Attitudes towards physical education teachers from a cross-cultural perspective: German and Chilean students’ viewpoints

Actitudes hacia el profesor de Educación Física desde una perspectiva intercultural: La mirada de estudiantes alemanes y chilenos

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Resumen
El papel del profesor en la generación de actitudes favorables hacia la Educación Física es esencial, porque su comportamiento influye directamente en la forma en que los estudiantes valoran la asignatura. El propósito de este estudio es analizar las actitudes hacia los profesores de Educación Física desde la perspectiva de los adolescentes alemanes y chilenos. Participaron 2030 estudiantes (1001 chicas y 1029 chicos, M_age = 14.44 ± 1.8). Se utilizó el “Cuestionario de Actitudes de los Escolares hacia la Educación Física”. Se adoptó un modelo de doble componente (afectivo y cognitivo). Los estudiantes alemanes otorgaron mayores puntuaciones al componente afectivo, mientras que los estudiantes chilenos dieron mayor valoración al componente cognitivo, encontrándose diferencias significativas entre los dos grupos en ambos componentes (p < .001). No se encontraron diferencias significativas según sexo en ninguno de los componentes. Las diferencias de nacionalidad parecen influir en las actitudes de los estudiantes hacia la Educación Física. Al identificar estas diferencias, puede ser posible planificar metodologías que generen actitudes favorables hacia la actividad física utilizando estrategias que trasciendan a los países.

Palabras clave: actitudes, educación física, adolescentes, intercultural.

Abstract
The physical education teacher's role in the generation of favourable attitudes towards physical education is essential, because his behaviour directly influences how students rate the subject. The purpose of this study is to analyse the attitudes towards physical education teachers from the German and Chilean adolescents’ perspective. 2030 students participated (1001 girls and 1029 boys, M_age = 14.44 ± 1.8). The “Questionnaire on Students’ Attitudes towards Physical Education” was used. A dual component model (affective and cognitive) was adopted. German students gave higher scores to the affective component than Chilean students, while Chilean students gave higher scores to the cognitive component, indicating significant differences between the two groups for the two components (p < .001). No significant gender differences were found in any of the components. The differences in their nationality seemingly influence the students’ attitudes towards physical education. By identifying these differences, it may be possible to plan methodologies that generate favourable attitudes towards physical activity, using strategies that transcend countries.

Keywords: attitudes, physical education, adolescents, cross-cultural.
Introduction

Physical education, like other sectors of the school curriculum, is concerned with students' learning and development. However, physical education has the privilege of being a subject in school that develops this learning from bodily experience. For this reason, it is important to note that depending on how students perceive these experiences, they generate certain beliefs or appraisals that influence their attitudes towards bodily experiences (Silverman & Subramaniam, 1999). Attitudes are defined as predispositions to respond favourably or unfavourably towards an object, person or situation (Ajzen, 2005) and are evaluative judgements, either positive or negative, about a person, object or issue (Hogg & Vaughan, 2010).

Attitudes towards physical education result from the encounter between students and the physical education classes in which they participate (Säfvenbom et al., 2014). When bodily experience in class is valued in a positive way, students' attitudes reflect a greater willingness to repeat the experience. If these experiences are negative, it is likely that students will seek to avoid these activities (Hopple & Graham, 1995). With increasing emphasis on the cultivation of physical activity habits within the objectives of physical education, attitudes are of crucial relevance since positive attitudes towards physical education classes are a necessary component in the generation of an active lifestyle (Chung & Phillips, 2002; Dismore & Bailey, 2011; Kjonniksen et al., 2010; Prochaska et al., 2003).

Several studies have concluded that, in general, the majority of students maintain positive attitudes towards physical education (Carcamo-Oyarzun et al., 2017; Dismore & Bailey, 2010; Gerlach et al., 2006; Hernández et al., 2010; Phillips & Silverman, 2015; Rikard & Banville, 2006; Silverman & Subramaniam, 1999; Stelzer et al., 2004; Subramaniam & Silverman, 2007). However, there are determinants that impact these attitudes to different degrees. Studies that have addressed this issue identify several determinants that influence students' attitudes, with the curriculum and the teacher as the most influential factors (Luke & Sinclair, 1991; Phillips & Silverman, 2015; Subramaniam & Silverman, 2000). The teacher plays a fundamental role in generating positive attitudes towards physical education because his behaviour either directly (Lavay et al., 2012) or indirectly (Jung & Choi, 2016) affects the physical education learning process and directly influences curricular development and other attitude determinants (Luke & Sinclair, 1991).

Teacher behaviour has been associated with both positive and negative attitudes, with accentuated differences depending on student gender (Luke & Sinclair, 1991; Nicaise et al., 2006; Nicaise et al., 2007; Olafson, 2002; Shropshire et al., 1997). Luke and Sinclair (1991) reported that students identified the teacher as a negative determinant of attitudes. This identification was greater among females than among males; however, the majority of girls who perceived the teacher negatively did not participate in physical education classes. Olafson (2002) conducted a series of interviews with teenage girls about physical education and concluded that participants in their study expressed a dislike for physical education and generated strategies to avoid participating in physical education classes. Olafson (2002) conducted a series of interviews with teenage girls about physical education and concluded that participants in their study expressed a dislike for physical education and generated strategies to avoid participating in physical education classes. Physical education teaching, intolerance to certain peer relations, and the dominant way in which cultural messages are internalized (Saffray, 2002), factors in which the physical education teacher may have a direct influence. Flintoff and Scraton (2001) also posited that adolescent women highlight the negative aspects of their physical education teachers; they are sarcastic towards their skills, hold low expectations of them, and show no concern. However, this is not true for all teachers; some students mentioned positive features such as fair treatment independent of ability and approachable ways of teaching (Flintoff & Scraton, 2001). Shropshire et al. (1997) found that girls perceived physical education teachers in a more positive way than boys did; girls considered physical education teachers friendly and felt the teachers had a greater willingness to help them. Teachers’ feedback to students is also perceived differently according to student gender; feedback influences perceptions of competence for girls more than for boys (Nicaise et al. 2006). Additionally, girls perceive an increased frequency of support and provision of technical information, whereas boys claim that teachers criticize them more and that they are more likely to ignore their mistakes (Nicaise et al. 2007). This female-positive attitude of feedback was also noted by Chedzoy and Burden (2009), female pupils showed a strong need for special attention from the teacher, whereas boys expected the teacher to give them instructions on practical activities and training.

In addition to the gender, interculturality is outlined as a relevant aspect in how students from different countries perceive the subject and the teacher who teaches it, taking into account that the global situation of physical education classes presents similar developmental problems in various parts of the world (Hardman, 2008). The literature that adopts a cross-cultural approach to this subject includes a study by Stelzer et al. (2004), which analysed students' attitudes towards physical education in four countries (Czech Republic, Austria, England and United States). Despite the fact that most of these students showed positive attitudes towards physical education, students from the Czech Republic and Austria had significantly more positive attitudes than did students in England and the United States. Additionally, all of these countries, with the exception of the Czech Republic, presented significant differences according to gender, with boys demonstrating more positive attitudes than girls. Another study that considered attitudes towards physical education among schoolchildren from different countries was by Dismore et al. (2006), who compared the views of schoolchildren in Japan and England towards physical education. The authors confirmed that students have very good acceptance of the subject and that Japanese students have more positive attitudes towards physical education compared with their English counterparts. In another cross-cultural study, Chung and Phillips (2002) surveyed secondary school pupils in the United States and Taiwan and focused on attitudes towards physical education and exercise in their free time. As in the studies mentioned above, these authors found differences according to gender and nationality: boys manifested more favourable attitudes towards physical education than girls did, and students in Taiwan presented more positive attitudes towards physical education than American students did. Although these investigations do not indicate the cause of these differences in cross-cultural attitudes towards physical education, the authors of these studies posit that this phenomenon may be explained by different organizational factors, such as curriculum content (Chung & Phillips, 2002), number of students per teacher
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Jaime, Carcamo-Oyarzun, et al.

Physical education teachers play a fundamental role in creating positive attitudes towards physical education because their behaviour, actions and decisions directly influence how students rate the subject. Given the scarcity of cross-cultural studies on this topic, this study has two purposes: first, to analyse attitudes towards physical education teachers from the perspectives of Chilean and German students; second, to determine these students’ similarities and differences by nationality and gender.

Materials and Methods

Participants

Because this study was cross-cultural and given the statements by Brandl-Briedenbeck (2005), we generated a strategy to compare Chilean and German students based on similar characteristics in both samples. To achieve this aim, we sought equivalence between the educational establishments to which these students belonged according to the following criteria: a) age within grade (grades 5 and 7 in primary, 9 and 11 in secondary at Chilean schools, equivalent to grades 5, 7, 9 and 11 in German secondary schools); b) co-educational schools (males and females in mixed schools); c) type of school (municipal schools, subsidized private schools and private schools in Chile and Gesamtschule, Erweiterte Realschule and Gymnasium in Germany); and d) population unit (urban and rural). These criteria allowed us to develop a probabilistic stratified sample of 2,030 schoolchildren (49.3% female and 50.7% male, age M = 14.44 ± 1.8), of whom 1,054 lived in the Saarland Region in Germany (49.0% female and 51.0% male, age M = 14.44 ± 1.7) and 976 lived in the Araucania Region in Chile (49.7% female and 50.3% male, age M = 14.45 ± 1.9). Authorization for this project was provided in Germany by the Saarland Ministry of Education, Women, Family and Culture and in Chile by the Araucania Region's Regional Ministerial Education Secretariat. Once the authorizations were official and the educational establishments where the questionnaire would be administered were chosen, the participating students’ parents were asked to sign an informed consent form, and the students signed an informed assent form.

Instrument

The ‘Questionnaire on Student Attitudes to Physical Education’ was used to collect data. It was created and validated by the Sports Science Institute at Saarland University (Cárcamo, 2012; Wydra, 2001) using the back-translation method (Hambleton, 1996) for its translation to Spanish. This questionnaire was developed using theoretical constructs in the literature on attitudes towards physical education (Silverman & Subramaniam, 1999; Subramaniam & Silverman, 2000). These constructs were organized into four areas: socio-demographic data, attitudes towards physical education classes, attitudes towards the physical education teacher, and physical activity habits. Content validity was established through a literature review considering variables that have previously been validated as important with regard to students’ attitudes towards physical education (Silverman, 2017; Silverman & Subramaniam, 1999; Subramaniam & Silverman, 2000) and by submitting the questionnaire to expert judgement by Chilean and German professionals in the fields of pedagogy and psychology. The questionnaire was pilot-tested with students from both countries (grade 9 in Chile, grades 7 and 11 in Germany; 87 students in total) to establish the clarity of the questions and to detect difficulties in comprehension by the students.

This study adapted the section of the questionnaire on attitudes towards physical education teachers. The dual component view was adopted, which considers an affective component that is related to emotions and a cognitive component that is related to beliefs (Subramaniam & Silverman, 2007). This is the most widely used model for researching attitudes towards physical education (Donovan et al., 2015; Phillips & Silverman, 2015; Subramaniam & Silverman, 2007). The affective component was constructed with items that presented statements reflecting the schoolchildren's emotional factors towards the teacher (e.g., ‘My physical education teacher is understanding’). The cognitive component explored the students’ opinions of their teacher’s performance in class (e.g., ‘My physical education teacher gives very varied classes’). Each component consisted of 10 items (20 in total) for which the students indicated their degree of (dis)agreement, scaled from 1 = completely disagree to 4 = completely agree for positive statements and from 1 = completely agree* to 4 = completely disagree for negative statements. The questionnaire presented an acceptable degree of reliability, with a Cronbach’s alpha of 0.766 for the affective component and 0.780 for the cognitive component.

Process

Interviewers in Chile and Germany were trained to follow an established protocol for presenting and explaining the questionnaire to students. The anonymity of the responses was emphasized, and the students were told that they should reply sincerely. The questionnaires were self-administered but were overseen by the interviewers. Each respondent received a questionnaire and answered individually. The interviewer was allowed to help the respondents with any issues related to understanding the interpretation of the items. The questionnaire was mostly administered during classes not related to physical education to avoid biasing the answers.

Statistical Analysis

Data analysis was conducted with the IBM SPSS Statistics v.25 program. A descriptive analysis was performed (frequencies, mean, standard deviations and confidence intervals) of the affective and cognitive components by country and gender variables. To determine whether there were differences between countries and gender, a multivariate analysis of variance was applied. To interpret significance, a p ≤ .05 alpha level was established. To quantify the effect size, eta square ($\eta^2$) has been used, considering small ($\eta^2 = .01$), medium ($\eta^2 = .06$), and large ($\eta^2 = .14$) effects (Cohen, 1988).

Results

Generally, and considering the total sample, students have favourable attitudes towards their physical education teachers, with a mean of 2.94 in the affective component and 2.98 in the cognitive component (4 maximum). Table 1 (affective component) and Table 2 (cognitive component) present the descriptive statistics of students’ attitudes towards their physical education teachers according to gender and country.
Results According to the Affective Component

In the affective component (Table 1), German students presented a higher value than Chilean students did, with significant differences between both groups ($F(1, 1828) = 15.060, p < .001, \eta^2 = .09$). According to gender, for the affective component, females presented a slightly higher mean than males did; however, no significant differences were found between genders ($F(1, 1828) = 1.23, p = .266$). When analysing the gender results according to country, the general trend was maintained: in the affective component, females presented higher values than males did both in Germany and in Chile. However, the differences were not significant (Germany: $p = .822$, Chile: $p = .891$), and there was no interaction between gender and country ($F(1, 1828) = .07, p = .953$).

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<th>Germany</th>
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<tr>
<td></td>
<td>N</td>
<td>M (SD)</td>
<td>CI 95%</td>
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<tr>
<td>Females</td>
<td>490</td>
<td>3.00 (0.53)</td>
<td>[2.94-3.04]</td>
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<tr>
<td>Males</td>
<td>505</td>
<td>2.97 (0.56)</td>
<td>[2.93-3.03]</td>
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<tr>
<td>Total</td>
<td>995</td>
<td>2.98 (0.54)</td>
<td>[2.95-3.02]</td>
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Results According to the Cognitive Component

In the cognitive component (Table 2), Chilean students presented higher values in relation to German students, with significant differences between both groups ($F(1, 1844) = 6.507, p < .001, \eta^2 = .06$). Regarding gender, males presented a higher mean than females did, although these differences were not statistically significant ($F(1, 1844) = .577, p = .456$). Regarding the gender results according to country, males presented higher values than females did for both German and Chilean schoolchildren, although there were no significant differences between gender according to country (Germany: $p = .907$, Chile: $p = .979$) or interactions between country and gender ($F(1, 1844) = .03, p = .858$).

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<tr>
<td></td>
<td>N</td>
<td>M (SD)</td>
<td>CI 95%</td>
</tr>
<tr>
<td>Females</td>
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<tr>
<td>Males</td>
<td>492</td>
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<td>[2.91-3.00]</td>
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<tr>
<td>Total</td>
<td>977</td>
<td>2.95 (0.52)</td>
<td>[2.90-2.98]</td>
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Discussion

In general, the students from both countries have favourable attitudes towards their physical education teachers. This finding is consistent with other studies addressing this issue (Gerlach et al. 2006; Hernández et al. 2010; Shropshire et al., 1997). The results show that both Chilean and German students show positive attitudes towards their teachers, although there are significant differences between the countries. Studies on this issue from a cross-cultural perspective suggest that these differences may be explained by organizational factors specific to different countries (Chung & Phillips 2002; Dismore et al., 2006; Stelzer et al. 2004). Therefore, it is necessary to reflect on elements that may suggest the causes of such differences.

One of the factors with the greatest influence on attitudes towards physical education is the curriculum (Luke & Sinclair 1991; Phillips & Silverman 2015; Subramaniam & Silverman 2000). The differences between Chile and Germany are understandable considering that both nations have very disparate approaches to curricula. The physical education curriculum in Chile, which is called ‘Physical Education and Health’ (Ministerio de Educación de Chile 2013), emphasizes health (Moreno et al., 2013) with a curricular structure based on lessons for the construction of healthy physical habits that are oriented on three axes: motor skills, active and healthy life, and security, fair play and leadership (Ministerio de Educación de Chile, 2013). In contrast, Germany is a federally organized country, and each Bundesland (State) has its own curriculum for physical education, called Sportunterricht. However, most states have adopted a curriculum based on the concept of ‘ability to act’, developed by Dietrich Kurz in 1977, wherein multiple perspectives on physical education are proposed (Kurz, 2000). The subject must address six dimensions: body experience, social learning, health education, adventure education, the sporting spirit, and the willingness to do better (Krüger, 2012). Classes must incorporate these six pedagogical dimensions, all of which are equally important, so that students can experience them all and give meaning to movement based on their experience and interests (Wydra, 2007). Comparing the curricula of both countries, we begin to understand the differences between Chilean and German students regarding their attitudes towards physical education teachers. When the curriculum focuses on the generation of healthy habits, the teacher’s main objective is to promote physical activity (Larsson & Nyberg, 2017). In this case, the teacher may focus on teaching in a deterministic manner by emphasizing functionality and the performance of tasks related to health so that students relate these actions to concepts more than to emotions. Thus, it is possible...
that Chilean schoolchildren give greater value to cognitive components than to affective ones. In contrast, in Germany, where the curriculum requires that the teacher must equally address various dimensions (Krüger, 2012), the fact that students can give meaning to their classes individually (Wydra, 2007) and can focus not only on the health concept but also on dimensions related to emotions may lead German students to give higher value to the affective component than Chilean students do.

According to Stelzer et al. (2004), in addition to curriculum, another factor that may influence these differences is the number of students per course. In the current study, the average number of students per class was much lower in the German sample (25 students per class) than in the Chilean sample (31 students). A high number of students per class is considered a negative factor for the development of physical education (Deutscher Sportbund, 2006); therefore, this situation may influence students’ perception of classes. Classes with fewer students would allow teachers to conduct more personalized classes that better serve the needs of students, which is highly valued by students (Ryan et al., 2003) especially females (Chedzoy & Burden, 2009). In this context, German students would receive more attention from their teacher, which may lead them to value the affective component more in relation to Chilean students.

With regard to gender, when analysing students’ attitudes towards physical education teachers, the results indicated that there were no significant differences between females and males. This finding concurs with other current studies (Hernández et al. 2010; Nicaise et al. 2006; Nicaise et al., 2007) that have found no gender differences in students’ opinions towards their teachers. Considering that previous studies show significant differences between females and males (Koca et al., 2005; Shropshire et al., 1997) due to the influence of new education policies oriented towards gender equality in physical education classes, a change in trend is taking place (Hernández et al., 2010). It is also noteworthy that females present higher values in the affective component than males do. This finding agrees with studies indicating that females demonstrate a strong need for personal bonding with a teacher and that they expect more attention and help from teachers (Chedzoy & Burden, 2009). In addition, females perceive that their performance in classes is not criticized as much as the performance of males and that they receive more encouragement from their teachers (Nicaise et al., 2006; Nicaise et al., 2007). Knowing this, it is important that the teachers think through their pedagogical decisions, in order to get the female students to participate, which depends in large part on the teacher-student interaction (Martos-García et al., 2020).

Conclusion

The findings of this study conclude that schoolchildren have very positive attitudes towards the physical education teacher. Furthermore, the results indicate that nationality should be a factor to be considered in the study of attitudes towards the physical education teacher, since statistically significant differences were found between the two countries. It seems necessary to go even deeper into the subject, generating studies that determine exactly how cross-cultural differences can influence students’ attitudes towards physical education. The identification of these aspects would allow the generation of educational strategies that transcend countries. Given that this study was based on the attitudes of adolescents towards their physical education teachers, it is necessary to conduct further studies on how children in primary schools perceive their physical education teachers.

Adolescence may be too late to generate favourable attitudes towards physical activities because students’ motivation and perception of competence are in the process of being consolidated. For this reason, early experiences in physical education are relevant for the generation of an active lifestyle and lifelong participation in sport activities (Kirk, 2005). Therefore, it is pertinent to extend the research to this age range.

The teachers’ awareness of their students’ perceptions can be useful in developing strategies that do not only focus on physical activity, but also seek to improve affective and cognitive aspects. Converting the learning experience into a more person-centered process while interacting at a personal level and addressing students’ concerns could enhance the development of positive attitudes towards physical education. Finally, it is necessary to emphasize the results of this investigation to teachers so that they can take advantage of students’ openness and disposition when they students have favourable attitudes towards them. Positive attitudes present a good basis to achieve adequate learning and to generate adherence to physical activity, giving teachers a valuable tool for conducting their classes as they seek to strengthen their teaching methodologies to encourage activities that generate favourable attitudes towards physical education.

References


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Jaime Carcamo-Oyarzun, et al.


