

## MOTIVATION AND SELF-CONCEPT OF STUDENTS WITH OVERWEIGHT AND OBESITY IN ELEMENTARY SCHOOL

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### ABSTRACT

The present research has as general objective to verify the motivation to learn of Elementary School II students and their self-concept related to a factor, children above ideal weight. For data collection 414 students between 10 and 16 years old participated, among them 74 overweight, obese or severely obese. The instruments applied were the Body Perception Questionnaire, Motivation Scale and Child and Adolescent Self-Concept Scale. The results show that in relation to school motivation, the identified regulation prevailed and in relation to self-concept, it was found that the personal self-concept has a high average and the social self-concept was the lowest. Pearson's correlation showed a relationship among demotivation and family self-concept, intrinsic motivation also correlated with general and social self-concept. Finally, the regression analysis showed a dependency relationship between intrinsic motivation when dealing with general self-concept and social self-concept.

**Keywords:** self-concept; self-determination theory; obesity

### Motivación y autoconcepto de estudiantes con sobrepeso y obesidad en la escuela primaria

#### RESUMEN

La presente investigación tiene como objetivo general verificar la motivación para aprender de los estudiantes de primaria y su autoconcepto relacionado con un factor, los niños con sobrepeso. Participaron 414 estudiantes entre 10 y 16 años, de los cuales 74 tenían sobrepeso, obesidad u obesidad severa. Se aplicaron los instrumentos Cuestionario de Percepción Corporal, Escala de Motivación y Escala de Autoconcepto Infanto-Juvenil. Los resultados muestran que, con relación a la motivación escolar, prevaleció la regulación identificada y con relación al autoconcepto, se encontró que el autoconcepto personal tiene un promedio alto y el autoconcepto social el más bajo. La correlación de Pearson apuntó una relación entre la desmotivación y el autoconcepto familiar, la motivación intrínseca también se correlacionó con el autoconcepto general y social. Finalmente, el análisis de regresión apuntó una relación de dependencia entre la motivación intrínseca cuando se trata del autoconcepto general y el autoconcepto social.

**Palabras clave:** autoconcepto; teoría de la autodeterminación; obesidad

### Motivação e autoconceito de alunos com sobrepeso e obesidade no Ensino Fundamental

#### RESUMO

A presente pesquisa tem como objetivo geral verificar a motivação para aprender de alunos do Ensino Fundamental II e o autoconceito deles relacionados a um fator, crianças acima do peso ideal. Participaram 414 alunos entre 10 a 16 anos de idade, dentre eles 74 com sobrepeso, obesidade ou obesidade grave. Os instrumentos aplicados foram o Questionário de Percepção Corporal, Escala de Motivação e Escala de Autoconceito Infanto-Juvenil. Os resultados mostram que em relação à motivação escolar, prevaleceu a regulação identificada e em relação ao autoconceito, constatou-se que o autoconceito pessoal teve uma média alta e o autoconceito social obteve a menor média. A correlação de *Pearson* mostrou relação entre a desmotivação e o autoconceito familiar; a motivação intrínseca também

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se correlacionou com o autoconceito geral e social. Por fim, a análise de regressão evidenciou relação de dependência entre a motivação intrínseca ao se tratar de autoconceito geral e autoconceito social.

**Palavras-chave:** autoconceito; teoria da autodeterminação; obesidade

## INTRODUCTION

Obesity is a chronic disease related to the excessive amount of body fat present in a certain part of the human body or in its entirety, which can cause metabolic complications (Souza, Guedes, & Benchimol, 2015; World Health Organization [WHO], 2017). According to Damiani, Damiani and Cominato (2015) there are two types of definitions for obesity, namely: endogenous, caused by biological factors, such as injuries to the central nervous system, and exogenous, in which the person eats more food than necessary to maintain his/her energy.

As with any other disease, to classify an individual as obese, it is necessary to undergo evaluations and diagnose them based on the results obtained. According to Souza et al. (2015), the main means of verification are the anamnesis, verifying the anthropometric measurements, in addition to their circumferential waist and hip measurements. It is observed that there are several diseases that can be related to obesity in the main functions in the human body, such as cardiovascular, respiratory, digestive, reproductive, endocrine, nervous, dermatological, neoplasms and psychosocial functions, among them diabetes, heart attack myocardium, metabolic syndrome, osteoarthritis, gallbladder, acute pancreatitis, non-alcoholic fatty liver disease and depression (Mancini, 2015).

Regarding obesity in childhood and adolescence, it is noted that it has been a serious and exponential problem in recent decades (Kobes, Kretschmer, Timmerman, & Schreuder, 2018). According to Damiani et al. (2015), 60% to 80% of the causes can be explained by hereditary factors, but what draws attention is the increase in this number according to: environmental changes; in relation to those responsible for the child; the society to which it belongs and the recreational spaces available to it. Oliveira and Fisberg (2003) argue that the increase in the consumption of high-calorie foods and the reduction in physical activities led to the worsening of this condition. The authors report that the most common diseases associated with childhood obesity are: dyslipidemia, hypertension and glucose intolerance.

From this perspective, Moura (2015) highlights that the media are socially influencing people from a very young age in their habits, including food. Many children remain exposed to commercials that offer unhealthy foods, which can lead to informal learning of unhealthy eating habits for these people, due to the fact that they are more vulnerable. It is observed that in addition to

these influences that the media can provide to children and adolescents, another factor that corroborates the increase in childhood obesity is the lack of physical mobility.

The perception of body image is built throughout the subject's life, however, it is relevant to understand that, especially in adolescence, this construction can be more assiduous, considering that this perception is made through internal and external experiences and sensations (Barros, Piekarski, & Mezzomo, 2017). According to Neves, Cipriani, Meireles, Morgado and Ferreira (2017), the negative evaluation of one's own body occurs because this individual does not recognize and does not fit into a model, mainly because it takes into account the cultural tendency. A study by Leite, Ferrazzi, Mezadri and Höfelmann (2014) shows that when assessing body perception, they found children who were not satisfied with their bodies, but when asking people directly, they observed that there is denial of this body dissatisfaction.

The rejection of body perception can be the result of different factors, but in particular, there is a prevalence of obesity in this aspect, and it can be defined that obesity is linked to factors of the subject's body perception. It is observed that the female sex suffers more constantly the pressure related to an ideal pattern, making the body perception distorted and negative (Barros et al., 2017; Nogueira-de-Almeida, Garzella, Costa Natera, Ferraz, & Del Ciampo, 2018).

The school is a propitious place to have discussions on the subject. This is because it is a plural environment and an ally in health promotion and prevention (Duré, Borges, Burgos, Garcia, & Krug, 2015). In this context, it is necessary to reflect on how much body image can affect students' motivation to learn, especially when they are enrolled in the last years of elementary school, when adolescence begins.

In this regard, it can be said that motivation or motive is something that makes the individual act, that is, circumstances that make him take action to move, determining different behaviors. According to Oliveira, Bzuneck and Rufini (2017), motivation has been considered a multidimensional construct since it can be linked to several factors or appear in isolation according to the situation, highlighting that school motivation can present specific characteristics that differs from other types of activities that require this construct. It can be understood as a factor or a process that is determined by immediate effects and final effects. It is perceived that this immediate effect is related to the development of

motivation in the learning process.

According to Maieski, Beluce and Rufini (2017), in the school context, students considered motivated are those who are involved at some level in the activities proposed in the classroom. Unlike what happens with unmotivated students, who carry out the activities, but with a minimum performance than expected, and when they realize that the activity requires a little more, they end up giving up.

Among the social cognitive theories about motivation, the Self-Determination Theory (Ryan & Deci, 2017) stands out, which implies an organismic theory of behavior and development of the human personality. To differentiate the types of motivation, the *autonomy control continuum* is used, that is, what represents autonomy versus control over regulations. The proposed *continuum* represents the evolution of behavior and portrays the motivation to learn as a cyclical process (Maieski et al., 2017).

Thus, demotivation is defined by the absence of motivation, that is, the individual does not react positively. Intrinsic motivation, in turn, is characterized by an autonomous interest in activities (Bzuneck & Boruchovitch, 2016; Rufini, Bzuneck, & Oliveira, 2011).

Maieski et al. (2017) point out that demotivation and intrinsic motivation are two poles and in the middle of them is extrinsic motivation, responsible for the degrees of self-determination, presented in four types: External Regulation, that is, the performance of some tasks in which they will be obtained rewards or to avoid punishment; Introjected Regulation, which is linked to the subject's self-esteem for fulfilling the proposal; Identified Regulation, in which the recognition and identification of the objectives proposed in carrying out the activities takes place; and Integrated Regulation, through which the individual recognizes the importance of a certain activity and assumes responsibility for complying with it.

Thus, it is encouraged that both the motivation to learn and the school self-concept can be associated with body weight. The self-concept is not innate, but the result of the relationship between the individual's interactions during life, considering the social context and the way in which the individual evaluates himself when considering his skills, experiences and representations. It appears that the self-concept is also related to the impact suffered by the opinion of others. In this sense, it is a phenomenon that can undergo modifications and be restructured according to human development, therefore, it cannot be considered static (Conte, Ciasca, & Capelatto, 2016; Sisto & Martinelli, 2004). Furthermore, the authors mention that there may be a self-concept for each interaction that this individual has, such as school self-concept, family self-concept, self-concept in relation to teachers, among others (Schiavoni & Martinelli, 2017).

Braz and Castro (2016) analyzed which personality and self-concept characteristics describe an obese

child. Participants were 25 children diagnosed with obesity between 8 and 10 years old. The Personality Traits Scale for Children - ETPC (Sisto, 2004) and the Child and Adolescent Self-Concept Scale - EAC-II (Sisto & Martinelli, 2004) were used and the results showed that these children have impaired school self-concept, personal and family, but in relation to social self-concept it is a positive constitution. Furthermore, there was no significant correlation between the instruments.

Schiavoni and Martinelli (2017) observe that investigating self-concept in the school environment is relevant, as the school has several social interactions that can contribute both positively and negatively to its constitution. According to Sisto and Martinelli (2004), the child needs to deal with both the cognitive demands and the interaction with the "new social world" because it is an environment that enables components for self-knowledge.

Thus, when considering the specificities inherent to increasing overweight and obesity in Brazil (Kobes et al., 2018), combined with the relevance of motivation and self-concept in the school environment, this research aims to verify the motivation to learn of students of Elementary School II and self-concept in children with overweight, obesity and severe obesity. We also sought to analyze differences in motivation to learn and self-concept, considering the school year of these children and the correlation between the instruments. Finally, simple linear regression analysis was used to verify the effect between motivation and self-concept in this group.

## METHOD

### Participants

Initially, the research had the participation of 414 students, with a mean age of 11 years and 8 months (SD = 1.2). The minimum age was 10 years old and the maximum 16 years old, being duly enrolled in Elementary School II of a state public school in a city in the interior of the State of Paraná. 219 females participated (52.9%) and 195 males (47.1%). The distribution of participants by school year was as follows: 6th (n = 109; 26.3%), 7th (n = 104; 25.1%), 8th (n = 103; 24.8%) and 9th (n = 98; 23.6%).

The students weighed an average of 51.0 kg (SD = 14.7), with a minimum weight of 20.4 kg and a maximum weight of 109.0 kg. The average height was 1.5m (SD = 0.09), with a minimum height of 1.23m and a maximum of 1.86m. The data are distributed in Table 1. Data from denied assessment and absent student refer to those who did not undergo the physical assessment. The classification concerns an error during the evaluation of a student, which is not specified.

After collecting data with the general sample of students and checking the BMI measurements (according to Table 1), it was estimated to select 50% of the sample that comprised the categories: overweight, obesity and

**Table 1 - Classification Table by BMI.**

Classification	F	%
Normal	223	53.8
Overweight	94	22.7
Obesity	56	13.5
Severe obesity	18	4.3
Discrepancy	1	0.2
Evaluation denied	3	0.7
Absent student	5	1.2
Thinness	14	3.3
Total	414	100.0

**Source:** The authors.

severe obesity ( $n = 168$ ), that is, it was expected to work with 84 students, half of the sample. However, due to complications during data collection, it was possible to select categories with 44.0% ( $n = 74$ ) of this sample to meet the objectives of this study.

#### **Instruments**

Data collection was carried out from a questionnaire prepared by the authors with a focus on Body Perception and two other measurement instruments. The questionnaire contained 16 items that addressed issues related to age, sex and school year and the student's perception of their body, image and food.

The motivation was verified using the Motivation Scale developed by Rufini et al. (2011) which contains 25 items based on the Theory of Self-Determination and distributed in five dimensions, ranging from demotivation to intrinsic motivation. The instrument has evidence of internal structure validity and the internal consistency indices were considered satisfactory, namely, demotivation  $\alpha = 0.85$ , extrinsic motivation by external regulation  $\alpha = 0.67$ , by introjected regulation  $\alpha = 0.76$ , by identified regulation  $\alpha = 0.88$  and intrinsic motivation  $\alpha = 0.81$ .

The Child-Youth Self-Concept Scale, constructed by Sisto and Martinelli (2004) aims to assess the self-concept levels of children and young people aged 8 to 16 years. The scale consists of 20 sentences, divided into personal self-concept "I think I am very worried", school self-concept "I imagine I am the kindest person in the class", family self-concept "I take great care with things at home" and social self-concept "I feel me weirder than the others". In addition, it is possible to carry out an assessment of the general self-concept. The instrument's psychometric properties refer to internal consistency, in which the 20 items were distributed among the 20 factors, explaining 41.09% of the variance. The internal consistency coefficients ranged from  $\alpha = 0.59$  to  $\alpha = 0.62$  for the factors and for the total score it was  $\alpha = 0.78$ .

Another aspect that was also worked on was the

recording of weight, height and BMI measurements (with the following classification: normal weight, overweight, obesity, severe obesity, discrepancy, denied evaluation – students who refused, absent student and thinness). The data were provided by the medical record from the Physical Education class, carried out bimonthly by the professor of that discipline, as verified before the data collection.

#### **Procedures and Data Analysis**

The research is supported by Resolution 466/2012 and its complements of the National Health Council and approved by the Ethics Committee with Human Beings of a university in Northern Paraná under Opinion number 3.076.068 (CAAE: 03157118.2.0000.5231). The instruments were applied after signing the Term of Free and Informed Assent – TALE by the students and the Term of Free and Clarified Consent – TCLE signed by those responsible.

After verifying the normality of the data and homogeneity of the variance, the data were submitted to descriptive and inferential statistics, using the SPSS program (*Statistical Package for the Social Sciences*) version 22.0. Initially, a frequency analysis was performed to verify the averages, standard deviations, minimum and maximum scores obtained by the participants. Next, differences were investigated by school year in relation to motivation and self-concept of students with overweight, obesity and severe obesity using Analysis of Variance - ANOVA and *Tuckey's post-hoc* test.

Finally, *Pearson's* correlation was performed between the scores of the two instruments, considering the magnitudes of Cohen (1988) and the dependency relations between the motivation to learn and the students' self-concept were verified through the analysis of simple linear regression by the *enter* method.

#### **RESULTS**

When describing the level of motivation in students in Elementary School II, descriptive statistics were used. With regard to Demotivation, the mean was 9.7 (SD = 4.5), the minimum score was 5 and the maximum 24. When checking the External Regulation variable, the mean was 11.9 (SD = 4.6), with the minimum score being 5 and the maximum 25. Regarding Introjected Regulation, the average was 12.7 (SD = 5.1), with the lowest score being 5 and the highest 25. The average of Identified Regulation was 22.6 (SD = 3.1), it was observed that the minimum score was 10 and the maximum was 25. Finally, the mean of Intrinsic Motivation was 18.3 (SD = 4, 9), with the lowest score being 5 and the highest score 25.

With regard to the level of self-concept of overweight, obese and severely obese students, descriptive analysis was used, showing that personal self-concept was 4.5%, school self-concept 3.8%, family self-concept had a percentage of 5.7% and, finally, the social self-concept

**Table 2 - Distribution Table of Results of the Self-Concept Scale of Students with Overweight, Obesity and Severe Obesity (n = 74).**

Self-Concept	F	M	Average in relation to the Item	Maximum score	Minimum Score
Personal	74	4.5	0.34	8.0	0.0
School	74	3.8	0.30	8.0	1.0
Familiar	74	5.7	0.32	8.0	0.0
Social	74	7.7	0.26	10.0	2.0
General	74	21.9	0	31.0	7.0

**Source:** The authors.

with 7.7%. The detailed description of these results can be seen in Table 2.

When considering that the self-concept factors have different numbers of items, it is necessary to divide the average of points by the number of items of the factors (personal, family, social, school and general). In this sense, it should be clarified that when comparing one dimension with the other, it is favorable to note that the highest sample score was in the personal self-concept dimension and the lowest in social self-concept.

With regard to differences in motivation between overweight, obese and severely obese students per school year, it was possible to note that the statistical difference is significant between years, considering the Analysis of Variance - ANOVA. The difference was in the group of overweight students in the introjected motivations  $F(3.407)=4.315$ ,  $p=0.005$ ; Identified  $F(3.407)=4.9$ ,  $p=0.002$  and Intrinsic  $F(3.408)=4.413$ ,  $p=0.005$ . *Tuckey's post-hoc* test shows where the difference lies, which can be seen in Table 3. In the obesity and severe obesity groups, there was no significant difference in the participants' motivation by school year.

In order to check whether there was a difference in the sample of overweight, obesity and severe obesity

between the dimensions of self-concept, ANOVA was used. The data indicated that there was no significant difference between the groups. However, when checking the obesity and severe obesity groups, there was a difference in personal self-concept, being marginal  $F(3.34)=2.808$ ,  $p=0.054$ . Tukey's post-hoc test indicated that the difference was between the dimensions of the 6th ( $M = 5.1$ ) and 9th ( $M = 2.5$ ) years, considering  $p = 0.040$ .

To verify the correlation between the motivation to learn and the students' self-concept, *Pearson's* correlation was used, considering Cohen's magnitudes (1988). Data indicated a positive and significant relation between lack of motivation and family self-concept ( $r = 0.233$ ,  $p = 0.043$ ) and between intrinsic motivation and family self-concept ( $r = 0.269$ ,  $p = 0.021$ ), both of small magnitude. Furthermore, there was a negative and significant correlation between intrinsic motivation and social self-concept ( $r = -0.305$ ,  $p = 0.001$ ), of medium magnitude and a positive and significant correlation between intrinsic motivation and general self-concept ( $r = 0.350$ ,  $p = 0.002$ ), also of medium magnitude.

Linear regression analysis was used to verify the effect between motivation and self-concept. According to Table 4, it was observed that intrinsic motivation enters the regression model, explaining 11% of the variance for the general self-concept of the sample. Still, intrinsic motivation enters the 13% regression model for social self-concept. The description of the data can be seen in Table 4.

## DISCUSSION

When it comes to the descriptive analysis of the sample's motivation to learn, through the Children's *Continuum*, school demotivation has a low average, that is, when referring to the construct motivation as intentional (Ryan & Deci, 2017), related to verifying the data generated, it is observed that the social conditions within the school are producing satisfaction for these students, so that the dynamics of their behavior is leading to a positive action. There was a high average in Identified Regulation; therefore, these students have a relationship of motivation to learn from the point of view of identification with some type of requirement or rule imposed in the school environment, as Maieski

**Table 3 - Results of the Tuckey Post-Hoc Test of Overweight, Obesity and Severely Obesity Students (n = 74).**

Motivation	Year	M	p
Introjected	7 <sup>o</sup>	14.2	
	8 <sup>o</sup>	12.1	0.016
	9 <sup>o</sup>	11.9	0.008
Identified	6 <sup>o</sup>	23.3	
	8 <sup>o</sup>	21.7	0.002
	7 <sup>o</sup>	23.0	
	8 <sup>o</sup>		0.019
Intrinsic	6 <sup>o</sup>	19.4	
	8 <sup>o</sup>	17.6	0.031
	9 <sup>o</sup>	17.3	0.11

**Source:** The authors.

**Table 4** - Linear regression for self-concept of students with overweight, obesity and severe obesity (n = 74).

Independent Variable	R <sup>2</sup>	R <sup>2</sup> adjusted	F	Beta <sub>z</sub>	T	p
General Intrinsic	0.122	0.110	(125.105) = 9.911	0.350	10.294	0.002
Social Intrinsic	0.149	0.137	(28.240) = 12.393	0.385	7.780	0.001

**Source:** The authors.

et al. (2017) refer in their studies when it comes to this type of motivation, which shows the responsibility and representativeness of this authority that is present in school life, since in these students surveyed this type of regulation predominates.

The second highest average of the results of the descriptive analysis is that these students tend to have intrinsic motivation in their motivational behaviors in the classroom, which demonstrates the autonomous interest in carrying out the proposed activities (Bzuneck & Boruchovich, 2016), that is, this student has an understanding of the activity he needs to carry out and is responsible for its fulfillment. So, the analysis that can be done is that these students need identification, but there are some moments when they take responsibility for themselves, understanding the intrinsic value of the task.

When checking the sample's level of self-concept, the results indicate that these students have a high average in their personal self-concept, which can be considered a positive result, considering that the perception of oneself in current times is an indisputable element and perceiving that these students have a high average, shows that they present a positive analysis of themselves. Based on Sisto and Martinelli (2004), this result indicates that the students in the researched sample manage to deal in a healthy way with their way of acting in different situations. The result is important, especially because this research sought to assess the self-concept of students with obesity and, thus, shows that, in a way, this subject will seek a way to deal with a problematic situation that was not expected if his self-concept was taken into account.

However, when verifying which of these influences of the self-concept is smaller, it is observed that it is the social self-concept, which takes into account that the self-concept is linked to the perception that the other has about the individual (Sisto & Martinelli, 2004). Thus, this result cannot be considered a positive factor, after all, the subscale in question is directly linked to the development of the student's self-concept and can have repercussions on their experience in the most varied contexts, including the school environment, in which the demand social, added to the period of adolescence is quite significant (Barros et al., 2017; Moura, 2015).

With regard to the differences between school years in terms of motivation, it is observed that, in overweight students, introjected regulation differs predominantly

from the seventh year to the two subsequent years, which demonstrates that overweight students in the seventh year seek to perform more activities through their self-esteem to fulfill the proposal. The most interesting fact is that from the 6th to the 9th grade there was variation in the intrinsic regulation of overweight students, with a higher average for the 6th grade. This fact presupposes that at the beginning of Elementary School II, students are more motivated by the intrinsic value of the task, that is, they perform them for their own interest (Bzuneck & Boruchovitch, 2016). Bearing in mind the importance of motivation in the school context, especially in students from a sample as specific as the one in the present study, it should be mentioned that the differentiation between school years shows important contributions to understanding how motivation changes over the course of schooling.

When the self-concept result is verified during the school years, no differences were verified, however, when dealing with the self-concept in the group of people with obesity, a minimal difference can be observed. This difference is found between students in the 6th and 9th grades, with the 6th grade standing out, which indicates that among the students with obesity in that school year, personal self-concept, related to issues related only to the individual himself, is found more prevalent (Sisto & Martinelli, 2004).

In view of the analysis of the correlation between the students' motivation and self-concept, a positive and significant result is observed between demotivation and intrinsic motivation with the family's self-concept. This means that school demotivation and the individual's autonomy in carrying out school activities may be related with the situations faced by the student in their daily family life.

In addition, intrinsic motivation and social self-concept also correlated. When considering that this is a type of autonomous motivation and the social self-concept is related to this perception of oneself, the evidenced result can be considered coherent. Added to this, the correlation between intrinsic motivation and general self-concept was also significant, evidencing what the literature of both constructs proposes regarding the need for an internal construction of the individual, obtaining satisfaction in the activity itself (Ryan & Deci, 2017).

From the regression analysis, it was found that

intrinsic motivation can explain 11% of the variance for the general self-concept of the sample and 13% for the social self-concept. As Oliveira et al. (2017), emphasize, the motivation to learn can be related to several factors. These results contribute to the confirmation of this theory, mainly because it is relating a different construct, according to the verification of this motivation to learn.

### FINAL CONSIDERATIONS

In view of the above, there is a need to recognize the factors that influence the development of student learning, especially with regard to the beginning of schooling. It is necessary to understand the importance of the school context, not only in relation to student results through the grades obtained, but in all situations present in this scenario and that may interfere with school activities, social and environmental interactions, such as the motivation to learn.

In relation to overweight and obesity, it is conjectured that there is a lack of scientific investigations that address the issue, which has great relevance for the individual's self-image and health, since it is a disease that needs to be treated with due importance. Furthermore, the lack of studies that address the issue, combined with student motivation and other psychoeducational factors, is also an issue, evidencing the relevance of the present study and its difficulties with regard to the comparison of findings with the scientific literature.

It is noteworthy that the present study is not free of limitations. In this regard, there is mainly the homogeneity of the sample, and the development of future research should cover the theme with different regionalities, a larger sample and with other schooling ranges, such as Elementary School I and High School. With this, there is the possibility of expanding knowledge about the levels of motivation and self-concept of students with overweight and obesity and investigating forms of prevention and remediation.

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