed sporting participation more associated to the competition and to the social recognition. On the other hand, the task climate in this study was positive and significantly linked with the mastery approach and the performance avoidance, coinciding with studies as the one of White & Duda⁴¹ and the one of Duda *et al.*⁴².

This study also showed that different motivational orientations were related with the perceived motive competence. Truly, the results reveal that so much the ego or performance approach orientations, as the task or apprenticeship approach orientations, were positively associated with the perceived motive competence. However, both motivational orientations positively predicted the perceived motive competence. Although other studies show that a high orientation to the task is associated with adaptative standards^{14,15,43}, the relationship found in this study between different motivational orientations and the motive competence suggests that the meanings that the users allocate to the success could be a decisive factor of the perception that they have of themselves. In fact,

as were confronted previous investigations^{33,44,45,46}, the strongest association between the goal orientations and the physical self-concept commonly were in dimension of the sub-scale of the *sport competence*.

With regard to the self-determined motivation, we found that the intrinsic regulation and the identified regulation, the two types of most self-determined regulation, are the ones that maintain higher positive association with the mastery approach orientation and the perception of a task climate. Even so, both regulation types are the ones that maintain stronger positive association with the perceived motive competence and they are the regulation types that, following our results, would predict with more intensity the perceived motive competence. On the contrary, the extrinsic regulation negatively predicted the perceived competence, coinciding like this with the study accomplished by Georgiadis *et al.*⁴⁷.

The results found in the correlation analysis and in the regression analysis seem to be linked with the defended hypotheses from each one of the motivational theories. In fact, the person's motivational disposition is connected with how that is perceived himself and builds his competence level in deceit situations, as can be the sporting centers^{8,14,15}. An user of the sporting center that has an intrinsic motivation or an orientation to the task is more

Table 2 - Lineal regression analysis of the perceived competence according to the Achievement Goal Theory and the self-determined motivation

Variables	B	SEB	β	Adj, R2
Step 1	2.65	0.19		0.05**
Ego climate	-0.02	0.03	-0.03	
Task climate	0.20	0.03	0.23**	
Step 2	2.06	0.20		0.15**
Ego climate	-0.03	0.03	-0.04	
Task climate	0.13	0.03	0.15**	
Performance Approach	0.07	0.01	0.17**	
Mastery Approach	0.17	0.02	0.26**	
Performance avoidance	0.01	0.02	0.03	
Mastery avoidance	-0.09	0.02	-0.20**	
Step 3	1.37	0.20		0.26**
Ego climate	-0.02	0.03	-0.03	
Task climate	0.08	0.03	0.09*	
Performance Approach	0.07	0.01	0.17**	
Mastery Approach	0.11	0.02	0.16**	
Performance avoidance	0.01	0.01	0.03	
Mastery avoidance	-0.08	0.01	-0.17**	
Intrinsic regulation	0.26	0.03	0.27**	
Identified regulation	0.14	0.05	0.11*	
Introduced regulation	-0.03	0.02	-0.04	
External regulation	-0.11	-0.04	-0.10*	
Demotivation	0.15	0.04	-0.12*	

* $\pi < 0.05$; ** $\pi < 0.001$

probable that perceived himself as physically competent because they have to focus themselves in the task, tries to solve the difficulties and to improve, instead of upsetting to get external goals or to demonstrate more ability than the others. On the contrary, a user that is more motivated by an external cause, or have an motivational ego orientation, is more probable that had a high competence perception when achieve his goal or demonstrate more ability in front of the friends. Therefore, assuming that in this case the success is based on getting an external goal or in a normative comparison, the personal involvement in the activity will not be enough to be seen more competent in the ability. Like this, a subject can notice his competence from internal or external references, but will grant him more importance to one or another depending on the type of motivational orientation that presents.

On the other hand, if we observed the results that relate the motivational climates and the perceived competence, can be affirmed that the users of the sporting centers that participated in this study had more probability of noticing larger competence levels when they perceived that in the center was more focused in apprenticeship instead of performance. This result is linked with the Achievement Goal Theory, considering that the people would be prone to answer with a adaptative conduct when the meaning of the deceit bases on the personal improvement and the effort, more than in the performance and the ability that is shown^{10,11,14,15}. The fact that the association between the perception of an implicating climate to the ego and the perceived motive competence is low, it could be explained by the possibility that a climate centered in the performance generates a motivation in those users that perceived themselves as more competent than their friends^{15,43}. As Reinboth & Duda⁴⁸ showed, a high competence could soften the negative effects than a climate centered in the performance would have for the apprentice's mental state. In spite of that, these results are shown adversary with

other investigations that show the perception of an ego climate as a negative predictor of the self-concept⁴⁹ and as a positive predictor of the physical and mental exhaustion⁴⁸. Therefore, more investigations would be necessary to identify how that a climate centered in the performance would allocate where the users of sporting centers are perceived, inside of the physical activity control.

Our second objective in this study was to examine the differences for gender in the studied variables. The results indicated that men punctuated higher in ego orientation, performance approach, demotivation and perceived competence, than the women. The women had more scores in the perception of a task climate and intrinsic regulation regarding the men. These results coincide with previous investigations, as accomplished by Carr & Weigand⁵⁰, Duda⁴³, Duda & Whitehead⁵¹, Fortier *et al.*⁵², Kavussanu & Roberts⁵³, Li *et al.*⁵⁴ and Ntoumanis & Biddle⁵⁵, that point that the women usually present an orientation to the task, perception of a task climate, intrinsic motivation and identified motivation, higher than men. In spite of, the researches indicate that the men punctuate higher than the women in sporting competence^{4,33,46,56}, although exist some studies that do not appreciate such differences⁵⁷.

Since the Achievement Goal Theory or Self-determination Theory are difficult to find a clear explanation to the differences for gender found in this study. In spite of, we could suggest in this case the influence of other social factors. We should not forget that the woman was stereotyped as biological and physically inferior than the man. In this sense, the stereotypes would penetrate the dynamics of the sporting centers and other institutions, so it would press the users to express and to demonstrate certain images and conducts that satisfy the expectations of the group and of the society in general^{58,59}. Considering that the physical self-concept and, in matter, the perceived competence, refer to the beliefs that the person has on the how skilled he is in different deceit domains,

Table 3 - ANOVA for gender according to the Achievement Goal Theory and the self-determined motivation

	men (n = 402)		women (n = 325)		F	p
	M	DT	M	DT		
Ego climate	20.75	00.04	20.37	00.04	340.09	00.000
Task climate	40.71	00.04	40.93	00.05	100.89	00.001
Performance approach	3.62	0.07	2.87	0.09	34.05	0.000
Mastery approach	5.67	0.05	5.52	0.06	1.32	0.250
Performance avoidance	3.64	0.08	3.76	0.09	0.99	0.319
Mastery avoidance	3.66	0.07	3.70	0.09	0.12	0.730
Intrinsic regulation	3.10	0.04	3.21	0.04	10.12	0.002
Identified regulation	2.85	0.03	2.86	0.03	1.29	0.255
Introduced regulation	1.10	0.05	0.95	0.05	1.86	0.172
External regulation	0.41	0.03	0.41	0.04	0.47	0.490
Demotivation	0.43	0.03	0.29	0.03	8.38	0.004
Perceived competence	3.66	0.03	3.45	0.04	5.43	0.020

or thinks that he has would be so, or more important, as what he really has. In addition, it is in this logic, where one can think that the women possibly notice that they are less motive competent than they really are, i.e., that underestimate their physical competence. In fact, the expectations created by the center, pressure groups, monitors and other agents, could affect the image that men and women have of themselves. However, we should not forget that the construction of an athletic image for a woman could be seen in many cases as inappropriate^{54,60}, in such way that the ideologies associated to the sport would marginate the women with clear negative consequences for them. As demonstrated Weiss & Horn⁶¹, the people that underestimate their competence are less motivated for the challenges and present more anxiety in competition situations regarding those persons that underestimate their physical competence or evaluate the one that correctly have.

In spite of that, at the margin of the possible social factors associated to the gender differences, from the perspective of target of deceit and the self-determined motivation are been able to potentiate an improvement of the motive perception. Enough evidence exists in the specialized bibliography on the contributions that tend to favor oriented to the task apprenticeship climates to favor more autonomy^{10,11}. A larger self-determination, as was shown in this study, would be associated with the higher perception of a motive competence. Besides, the effects of a program of physical activity that potentiate the autonomy, through apprenticeship climates, would be especially visible in people with low self-esteem and physical self-concept^{4,34,62,63,64}.

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