

## Attitudes of Physical Education Teachers Towards Obese Students

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### Abstract:

The self-regulation of exercise intensity is essential in promoting consistent exercise engagement using validated tools such as the Borg scale. Nonetheless, the validation of the Borg scale within the context of Arabic-speaking populations during the month of Ramadan had not been explored before. This study aimed to determine the usability of the Borg scale in measuring perceived exercise exertion during and after fasting in Ramadan, to generate various levels of aerobic exercise intensity, and its relationship with physiological response (heart rate) and performance capacity (running speed). Eighteen healthy males with a mean  $\pm$  SD age of  $21.84 \pm 1.37$  years participated in this study. Each participant was asked to run on a treadmill for 3 trials at low, medium, and high perceived intensities, during which the physiological and performance responses were measured. All procedures were conducted during the 2nd and 4th weeks of Ramadan and the 2nd week after Ramadan. Significant differences were found in produced physiological and performance responses among all intensities at all study times. The results indicate the validity of the Borg scale and its capability to produce different levels of aerobic intensity during and after Ramadan. Furthermore, findings show that Ramadan may lead to physiological adaptations after 4 weeks from its beginning.

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**Key Words:** Obesity, stigmatization, physical education.

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**Introduction:**

Obesity is a complex and multifactorial issue whose occurrence has significantly increased in recent years (Low et al., 2009). Obese individuals frequently experience weight-related stigmatization, which encompasses negative attitudes and beliefs about body weight, manifesting as stereotypes, prejudices, and unfair treatment (Puhl, 2009). Defining school violence is challenging, as it can manifest in various forms within the classroom or during lessons. Beyond physical aggression, school violence includes discrimination based on ethnic or social origin, gender, or clothing style. Stigmatization, a relational process distinguishing the stigmatized from the "normal," is another prevalent form of violence. Approximately 90% of adolescents report witnessing stigmatizing behaviors toward their peers, with 45% identifying weight as the primary characteristic for which young people are most likely to be bullied at school, followed by sexual orientation (Puhl, Luedicke, & Heuer, 2011).

Stigmatization can manifest through inappropriate verbal comments such as teasing, insults, or derogatory remarks, as well as social exclusion and physical aggression (Puhl, 2009). These behaviors can have severe consequences for the psychological and physiological health of obese individuals, increasing their risk of depression and anxiety (Puhl et al., 2009).

In the school environment, accommodating a student who is partially fit for physical education presents a unique challenge for teachers, who must assess the extent to which the obese student can participate in physical activities. Several studies have examined the ability of physical education teachers to motivate children to engage in physical activities (Ames, 1992; Lewis, Fraser, & Manby, 2014). However, there is a paucity of research on the behaviors physical education teachers should adopt to avoid discriminating against obese children (MacLean et al., 2009).

Given the alarming increase in the number of overweight children and adolescents (Ogden, Flegal, Carroll & Johnson, 2002), stigmatization likely affects a significant number of young people (Strauss & Pollack, 2003). Education is considered the most promising path for future efforts to reduce stigmatization (Puhl, Moss-Racusin, Schwartz, & Brownell, 2008). Therefore, it is crucial to understand how physical education teachers can create a context for physical activities that minimizes stereotypes towards overweight students (li & Li, 2008). Effective interventions aimed at reducing weight-related stereotypes in physical education must be developed (Greenleaf, Martin & Rhea, 2008). Despite the necessity of interventions against weight discrimination (Losekam et al., 2010), there is limited research on the stigmatizing attitudes of physical education teachers (O'Brien et al., 2007).

Based on this literature, we pose the following question: What attitudes do physical education teachers adopt towards obese students?

**Methodology:**

**Exploratory Survey:**

We conducted semi-structured interviews (comprising 5 questions, see Appendix 1) with 5 physical education teachers.

**The Sample:**

Three obese students, nine physical education teachers, and three physical education inspectors agreed to participate in this study.

**Table 1. Characteristics of the Study Population**

Population	Number	Gender	Age	Experience
Obese students	3	Girls : 1 Boys : 2	Girls : 13 years Boys : 15 years	
Physical education teachers	9	Wemen : 2 Men : 7	Wemen : 2 between 30 and 35 years Men : 5 between 30 and 35 years. 2 between 40 and 45 years	2 Wemen : 7ans 5 Men : 7ans
Physical education inspectors	3	Men : 3	Men : 3 between 45and 55 years	2 Wemen : 16 ans 2 Men : 7 ans 1 Men : 11 ans

After contacting the relevant organizations and obtaining the necessary permissions, the interviews were conducted. Interviewees responded anonymously to the questions.

### Measurement Tools:

The selection of semi-structured interviews was driven by their potential to provide comprehensive insights into our research question and objectives. This qualitative method is particularly effective in capturing the "feelings and experiences" of respondents. One of its primary strengths lies in its ability to uncover unexpected or understudied phenomena that may be overlooked in quantitative research (Taylor et al., 2009). Data collection was conducted through semi-structured interviews. This approach involved the construction of an interview guide comprising several open-ended questions designed to elicit perceptions, thoughts, and experiences related to the three chosen themes (Thompson, Humbert, & Mirwald, 2003).

The interview questions were organized thematically, with the use of a guide featuring open-ended questions enabling "flexible" interviews. This structure allowed participants to freely share and express their experiences. The study included interviews with three obese students, nine physical education teachers, and three physical education inspectors. A total of 15 interviews were conducted, recorded with the prior consent of the participants, and transcribed in the appendices of the thesis. These semi-structured interviews aimed to verify and deepen the research question, providing a rich, nuanced understanding of the subject matter.

### Conduct of the Survey:

For each respondent, the interview was conducted at their workplace during May 2018. Each interview was initially planned to last 30 minutes.

### Results:

#### 1. Semi-structured Interviews with Physical Education Teachers

The semi-structured interviews with physical education teachers revealed differences in attitudes, some of which favour the stigmatization of obese students during physical activities.

#### • Negative Prejudices:

-The comments from the nine physical education teachers revealed that they assess students' athletic abilities based on their weight, implying that knowing a student's weight is sufficient to determine their sports proficiency. The teachers also expressed the belief that obese students lack physical abilities and face spatial and temporal challenges in producing physical performance, despite the fact that sports performance is evaluated in both spatial and temporal contexts.

-These prejudices can lead physical education teachers to focus solely on what obese students are unable to achieve. Consequently, they hold reduced expectations regarding the personality and social skills of obese students. These biases also negatively impact the perceived reasoning, cooperation, skills, and sports abilities of these young individuals.

-One teacher (Teacher 05) articulated the hypothesis that "an obese student with overweight cannot perform exercises requiring physical qualities such as flexibility, speed, endurance, but can do exercises requiring strength."

-It was concluded that maintaining low expectations for the physical abilities of obese students poses significant challenges for the effective implementation of physical education programs (Peters & Ruan, 2010).

#### • Creation of a Stigmatizing Environment:

- The evaluation process is a critical moment for teachers to justify their pedagogical choices, revealing the values underlying their strategies.

- Based on the analysis of responses, the teachers in our study indicated that they employ special criteria to grade obese students, aiming to motivate them and help them achieve favorable grades relative to their peers. However, this strategy inadvertently highlights the difference between obese students and their peers. The focus on the student's pleasure, development, and well-being from the outset creates an environment that fosters stigmatization.

- For instance, Teacher 08 states, "I always try to find a special grading scale and criteria to appreciate the efforts of obese students during sessions and their progress."

- Similarly, Teacher 07 explains, "I always choose a special grading scale and criteria that align with their progress during the cycle and their abilities, to give them the opportunity to get good grades like their non-obese peers. Physical education is not about performance."

- Pierce and Wardle (1997) reported that obese students often feel excluded during physical activities.

**Table 2. Attitudes of Physical Education Teachers**

Categories	Sub categories
Negative Prejudices	Passive, Lazy, Shy, Inactive, Weak, Low self-confidence
Exclusion from Physical Activity	Classification in low level, less important tasks, Facilitated exercises, Assignment of easy roles
Creation of a Stigmatizing Environment	Special grading scale, Special criteria, Specific contract within the group, Competitive games between groups, Activities increasing aggressiveness,

The results of our research enable the identification of negative attitudes among physical education teachers that contribute to the stigmatization of overweight and obese children during physical education sessions.

Three themes emerge in identifying the stigmatizing attitudes of physical education teachers towards obese students: negative prejudices, exclusion during physical activity, and the creation of a stigmatizing environment. These themes will be examined in comparison with existing literature, leading to the development of recommendations for each theme.

## Discussion

### Negative prejudices:

In the analysis of interviews with obese students and physical education teachers, as well as in other studies, it has been observed that physical education teachers often harbor negative prejudices against obese students. These biases, in our view, can lead teachers to concentrate solely on the perceived limitations of obese students. Consequently, physical education teachers tend to hold reduced expectations concerning the personality, skills, and athletic abilities of these youths.

This phenomenon aligns with the research findings of Li and Rukavina (2012), which indicate that prejudices related to personality, social skills, and athletic abilities, as identified by physical education teachers, contribute to the stigmatization of obese students. Peters and Ruan (2010) have concluded that such diminished expectations regarding the physical capabilities of overweight youth pose significant challenges for the effective implementation of physical education programs. Additionally, O'Brien et al. (2007) have advocated for the inclusion of weight bias reduction programs in physical education teacher training. We posit that it is crucial for physical education teachers to recognize their lowered expectations, as this awareness would promote equitable expectations for all students and help mitigate discrimination.

### Exclusion during physical activity:

In the analysis of interviews with obese students and physical education teachers, as well as in other studies, it has been observed that physical education teachers often marginalize obese students by assigning them less significant tasks and easier exercises during physical education sessions. This practice of assigning alternative tasks can stigmatize obese students, and delegating a less important role within activities is perceived and reported by obese students as exclusion (Goffman, 1963; Li and Rukavina, 2012). Despite the intention to assist, physical education teachers inadvertently segregate these students.

We assume that obese students should be integrally included in physical activities and should not be relegated to less important roles. Exclusion from physical activities discourages overweight children from engaging actively (Li & Rukavina, 2012a). Research indicates that such exclusion contributes to reduced activity levels among these children (Nanselet al., 2001; Iannotti, & Nansel, 2009). These practices perpetuate the stereotype that "obese children are inactive and unmotivated," denying them the opportunity for active participation even if they wish to engage. It is imperative for physical education teachers to establish norms of equality and acceptance, providing all children with the chance to participate fully in physical activities (Rukavina & Li, 2008).

### Creation of a stigmatizing environment:

In the analysis of interviews with obese students and physical education teachers, as well as in other studies, it is evident that physical education teachers often create an environment that fosters stigmatization through certain practices. Physical activities that emphasize social comparison tend to elicit negative comments about the physical performance and appearance of overweight or obese children (O'Connor & Graber, 2014). Activities that highlight body visibility and physical abilities in front of peers are particularly conducive to the stigmatization and discomfort of these students. Specifically, exercises such as fitness drills, running, jumps, and

facial supports have been identified as promoting social comparison (O'Connor & Graber, 2014; Van Amsterdam et al., 2012).

Physical education teachers must be cognizant of the impact of these activities. Such physical activities often lead to negative remarks about the physical performance and appearance of obese children, making them feel uncomfortable when compared to their peers. The visibility of performance to others is more stigmatizing than poor results themselves (Trout & Graber, 2009). Therefore, we recommend adapting exercises to reduce the visibility of obese or overweight students. For instance, during running activities, starting at different intervals can make the performance less conspicuous (Trout & Graber, 2009).

Evaluation practices that emphasize physical performance can further exacerbate social comparison and stigmatization. Evaluations focused solely on physical performance foster an environment where differences are displayed, which can undermine the student's enjoyment, development, and fulfilment. Irwin, Symons, and Kerr (2003) suggest the implementation of exercise stations during evaluations to allow students to be assessed without being observed by their peers.

The emphasis on comparing performances among students during evaluations can contribute to stigmatization. Crombie et al. (2011) recommend involving all children to avoid having spectators and regularly changing groups. Encouraging children to focus on their performance rather than comparing themselves to others is also crucial (Trout & Graber, 2009).

Additionally, using punishment for poor physical performance is particularly harmful and contributes to the victimization and discrimination against obese students. Such practices not only result in failure for the child but also subject them to punishment, which can lead to resentment from their peers. It is essential that physical education teachers understand that punishing children for their physical performance does not improve their performance and can cause further harm. No teacher should punish a child based on their physical performance (Trout & Graber, 2009).

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## اتجاهات معلمي التربية الرياضية نحو الطلاب البدناء

### الملخص:

السمنة هي قضية معقدة ومتعددة العوامل، وقد ازدادت معدلات انتشارها بشكل كبير في السنوات الأخيرة في هذا السياق، تطرح هذه الدراسة سؤالاً حول المواقف التي تتجلى في العمل التربوي للمعلم، والتي تساهم بشكل غير واعي في وصم الطالب البدين بدلاً من دمجهم. لذلك، نظمت الأسئلة المطروحة في المقابلات وفقاً للعناصر الموضوعية. لقد أتاح استخدام شبكة تستند إلى أسئلة مفتوحة إجراء مقابلات "مرنة"، مما سمح للمشاركين بالتعبير بحرية عن تجاربهم. تتكون المقابلات من ثلاث مقابلات مع الطلاب البدناء، وتسع مقابلات مع معلمي التربية البدنية، وثلاث مقابلات مع مفتشي التربية البدنية. تم تسجيل هذه المقابلات الخمسة عشر بموافقة مسبقة من المشاركين ثم تم تفرغها في ملاحق الدراسة. في الواقع، تسمح لنا النتائج الأبرز المسجلة في هذه الدراسة أن نقول بأن معلمي التربية البدنية الذين تمت مقابلتهم ليسوا على دراية بوصمهم للطلاب البدناء خلال حصص التربية البدنية. لقد ساهمت هذه الدراسة في فهم المواقف التي يتبناها معلمو التربية البدنية والرياضية والتي تعزز الوصم. نظرًا لأنهم الوحيدون الذين يقدمون فرصًا للأنشطة البدنية للأطفال من جميع الأعمار، فإن معلمي التربية البدنية هم الأكثر تعرضًا لزيادة نسبة الأطفال الذين يعانون من السمنة. لذا، من المهم جدًا تزويدهم بالأدوات والاستراتيجيات لتحديد مواقفهم من أجل مكافحة وصم الطلاب البدناء.

**الكلمات المفتاحية:** السمنة، الوصم، التربية البدنية.