



Bullying in Physical Education: Its Prevalence and Impact on the Intention to Continue Secondary School Physical Education

Prévalence et impact de l'intimidation sur le désir de poursuivre des cours d'éducation physique au secondaire

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The purpose of this study was to determine the prevalence of bullying in physical education classes and its influence on students' intention to participate in the class in the future. The study also examined the relationship between bullying and body dissatisfaction as well as bullying and physical competence in physical education. A survey was utilized to collect both quantitative and qualitative data about students' experiences in physical education class. Two-hundred and thirty-four grade students (144 F; 90 M) in Grade 10 physical education classes from 8 different secondary schools located in school boards in Southern Ontario, Canada participated in the study. Data analyses were completed using the Statistical Package for the Social Sciences (SPSS) version 16.0. Results showed that approximately 11.1% of respondents had experienced physical bullying in physical education; 13.6% had experienced verbal bullying; and 12.8% experienced social bullying. Furthermore, those who experienced frequent bullying in physical education did not intend on taking the class in the future. The relationship between body dissatisfaction and bullying was not found to be significant. However, physical competence was found to significantly predict bullying in physical education. These results show how prevalent bullying is in physical education classes and how it negatively impacts future participation in the class.

Cette étude vise à déterminer la prévalence de l'intimidation pendant les cours d'éducation physique et ses effets sur le désir des élèves de suivre d'autres cours d'éducation physique à l'avenir. L'étude examine aussi les liens entre l'intimidation et l'insatisfaction corporelle, et entre l'intimidation et la compétence physique en éducation physique. On a eu recours à un sondage pour recueillir des données quantitatives et qualitatives sur les expériences des élèves pendant les cours d'éducation physique. Deux cent-trente-quatre élèves de 10^e année (144 filles et 90 garçons) suivant des cours d'éducation physique et fréquentant huit écoles secondaires relevant de divers conseils scolaires du sud

de l'Ontario (Canada) ont participé à l'étude. On a utilisé la version 16.0 de l'Ensemble des programmes statistiques relatifs aux sciences sociales (SPSS) pour analyser les données. Les résultats révèlent que quelque 11,1 % des répondants ont été victimes d'intimidation dans le cadre de leurs cours d'éducation physique; que 13,6 % ont été victimes d'intimidation verbale et 12,8 % d'intimidation sociale. En outre, les élèves qui ont été victimes d'intimidation à plusieurs reprises pendant les cours d'éducation physique n'avaient aucun désir de suivre d'autres cours du genre à l'avenir. On a constaté que les liens entre l'intimidation et l'insatisfaction corporelle étaient ténus, mais que la compétence physique semblait être un bon prédicteur d'intimidation pendant les cours d'éducation physique. Ces résultats confirment la prévalence de l'intimidation pendant les cours d'éducation physique et ses effets néfastes sur la participation future à de tels cours.

Context of the study

Physical education has been defined by some as “a school subject designed to help children and youth develop the skills, knowledge, and attitudes necessary for participating in active, healthy living” (Fishburne & Hickson, 2005, p.2). Unfortunately, a large number of children and adolescents do not have experiences in their physical education classes that enable them to reap these benefits. In the Province of Ontario, Canada, over 50% of students will drop out of physical education class after they have achieved the single physical education credit needed to graduate (Pepler, et al., 2006). The steepest decline in enrolment is typically between grades 9 and 10 when physical education becomes optional. One of the major reasons that have been cited in the literature as a source of motivation to drop out of physical education is bullying (Carney & Merrell, 2001; Cockburn & Clarke, 2002; Dwyer, et al., 2006; Hills, 2007). Previous research has demonstrated that the more frequently one is bullied in physical education, the more likely they are to dropout after the class is not mandatory (Carney & Merrell, 2001; Cockburn & Clarke, 2002; Lenskyj & van Daalen, 2006).

Bullying has been defined as “repeated exposure to purposeful attempts to injure or inflict discomfort and pain on another individual through words, physical contact, gestures, or exclusion from a group” (Olweus, 1993, p.1). Bullying is often defined as an ongoing occurrence that is unprovoked and unwanted by victims. It is intentionally harmful, aggressive behaviour where there exists an imbalance of power between two parties in a relationship (Harris & Petrie, 2003). The power advantage found within these relationships often arises from differentials in size, strength, physical abilities, social status, personality type, and popularity (Pepler, Craig, Yuile, & Connolly, 2004). All acts of bullying involve an individual or group of individuals devaluing another in the hopes of making themselves seem superior to their victims and peers (Carney & Merrell, 2001). Acts of bullying evoke feelings of fear, distress, shame, and humiliation in victims (Kumpulainen, Rasanen & Puura, 2001). Bullying works to establish and maintain social dominance through overt aggression and harassment (Carney & Merrell, 2001). Those who are victims of bullying are often too intimidated and anxious to stand up to the aggressor.

Generally, there are three forms of bullying that have been identified in the literature: *direct bullying*, *direct verbal aggression* and *indirect bullying* (Crothers & Levinson, 2004; Olweus, 1997). Direct bullying is easily detectable

and relatively overt; it is comprised of harmful acts of physical behaviour and aggression. The literature states that this form of bullying is most commonly demonstrated by males (Harris & Petrie, 2003). In recent years however, there has been an increased trend of physical bullying by females (Shariff, 2008). Examples of this form of bullying include acts of pushing, kicking, punching, and hitting. *Direct verbal aggression* includes behaviours such as teasing, name-calling, accusing, and shouting in the face of the victim (Carney & Merrell, 2001). Conversely, *indirect bullying* is extremely covert and often goes unnoticed by others. This type of bullying is also known as relational victimization and most commonly occurs in females, although these behaviours are currently on the rise in males (Crothers & Levinson, 2004). Indirect bullying involves social isolation, manipulation, and intentional exclusion from a group or friendship for the purpose of retaliation (Pepler et al., 2004). Individuals exclude others from being a part of their social group and will work to manipulate the way others feel towards the individual who is being bullied. This is usually done by spreading slanderous rumours about them. Indirect bullying is more difficult to detect as it usually occurs subtly without the victim knowing what is actually being said about them (Carney & Merrell, 2001).

In 2007, 49% of Canadian students reported being verbally or physically bullied at least once or twice during the school term (Goldbaum, Craig, Pepler & Connolly, 2007). This appears to be a growing concern given the statistics reported in 1995 indicated that 15.5% of Canadian students acknowledged being bullied at school more than once or twice per term (Charach, Pepler & Ziegler, 1995). While bullying behaviours can occur at all ages, evidence suggests that the peak period of its occurrence is between the ages of 9 and 15 (Hazler, 1996). Between these ages, developmental changes due to the onset of puberty begin happening as well as changes within an individual's school and social environments. Differences in height, weight, secondary sexual characteristics, and levels of coordination become obvious during these years and are often the targets of bullies (Carney & Merrell, 2001). Bullies are also likely to tease or verbally humiliate any individual whose personality, behaviour or appearance lies significantly outside of the 'norm'.

Pepler et al (2006) conducted a study in Ontario which measured self-reported frequency of being bullied from grades 6 to 12. The results showed that reports of being bullied steadily declined with successive grade level, with the exception of grade 9. Both males and females reported that it was in grade 9 where a significant increase in the instances of being bullied occurred. Within these transitional years from elementary to secondary school, adolescents and teenagers are at a point of their social development where fitting in and being accepted by peers is of the utmost importance to them (Carney & Merrell, 2001). The transition to a new school environment includes a larger peer group, which leaves many individuals vulnerable as they try to establish themselves in a new social context (Pepler et al., 2006). As a result of being bullied, one may lose friendships and popularity status, making the creation and maintenance of new social networks more difficult.

Bullying has been found to negatively impact mental and physical health. Teenagers who are bullied often possess low self-esteem and feel insecure about themselves (Rigby, 1999). They often see themselves as worthless and blame themselves for the attacks they suffer (Carney & Merrell, 2001). In teenage

females, being bullied has been linked to the development of eating disorders (Kaltiala-Heino, Rimpela, Rantanen & Rimpela, 2000). Those who are bullied often suffer from bouts of depression and are generally less happy than others (Slee & Rigby, 1993). Frequent bullying can cause increased stress for the individual which in turn can alter a person's emotional state leading to depression and anxiety (Rigby, 1999). Individuals who suffer from bullying throughout their teenage years tend to continue to have low self-esteem and suffer from bouts of depression into adulthood (Olweus, 1992).

Physical health problems have also been found in those who are bullied throughout their adolescent and teenage years. Headaches and stomach aches have been commonly cited by children who have reported being recently bullied at school (Williams, Chambers, Logan & Robinson, 1996). Other physical maladies that have been reported by students who are bullied include dizziness, sleeping problems, poor appetite, bedwetting and vomiting (Kelly, 2009). Stress can also cause problems with physiological functions (Cox, 1995) such as lowered immunity leading to infections and a wide range of health complaints (Rigby, 1999).

Physical Education is supposed to be the place where students develop the skills, knowledge, and attitudes to lead healthy active lives. Unfortunately, our physical education classes have at times, served as a breeding ground for bullying behaviours which contribute towards the development of health problems that physical education programs are in fact trying to prevent. It has been found that those who are bullied often fear attending physical education class and are at an increased risk of truancy and dropping out (Carney & Merrell, 2001). The physical violence and intimidation that can occur in physical education classes can deter students from further participation. Bullying that initially comes in the form of verbal harassment can escalate to physical threats and acts of violence during sport and activity (Lenskyj & van Daalen 2006; Parker, 1996). This results in an environment where students feel uncomfortable attending future classes for fear that they may be physically harmed by another student. Those who bully and are overly competitive use their physical size and strength to intimidate other students (Carney & Merrell, 2001). This is usually done through the forceful pushing or shoving of others when participating in various sports and activities (Dwyer et al., 2006; Parker, 1996). Sustaining injuries and engaging in rough play during physical education class lead students to discontinue their participation in physical education classes because they are both intimidated and fearful of their aggressors.

As students enter into adolescence, they become ever more aware of their bodies and the constant evaluation it endures from their peers. The establishment of an idealised physicality in physical education class results in a social order where some bodies are devalued while other bodies are privileged (Hills, 2007). "Heavier" girls are often the targets of painful teasing and taunting by classmates, and as such, are the likeliest to discontinue their participation in physical education (Lenskyj & van Daalen, 2006). Males who are short, thin and lack muscle mass often experience teasing from classmates (Flintoff & Scraton, 2005). The scaling of bodies that occurs through public humiliation and embarrassment decreases the willingness of students to engage in physical activities (Hills, 2007). In many cases, the heightened awareness of their physical appearance occurred after being taunted and teased about how they looked in

their gym uniform (Dwyer et al., 2006; Lenskyj & van Daalen, 2006). Differences in biological maturation levels and secondary sexual characteristics at this time are glaringly obvious and are often the targets of hurtful teasing (Carney & Merrell, 2001). Nonverbal behaviours such as leering, looking, and gesturing are also forms of bullying that some students face while wearing their gym uniforms (Flintoff & Scraton, 2005; Lenskyj & van Daalen, 2006). These forms of constant judging decrease willingness to engage in activity and future physical education courses as they feel their bodies are under constant scrutiny.

Such experiences within physical education can have a negative impact outside of the structured class setting. For example, students who have been bullied in physical education class are at risk of developing a negative body image of themselves (Lunde, Frisen & Hwang, 2005; Lunde, Frisen & Hwang, 2007; Thompson, Heinberg, Altable, & Tantleff-Dunn, 1999). During adolescence and into their teenage years, many individuals experience decreased satisfaction with their bodies (Grogan, 1999). Body dissatisfaction is defined as “a person’s negative thoughts and feelings about his or her body” (Grogan, 1999, p.2), and acts as an accurate gauge of one’s body image (Irwin & Tucker, 2006). Teenage boys tend to be more satisfied with their bodies than girls (Lunde et al., 2007). Females between the ages of 13 and 16 have been found to possess the highest levels of body dissatisfaction among any age group (Grogan, 1999). Feelings of body dissatisfaction are so common among this population that disliking one’s body is considered to be a normal part of life for teenage females (Irwin & Tucker, 2006; Lunde et al., 2007). Males may become more dissatisfied with their bodies between the ages of 13 and 15, corresponding to the time of pubertal growth (Lunde et al., 2007). For these males, a lack of muscular tissue has the greatest influence on body dissatisfaction (Carlson-Jones, 2004; Lunde et al., 2007). As a result of body dissatisfaction, teenagers are prone to feelings of low self-esteem and depression (Carlson-Jones, 2004; Irwin & Tucker, 2006; Rigby, 1999).

Physical competence has also been found to influence physical education participation (Carroll & Loumidis, 2001). Physical competence itself refers to “beliefs about one’s capabilities for specific physical tasks [in addition to] beliefs about one’s physical fitness and functioning in general” (Martin & Lichtenberger, 2002, p.416). High perceived physical competence facilitates expectations for success and behaviours such as persistence, effort and personal challenge (Bebetsos, 2007). Previous experiences in similar situations, feedback about those experiences and levels of difficulty allow one to form an assessment of physical competence (McKiddie & Maynard, 1997). Young teenagers rely more on peer comparison and peer evaluation to form such appraisals (McKiddie & Maynard, 1997). Feelings of competence are essential for students to be intrinsically motivated in any activity for which they are participating. Those with higher perceived physical competence in physical education are more likely to participate in physical activity for a longer duration at a higher intensity (Carroll & Loumidis, 2001).

An individual with high physical competence is likely to view his or her own body as strong, healthy and coordinated (Kearney-Cooke, 2002). As body image satisfaction increases, so does competence in physical abilities (Asci, Gokmen, Tiryaki, & Asci, 1997). A study done by Cok in 1990 found that Turkish high school students who reported positive body images were more

likely to participate in physical education programs at school. This finding was similar for both sexes (Cok, 1990). Those who are satisfied with their bodies are more confident in their physical abilities and are therefore more likely to continue participation in activity, sport and physical education (Asci et al., 1997).

Students who feel they are less able to complete a skill are more susceptible to bullying in physical activity settings (Hills, 2007; Luke & Sinclair, 1991). Levels of coordination are often developing throughout the early teenage years, making differences in maturation exceedingly obvious to fellow classmates (Carney & Merrell, 2001). These students are bullied by others because they are seen as being incompetent in the athletic sense. As a result, those who are bullied continuously worry about their lack of skill, and go on to experience limited success in physical education class, leading them to drop out (Hills, 2007).

Limitations of the Literature

Although the existing literature on bullying is extensive, few studies have measured levels of bullying in secondary school physical education classes. The majority of literature that was found in this review has researched bullying exposure in school-based settings apart from physical education class. Studies that have measured bullying exposure within the school question incidents of bullying in the traditional classroom, during recess, and on the walk to-and-from school. It is the goal of this study to add to the existing knowledge base of bullying exposure in physical education class.

Similarly, there are gaps in the literature with regard to the impact that body image and physical competence have on bullying in physical education classes. This is especially true for males. Additionally, a small number of studies have examined the relationship between bullying and body image as well as bullying and physical competence in physical education classes. This study will add to the existing literature on physical education as it intends to determine the prevalence of bullying in the class, its influence on the intention to take physical education in the future, while also examining the relationship between bullying, body image and physical competence among secondary school students.

Purpose

The purpose of the current study is to determine the prevalence of bullying in physical education classes within a small sample of schools located in Southern Ontario, Canada and how it influences secondary school students' intention to take the class in the future. The relationship between bullying and body image as well as bullying and physical competence in physical education class are also analyzed to gain an understanding of potential root causes behind bullying in the hopes that it can be eliminated from physical education programs.

Method

Participants

Two-hundred and thirty-four students (144 F; 90 M) with an average age of 15.3 years participated in the study. The response rate of participants was 57.8% as 405 permission forms were distributed. In addition to receiving ethical approval from a University Research Ethics Board, two different school boards gave ethical permission to participate. Of the 10 Secondary schools contacted to participate in the study, 8 agreed to be a part of the study. Eighty-six percent of

the participants reported taking a Grade 9 physical education class. Grade 10 classes were chosen to participate in this study as they were more likely to have recently experienced grade 9, the year where bullying is most prevalent (Pepler et al, 2006) and the vast majority of students in Ontario take their required Secondary Health and Physical Education credit in Grade 9. A total of 31.6% of the participants (52F; 22M) indicated no intention to take a physical education class in the future. These participants were considered future dropouts in physical education.

Procedure

The lead researcher contacted the principal from each high school where permission had been granted by the individual school boards. After explaining the purpose of the study, each principal referred the researcher to the head of the physical education department. Nineteen grade 10 Physical Education classrooms from 8 secondary schools were visited. Those participants and their parents/guardians that had provided informed consent completed the questionnaire. As per the request of one of the participating school boards, a youth counsellor was present at the time of survey administration. Students in the Grade 10 physical education class were asked to recall their experiences in physical education classes from Kindergarten currently through grade 10. Completion of the questionnaire took approximately 15 minutes.

Questionnaire

The questionnaire included background information and measures of body dissatisfaction, exposure to bullying in physical education class, and physical competence during physical education¹.

Background information. The questionnaire began by asking the participant to identify which physical education classes they have taken, they are currently taking, they plan to take, and which classes they would like to take but cannot fit into their timetable. Those who indicated that they plan to take or would like to take physical education in the future were coded as “Plan to Take PE in the Future” while those who did not indicate their intentions to take physical education in the future were coded as “Future Dropouts”.

Body Dissatisfaction. The Contour Drawing Rating Scales (CDRS) were chosen for both genders (Thompson & Gray, 1995). Several studies rated the CDRS as having high test-retest reliability and validity measures among adolescent and teenage participants (Tiggemann & Wilson-Barrett, 1998; Wertheim, Paxton, & Tilgner, 2004). Each gendered scale consists of 9 numbered figures ranging from 1: thin to 9: overweight. To complete the scale, participants were asked to circle the letter that corresponded to the figure they felt best resembled their current figure. They also circled the letter that corresponded to the figure they felt best resembled their ideal figure. The difference that exists between the two images represents the level of body dissatisfaction.

Bullying exposure. The bullying exposure section of survey was developed from the Olweus’ (1996) Bully/Victim Questionnaire (BVQ). The BVQ was chosen because its items were most representative of the various forms of bullying that occur among teenagers in school-based settings. This instrument was also validated by prior studies found in the literature and was determined to be one of the best methods for determining incidence rates of bullying among

adolescents (Austin & Joseph, 1996; Pellegrini, Bartini, & Brooks, 1999). The BVQ measures the frequency of bullying exposure based on the individual's retrospective recall. Consisting of two subscales, the BVQ measured 6 items regarding the frequency of indirect relational bullying and 8 items regarding direct physical and verbal bullying. Minor modifications to the questions were made to make them relevant to physical education classes. These changes were made following a content-validity procedure which involved receiving feedback from 10 experts.

Physical competence. The six physical competence items were derived from the Intrinsic Motivation Inventory Scale (Ryan, 1982). The scale has been validated by many studies in understanding the motivation of adolescents during activity (McAuley, Duncan, & Tammen, 1989).

Open-ended questions. At the end of the survey, students were asked to describe their experiences in physical education classes and further elaborate on any incidents of bullying that had occurred in physical education class. The three open-ended questions asked the participants to describe situations where they were victimized in physical education classes. For each of the open-ended questions, the researcher coded whether the response indicated the student had experienced a type of bullying or not. These were then coded into various themes based on the type of bullying that was reported. An alternate coder was utilized to establish trustworthiness within the qualitative data. The alternate coder used the themes generated by the researcher to recode the raw data. The alternate coder agreed with 93.5% of the original researcher's coding. Discrepancies were settled through discussion of interpretations.

Results

The Prevalence of Bullying in Physical Education Classes

One-hundred and forty-two of the study's participants (60.7%) responded to the open-ended question that asked them to report physical bullying. The question asked students to identify instances where they had experienced being pushed, kicked or shoved in physical education classes. The question did not however clarify a difference between intentional and accidental instances of bullying. Twenty-six participants (16 female and 10 male) or 11.1% of the total number of participants in the study identified that they had been physically bullied in physical education class. The other 116 who responded to this question indicated that they had not experienced physical bullying in physical education class. Respondents identified being physically bullied in the following ways: hit, shoved, kicked and having had objects thrown at them. Of the 26 participants who indicated that they had experienced some form of physical bullying, 23 of them further elaborated about these experiences. From these comments, two themes emerged that explained why participants felt bullying took place in the class: joking around and physicality being a part of physical education. For example, some respondents commented that they felt their peers were joking around when they were bullied against: "When anyone kicked or shoved me, it was just me and my friends joking around". However, some participants cited that they wanted the behaviour to cease even if it was only thought of as a joke: "If I have ever been pushed in physical education it was a joke, but sometimes it gets to the point where I want it to stop". Other participants identified being hit or

kicked as a part of physical education classes: “The only time anyone has ever hit me or anything was if we were competing in a sport which is cool”.

Verbal bullying in physical education classes is known as a direct form of bullying because it includes mocking, teasing and yelling in the face of the individual being bullied (Carney & Merrell, 2001). One-hundred and thirty-five of the study’s participants answered the question pertaining to verbal bullying in physical education classes. A total of 32 individuals (22 female and 10 male), or 13.6% of participants reported that they had experienced verbal bullying in physical education classes while the remaining 103 who answered this question indicated that they had not been verbally bullied in physical education class. From the 32 individuals who indicated they were verbally bullied, 26 participants gave more detailed descriptions of verbal bullying in physical education classes. All of these participants cited mocking as the type of verbal bullying they had experienced. Skill level was the most common reason given as to why participants were verbally bullied. The following comment illustrated this: “People said that I sucked at a sport”. Conversely, some cited high levels of skill as the reason why they were bullied: “People would mock me in gym class because I was good at most activities”. Participants stated that their appearance was also ridiculed in physical education classes: “The worst thing was being called ‘thunder thighs’”; “I am flat-chested, so they called me a ‘table top’”. A female participant also stated that she had been ridiculed in the change room: “A classmate called me ‘fat’ in the change room”.

Social bullying includes exclusion, gossiping and manipulation (Pepler et al., 2004). As such, it is labeled as indirect bullying because it is not physical in nature and often goes on without the bullied person knowing. A total of 147 participants completed this question on the survey. Thirty participants (27F; 3M), approximately 12.8% of participants indicated that they had been socially bullied in physical education classes while the remaining 117 participants who responded to this question reported they were not socially bullied in physical education class. Of the 23 comments that gave more in-depth descriptions of social bullying experiences in the class, two forms were cited: exclusion and gossiping. Skill level was the only reason given for being excluded and gossiped about. The following comments illustrated this: “Every time when they have to choose teams and pick people, they would pick me last. Whenever I would let them down they would start whispering behind my back”. Similarly, females stated a divide between athletic and non-athletic classmates: “Sometimes the athletic girls group get together so that a few of us are left out. It’s not really isolation, but it ends up feeling like it”.

The Influence of Bullying on the Intention to take Physical Education in the Future

A 2 (Gender) by 2 (Future Physical Education Participation) MANOVA was conducted to explore mean differences in levels of Direct and Indirect Bullying as measured using the BVQ. No significance ($p > .05$) was found for the interaction. However, there were separate between subject effects for Gender and Future Physical Education Participation. For Gender, between subject effects were found for Indirect Bullying. Female participants reported significantly ($p < .05$) higher frequencies of Indirect Bullying in physical education classes compared to males. There were no significant ($p > .05$) gender differences found

for Direct Bullying. For intention to take physical education in the future, those who did not intend to take the class in the future reported significantly higher levels of both Direct ($p < .05$) and Indirect ($p < .05$) Bullying (see Table 1).

Table 1
Between Group Differences for Forms of Bullying

Groups	Df	F	p
Gender			
Direct Bullying	1	1.42	.236
Indirect Bullying	1	4.40	.037
Plan to Take PE			
Direct Bullying	1	14.55	<.001
Indirect Bullying	1	10.12	.002
Gender x Plan to Take PE			
Direct Bullying	1	.002	.966
Indirect Bullying	1	.469	.494

The Relationship between Bullying, Body Dissatisfaction and Physical Competence

Four separate regressions were performed to examine the relationship between bullying, body dissatisfaction, and physical competence. Separate regressions were performed for both genders. Female body dissatisfaction did not significantly ($p > .05$) predict direct forms of bullying in physical education classes for females (see Table 2).

Table 2
Summary of multiple regression analysis for variables predicting direct bullying for females in physical education (N = 125)

Variable	B	SE B	t
Competence	-.116	.044	-2.64*
Body Dissatisfaction	-.032	.027	-1.16

Note. * $p < .05$; $R^2 = .088$

However, female physical competence did significantly ($p < .05$) predict direct forms of bullying in physical education classes for females. The second regression had independent variables of female body dissatisfaction and female physical competence with the dependent variable being indirect bullying (see Table 3).

Table 3
Summary of multiple regression analysis for variables predicting indirect bullying for females in physical education (N = 125)

Variable	B	SE B	t
Competence	-.257	.061	-4.20**
Body Dissatisfaction	.018	.038	.488

Note. ** $p < .05$; $R^2 = .133$

Female body dissatisfaction did not significantly ($p > .05$) predict indirect forms of bullying in physical education classes for females. However, female physical competence did significantly ($p < .01$) predict indirect forms of bullying in physical education classes for females.

Table 4

Summary of multiple regression analysis for variables predicting direct bullying for males in physical education (N = 89)

Variable	B	SE B	t
Competence	-.259	.056	-4.66**
Body Dissatisfaction	-.010	.033	-.311

Note. ** $p < .01$; $R^2 = .204$

The third regression had the independent variables of male body dissatisfaction and male physical competence with the dependent variable being direct bullying (see Table 4). Male body dissatisfaction did not significantly ($p > .05$) predict direct forms of bullying in physical education classes for males. However, male physical competence did significantly ($p < .01$) predict direct forms of bullying in physical education classes for males. The fourth regression had the independent variables of male body dissatisfaction and male physical competence with the dependent variable being indirect bullying (see Table 5).

Table 5

Summary of multiple regression analysis for variables predicting indirect bullying for males in physical education (N = 89)

Variable	B	SE B	t
Competence	-.397	.085	-4.64**
Body Dissatisfaction	-.009	.018	.185

Note. ** $p < .01$; $R^2 = .200$

Male body dissatisfaction did not significantly ($p > .05$) predict indirect forms of bullying in physical education classes for males. However, male physical competence did significantly ($p < .01$) predict indirect forms of bullying in physical education classes for males.

Discussion

The Prevalence of Bullying in Physical Education Classes

This study was designed to create an understanding about the prevalence of bullying in physical education classes and its influence on students' intention to take the class in the future. Approximately 11.1% of participants cited that they had been physically bullied in physical education classes. However, many of these participants seemed to indicate that such "physical" acts (e.g., bumping, shoving) were part of the culture of physical education. Given that the open-ended questions did not indicate level of intent, future research is warranted to better understand the nature of such physical encounters in physical education classes. With respect to verbal bullying, 13.6% stated that they had experienced it in physical education classes, and 12.8% reported that they experienced social

bullying in physical education classes. Based upon the themes that emerged that described in more detail the nature of such comments, it would appear that these two forms of bullying are more intentional. Given that 15%-20% of all students will experience bullying during their school career (Batsche, 1997), the percentages of bullying reported in this study, particularly verbal and social bullying, suggest that physical education class may be a place where a number of students experience bullying.

Differences between genders and their experiences with bullying in physical education classes were analyzed. The study found no significant differences between the two genders in their reported frequencies of direct bullying in physical education classes, similar to recent findings. Much of past literature has stated that physical bullying such as kicking and punching is most prevalent among males (Harris & Petrie, 2003), however, physical bullying is now a growing concern among females (Shariff, 2008). Similar to the existent literature, respondents identified physical bullying as hitting, shoving, kicking and deliberating having objects thrown at them. The only type of verbal bullying having been experienced by the participants in this study was mocking. Participants reported that they were mocked about their appearance and performance in physical education classes. A considerable amount of research suggests that these two characteristics are the most frequently targeted by bullies in physical education classes (Cockburn & Clarke, 2002; Hills, 2007). Most participants stated that they were teased about poor performances during the class. Interestingly, some participants reported that they were bullied because of strong athletic performances. Flintoff and Scraton (2005) have illustrated that athletes are often mocked in physical education classes, with the females being branded 'lesbians' and the males being branded 'meatheads'. Most likened these behaviours to joking around with classmates. However, individuals who are being bullied may not interpret this in the same way. Feelings of embarrassment and identity challenge can present themselves to the target of the tease or punch (Kowalski, 2000).

The results of the study showed that females reported significantly higher frequencies of indirect bullying than males in physical education classes. Indirect bullying, also known as relational aggression, includes as behaviours such acts as exclusion, gossiping and relational manipulations. Similar to the literature (Crothers & Levinson, 2004; Cockburn & Clarke, 2002), this study found that females were more likely than males to experience indirect bullying in physical education classes. There were two forms of this behaviour found in physical education classes: exclusion and gossiping. All of those who reported indirect bullying were either gossiped about or excluded from group activities due to a lack of skill. This included being picked last for team games, a common occurrence for females who are less skilled in physical education classes (Flintoff & Scraton, 2005). Marginalizing individuals based on their lack of skill alienates them from the rest of the class (Hills, 2007).

The Influence of Bullying on the Intention to take Physical Education in the Future

Bullying behaviours (both direct and indirect) were found to deter male and female participants from future physical education participation. Similar to what has been stated in the pre-existing literature, girls who are bullied often fear

going to school and are at an increased risk of truancy and dropping out (Carney & Merrell, 2001). Likewise, boys who are often bullied about not meeting the standards of hegemonic masculinity in physical education are at an increased risk of ceasing their participation in the class (Bramham, 2003). Data analysis from this study found that for both genders, those who did not intend to take physical education in the future reported significantly higher frequencies of being bullied in physical education. The literature states that those who are bullied in physical education classes often feel uncomfortable and apprehensive about attending future classes in the fear they will endure more humiliation (Carney & Merrell, 2001). Their apprehension is intensified when they are frequently mocked and excluded by peers due to their performance in the class (Hills, 2007). As a result, those experiencing frequent bullying in physical education classes do not intend on taking the class in the future compared to those who do not experience such behaviour. This study did not, however, distinguish whether girls were being bullied exclusively by other girls or by both boys and girls (and vice-versa for boys). Given that the physical education classes were a mix of co-ed and segregated classes, future research may wish to examine the impact of the relationship between those doing the bullying and those being bullied.

The Relationship between Bullying, Body Image and Physical Competence

The relationship between body image and bullying was not found to be significant in this study. That is, body dissatisfaction, which acted as a measure of body image, did not predict bullying behaviours (both direct and indirect) for either gender. This is contrary to what has been found in the literature. Previous literature has reported that those who feel dissatisfied with their bodies are more likely to have been bullied in physical education classes (Kumpulainen et al., 1998; Eisenberg & Neumark-Sztainer, 2003). As the body is so central in physical education, (Cockburn & Clarke, 2002), one would assume that body dissatisfaction predicts being bullied in the class. The hierarchy of desirable body types influences what certain classmates deem 'attractive' (Hills, 2007) and leaves individuals feeling humiliated and embarrassed about their body when they do not meet that standard (Irwin & Tucker, 2006). Previous research conducted by Lenskyj and van Daalen (2006) reported that peer groups often bully those who do not meet the set 'ideal' by gesturing and laughing at them. For example, teenage males who are smaller in stature, that is, they do not possess an increase in height or muscle mass are more insecure about their bodies (Lunde et al., 2007). These feelings of insecurity are compounded as males are likely to experience greater dissatisfaction with their bodies when they are bullied (Lunde et al., 2007).

A potential explanation for this finding would be that individuals who participate in physical education beyond grade 9 already possess a positive body image. Participants were from grade 10 physical education which is an elective taken in addition to their required physical education credit. These students might be more athletic than students who ceased enrolling in physical education after grade 9. This finding is represented in the results of a study conducted by Asci et al (1997), where it was found that females reporting higher satisfaction with their bodies were more likely to continue participation in physical education. This finding was also found by Cok (1990), who stated that individuals possessing higher body satisfaction are more likely to continue participation in physical

education programs at school. Individuals who are satisfied with their bodies are more likely to focus on mastering physical skill instead of focusing on the appearance of their bodies (Martin & Lichtenberger, 2002).

Physical competence significantly predicted being bullied (both direct and indirect) for both genders. In this study, physical competence referred to one's beliefs about their capabilities for specific physical tasks (Martin & Lichtenberger, 2002). These results showed that participants with low physical competence experienced significantly more bullying than those with higher physical competence in the class. This finding is consistent with the current literature. Both male and female students who feel they are not physically competent enough to complete skills in physical education classes are more susceptible to bullying behaviours such as exclusion and mocking from peers in their class (Luke & Sinclair, 1991; Hills, 2007). Poor performances in physical education classes often lead to public evaluations of competence including taunting and teasing (Hills, 2007). Those who are not physically competent in physical education classes are most often excluded from team games and marginalized in that they are chosen last when picking teams (Flintoff & Scraton, 2005). As included in the definition of indirect bullying used in this study, exclusion is a form of relational aggression that is often covert. However, as stated by Flintoff and Scraton, team sport as well as picking teams is done together as a class. If a student is picked last for a team, it can lead to decreased feelings of competence in their physical capabilities.

Limitations

The ability of the questionnaire to capture the difference between "intentional" versus "unintentional" acts was a limiting factor in the study. The open-ended questions within the survey could have led to participants over-reporting frequencies of bullying. These questions gave specific examples of bullying situations in physical education that could have swayed the participants to recall instances similar to those mentioned. Additionally, if a participant reported an instance of bullying that was only thought of to be 'a joke' to them, given the inability to judge level of intent through the open-ended answers, it was coded by the researcher as experiencing bullying in physical education. In addition, the questionnaire was retrospective of all previous physical education class experiences. With time, a certain incident may have not been remembered clearly and could have been perceived by the participant as a bullying incident when in fact it could have been unintentional at the time. More focused follow-up interviews would be helpful in the future to uncover whether participants felt such acts were intentional or unintentional.

Another limitation was the use of Grade 10 physical education classes. These were the classes that were given permission to take part by the school boards involved in the study. The reason for this decision was based on the premise that the study dealt with curricular expectations related to this specific grade. They were also chosen because the majority of students in Ontario take Grade 9 Health and Physical Education to meet their mandatory credit for graduation and the literature has suggested that Grade 9 is commonly a time where bullying takes place. Although the vast majority of the participants had taken a Grade 9 Health and Physical Education course, a small percentage (i.e., 14%) had not. In Ontario, Grade 9 Health and Physical Education is not a

prerequisite to take a Grade 10 Health and Physical Education class. Therefore, not all of the participants shared a similar background with respect to previous physical education experiences.

Another limitation to only having participants from Grade 10 classes was that the majority of these students would have chosen to take the class for additional credit (i.e., they had already taken a health and physical education credit to satisfy their graduation requirement). As a result, the data collected in this study is not fully representative of all grade 10 students as those who dropped out after grade 9 were not surveyed. Therefore higher frequencies of bullying, body dissatisfaction and physical incompetence might have occurred than the results of this study have reported. Future studies would benefit from surveying participants in grade 10 Math and English classes (both required classes for Grade 10 students) for example, because physical education participants and those who did not choose to further their participation in physical education would both be in the classes, allowing for comparison between the two groups.

Conclusion

The purpose of this study was to examine the prevalence of bullying and its influence on future physical education participation among a sample of secondary students taking a grade 10 physical education class. Physical, verbal and social forms of bullying were found to exist in physical education classes. Results showed that those who reported being frequently bullied in physical education classes did not intend on taking the class in the future. Body dissatisfaction was not found to predict bullying behaviours in physical education however physical competence was found to predict both direct and indirect bullying behaviours in physical education. The results of this study suggest that physical educators should be vigilant to prevent bullying in their classes. However, the sample for this study was from two school boards located in geographically similar areas in Ontario and there is need for further research in other areas across Canada. As well, current physical education curricula in Canada, in particular the revised Ontario Grades 1-8 Health and Physical Education Curriculum (Ontario Ministry of Education, 2010), puts a focus upon the development of critical living skills such as cooperation, respect, and problem solving as a core learning expectation for students. Such shifts in curriculum are critical in order to ensure that all students not only develop the physical competence they need to deter bullying, but also the life skills they need to prevent bullying from happening in the first place.

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¹ Contact the authors if you wish to receive a copy of the complete questionnaire.
