What is real Students' perceptions of physical education

"What is REAL?" asked the Rabbit one day.... "Does it mean having things that buzz inside you and a stick out handle?" "Real isn't how you are made," said the Skin Horse. "It is a thing that happens to you... It doesn't happen all at once... You become. It takes a long time."

(From The Velveteen Rabbit, by Margery Williams)

his paper tells the story of 36 secondary school students involved in a qualitative study that investigated their perceptions of physical education (PE) as a subject. Although these eighth and ninth year students (13 to 15 years-of-age) were from two different schools in the north-eastern part of the United States, what they tell us is applicable to Australia and New Zealand. One school was a junior high school (seventh and eighth grades) and the other a high school (eighth to twelfth grades). Four teachers were involved in teaching the classes from which the students were selected. Each teacher had a reputation of being a "good" teacher who cared about the children and what they learned. The PE programs at both schools centred around a multi-activity curriculum (usually four weeks of an activity and then moving on to the next activity). At the time this research was being conducted, the various classes were involved with a range of activities that included floor hockey, softball, gymnastics, and frisbee football. Students participated in the compulsory physical education classes twice a week. Young adolescents were chosen for this research because it is "a time when considerable pressure accompanies the task of establishing an identity and this will influence decisions about behaviour in profound ways. Some decisions made at this point about activity and sport might track into adulthood" (Fox, 1994, p. 15). Ten of the participants were male and 26 female. Fifteen students self-identified as holding a positive attitude toward the subject, eight placed themselves in the "in

between" category and 13 students indicated

that they felt negatively toward PE. They also differed in year level: 24 were in year

eight and 12 in year nine. With regard to

skill level, 13 students were identified by the researcher and their teacher as average to high skilled, 12 were judged as having average ability and 11 were classified as average to low skilled. Despite these differences, the 36 students interviewed were united in their belief that physical education was not a "real" subject. The paper highlights the reasons (as reported by the students) that led them to this conclusion—a disheartening one for teachers who believe in the educational value of physical education.

Background research

Although some recent studies have indicated that there are a proportion of students who find PE irrelevant and unenjoyable, other research on student attitudes toward PE suggest that usually 80 percent or more of students enjoy the subject (*see* notes). On the basis of the latter, we could celebrate our success and dismiss the 20 percent as unreachable. Alternatively, we could be spurred on to capture the minority who express dissatisfaction with our subject and devise strategies to try to change their attitude. While I would prefer to see teachers adopting the latter approach, research indicates that there are other factors that influence students' attitudes toward physical activity and their perceptions of the subject. These factors include physical ability and perceived physical competence; the influence of family, mass media, peers, and prior experiences in sport; other PE classes; and less structured play. These factors often appear to be beyond the influence of teachers.

Research into children's attitudes and perceptions has revealed that students' physical ability can play a considerable role in influencing success and, as a result, enjoyment of physical activity and physical education. Further, children have a perception of their physical ability (which may or may not match their actual ability). Researchers have found a link between children's self-esteem and perceived physical self-competence and participation levels and there is some evidence that students with low self-esteem may dislike physical education more frequently than students with higher self-perceptions (see notes). Families also play an important role in

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summarised much of the research on this

topic and concluded:

Active parents have active children, with boys being more active than girls.... Perceptions of competence that children have are related to parental perceptions of the child's competence.... Parents who enjoy physical activity also encourage their children's involvement in physical activities." (p. 99)

Mass media may also contribute to people's perception of the importance of physical activity and how they view the body. Oskamp (1991) reported that by the time the majority of American children finish high school they will have "spent more hours in front of the TV set than in school classrooms, churches, and all other educational and cultural activities combined" (p.167). The image of the "ideal body" is constantly the subject of popular magazines, and television programs and films often confirm these impressions. Research suggests that media can be influential in affecting how male and female adolescents view physical activity. In addition to these factors, adolescents are particularly prone to being influenced (in both positive or negative ways) by their peers. Therefore, if popularity is achieved through athletic prowess, and studies suggest this is particularly true for males, then many boys will strive to excel in physical activities. The connection between athletic ability and popularity appears to be less substantial for females. While friendship status for males is often achieved through athletic achievement, appearance and "attitude" is more important to females.

Finally, by the time students walk through the gym door to your PE classes (particularly at the secondary school level), the large majority of them will have been involved in sporting teams and will have experienced a considerable number of hours of physical education with other teachers and of course numerous hours playing with other children and family members in less structured settings. Prior experience in physical activity; the influence of family, media, and peers; and children's perception of their physical competence combine to contribute to students' perceptions and their expectations of what physical education should comprise and why it is taught.

Once the students are in a physical education class, the behaviour of the teacher, the environment established, and the

children's participation patterns and their

Greendorfer, Lewko and Rosengren (1996)

feelings toward physical activity.

curriculum play considerable importance in confirming or changing students' attitudes toward class.

The study

To discover the relative influence of these factors to students and to identify other factors not previously recognised, each of the 36 participants in this study were interviewed (two group interviews and one individual session), observed during PE classes for a minimum of eight sessions, and their classes were videotaped once a week for four weeks. The three interview sessions were spaced over four weeks. The initial group interview (three students and interviewer) included questions about the students' background, their family's involvement in physical activity, their experiences in primary school physical education and sport, and their professed attitude toward school and physical education. The second group interview concentrated more specifically on students' perceptions of their physical education class and the factors which appeared to contribute to these perceptions. In addition to the group interview, a separate individual interview was conducted. During this session, a randomly selected videotape of one of their physical education classes was shown to each student. They were asked about their feelings toward PE teachers, classmates, family and any personal experiences or disclosures they may not have felt comfortable sharing in a group situation. In total, 72 student interviews were transcribed and coded. Differences and similarities between male and female participants, among high, average and low skilled students, and among those with differing attitudes were identified (see Carlson, 1994). To assist the reader to evaluate student comments, a symbol has been placed after each student's name (a pseudonym).(+) indicates that the student had self identified as having a positive attitude toward PE. (o) identifies the participant who liked PE some of the time, while (-) denotes participants who indicated their dislike of the subject (see table 1). To avoid confusion in terminology, the reader should note that in the United States most students refer to physical education classes as "gym" rather than PE or Phys Ed.

Factors that influence attitude

The results confirmed the impact of many of the already identified factors that influence attitude toward PE and physical activity, and therefore only limited examples from participants will be used to illustrate these links. The more disturbing finding was that students had identified PE as being not really being a subject. When weighed against their criteria for what made a subject valid and "real", PE was judged wanting.
Interestingly, the skill level and attitude toward PE did not influence this belief.
Students, regardless of their differences in sex, school, attitude, and skill level, were united in the belief that gym was not a "real" subject. Many of the identified factors contributed to this belief and each will be touched on briefly below.

Interview data suggested that physical ability and perceived physical competence did contribute to most students' enjoyment of the subject. Alexis's (o) comments illustrate how her lack of confidence in the physical

Table 1: Attitude, grade, and skill level of participants

Component	Male	Female	Total
Attitude Positive In between Negative	7 3 0	8 5 13	15 8 13
Grade level Eighth grade Ninth grade	6 4	18 8	24 12
Skill level High Average-high Average Average-low Low	5 0 1 3 0	4 4 10 4 4	9 4 12 7 4

domain contributed to her dislike of the subject. Once her confidence grew, so did her enjoyment of the subject:

This year I have got better at all my sports because last year I was so shy and I couldn't do anything really well cause I didn't really like any of them and this year I have got a lot better. I have tried more. I had low selfesteem ... especially in gym. Real, real low ... because I was never good at sports because my parents never pushed me to do sports or anything, so I didn't really know what to do. (Alexis (0))

The existence of four average- to high-skilled girls in the negative attitude category and three low- to average-skilled students in the positive category, however, indicated that physical competence alone could not predict enjoyment or dislike of the subject. Alexis's statement also supports the idea that family may influence students' activity patterns and feelings toward physical activity in general. Those who were actively encouraged by their parents and older siblings to participate reported generally feeling more positively toward their own ability and as a result often felt more positively toward PE and physical activity in general. Therese (+) explained "Once my brother started to get into everything, he kind of pulled me along and then I just learned to love it [sport] because

of him." Therese, along with other female participants, indicated that their fathers encouraged their brothers to participate in sport more than the girls, "My dad is into sports, but he never pressed me into anything.... He never pressed me as much as my brother." Vanessa (+) explained that, in her experience, mothers were less likely to provide positive sporting role models to their children, "It is like a guy thing and a girl thing. Not sexist but mothers would rather be doing reading than going out to play basketball."

The direct and indirect influence of mass media on adolescents (or any section of the community) is difficult to measure, yet the statements from the interviewed participants indicated that magazines, television, and newspapers had some impact on them. One of the female participants who did not appear overweight supported this finding when she stated:

Like society says you have to be thin to be pretty. I think I would have better self-esteem [if I lost weight] cause I would feel better.... I don't really compare myself to the models cause I know that they are really, really skinny and work very hard at being very skinny. I just want to feel better. (Rita, (0))

The data supported research findings that peers are influential at this age. Many participants reported that overweight students were often rejected from the popular cliques. Similarly, unskilled boys were often less popular than those who were proficient sportsmen. Peter (+) explained, "That is how I got popular—through football. Football has all the popular people." Ervin (+), a talented athlete, reported that he would treat less skilled students differently. "I wouldn't acknowledge them as much." In contrast, Carla (+) reported, "I think it [popularity for girls] has to do with looks ... there are some girls in sports that are popular but that doesn't really have anything to do with it."

Finally, past experience in sport, play, and former PE classes was found to be influential, although there were some students (mostly in the average- to high-skilled range) who disliked PE in primary school and yet enjoyed it in secondary. One participant explained how negative experiences could influence perceptions of current PE:

I think it [negative PE experiences] affected me a lot. For six years I didn't like gym and suddenly, like the teachers, are fun and everything. But I guess I started off not liking gym so I just don't really like it too much. (Maureen (-))

What leads students to believe PE is not "real"?

The above factors contributed to the participants' expectation of what physical education should be. Some of these factors

are very difficult for a physical education teacher to control, yet they are very important aspects to consider when investigating why certain children are not responding positively to PE classes. The interaction of the factors mentioned above contributed to the participants' attitude toward physical education and will not be elaborated upon further. Rather than pursue these already documented factors, the focus will be the reasons that lead the participants (regardless of their skill level, sex, or attitude) to the belief was that physical education was not a valuable, valid subject.

The reasons that PE was not a "real subject" were obvious to the participants. First, they stated that "real" subjects led to work or college opportunities, and you learned "things". Sara (+) stated, "You need English and Math and all that to like continue your career." Tracy (-) added "I mean you have to pass it [PE] to graduate, but it is not a big deal unless you are going to become a gym teacher." The lack of value attributed to PE by one participant was evident when she stated, "I don't think it [gym] does anything. Half the class just stands there. It doesn't get you in shape or anything, and most of the people do sports. It is just kind of useless.' (Monica (-))

When asked what they learned in class, most of the participants struggled to answer. Judy's (-) words summarised many students' responses:

We don't learn anything.... I mean some of the time you learn how to throw a frisbee but everybody basically knows how to do that. And you don't really need it.... I don't think anyone thinks it [PE] is as important as academics.

A statement from Roxanne (+) who loved PE corroborated this point, "In all my life, I have not really learned anything in gym class. I mean I like it. It is fun."

The main value of PE class was identified by Susie (+) when she stated, "I look at it [PE] as basically that, getting away from the academic and you get to run around and exercise and have fun." As this statement implies that the value of the subject was in the fun it provided and the subsequent release of tension and contrast to most other classes. Fun is a vital component of PE and physical activity and should not be dismissed as trivial. In most studies that investigated the reason for children's and adolescents' participation in physical activities, fun is usually very high on the list. Fun and learning can occur at the same time (and usually do) but often children are unaware of this, equating fun with play and learning with sitting at desks.

In addition to their own beliefs about what reduced the status of PE to less than "real",

many students reported that they believed that their parents or school administration often indicated that physical education was not as valued as most other subjects. Ivy (-) stated, "I don't think they [teachers] think it [gym] is as important as academic subject.... If you are in a class and you have to do something, they are not going to let you out for gym." Samantha (-) reported how she felt her mother would respond to the elimination of PE as a subject, "I don't think she [mother] would mind ... because she knows that I work-out and she knows that I take dance and that helps too."

Even the students who really enjoyed the subject struggled to defend its inclusion as a subject if the timetable demanded the elimination of two subjects (one of the interview questions). Ervin (+), when asked this question, hesitated and then stated:

Music and [silence] and [silence], I'd have to say gym.... I get enough exercise anyway, so for me personally it is not a need. Even though I love it and I look forward to it every C block. But it is not a need ... like other classes are, such as English and math.... So I think I would have to drop it.

Participants, regardless of the attitude toward the subject, believed physical education was expendable because they could not identify tangible benefits and immediate or long term gains from participation in class. Further, many expressed the belief that by participating in sport or physical education outside school they did the equivalent of PE anyway. They did not identify any important distinctions between sport, play, and PE.

The another factor identified as contributing to the participants' belief that PE was less important than other subjects was the grading procedures. How could it be as important as an "academic" subject if as Judy (-) stated "any one can pass gym". Similarly, Roxanne (+) added, "How can you get an F in gym?.... You just have to have fun. It is not like you have to be smart or anything." Jimmy (+) summarised many participants' thoughts when he added, "I just show up and play and wear the right clothes.... I don't see it really as a real academic class." The main criteria on which student grades were based in the two schools investigated were students' participation and dressing for activity. The majority of the participants reported that they approved of this form of assessment. Nevertheless, it appears that this lack of accountability confirmed for them that learning did not take place in PE class.

The final "death knoll" for physical education being considered a "serious" or "real" subject was sounded when the close association with sport and play was identified. Michelle's (-) words were typical when she stated, "you don't need gym ...

because you can do it some other time with your friends." Judy's (-) comment also summarised many students' statements when she reported, "I don't think gym should be required. If you do a sport you shouldn't have to do gym." If students were involved in an extra-curricular sport, they rarely saw any major benefit in participation in physical education class, except for the enjoyment it gave some of them and the break in the routine from seat work.

So...making PE "buzz"

Would these results be any different in your school? Perhaps, perhaps not. The Velveteen Rabbit quoted at the beginning of this paper became real when he was loved by the Boy. Unfortunately, data analysis from this study indicates that love of PE, although of vital importance, is insufficient to make physical education a "real" subject, in the eyes of the students. It appears that we do need to have "things that buzz inside you and a stick-out handle". I believe that one of the substantial causes of the "buzz" inside physical education is substantial theoretical and practical content. It is insufficient to teach children sporting skills alone—and good teachers do not. What the teachers involved in this study had failed to do was to articulate to their students what they were learning and connect it in a meaningful way so students were aware of the affective, cognitive, and process skills being achieved. Further, although the participants indicated that they were aware of some of the psychomotor skills, they were often unaware of the importance of these to their health and wellbeing.

While teachers cannot control home environment, and may feel powerless in the face of mass media and some of the peer pressure applied to students, they do have considerable control over the PE curriculum and the way it is delivered. The findings of this study indicate that students, parents, and other teachers must be made aware that not only is PE enjoyable (and we must continue to work hard to make it fun for all), but it also teaches them important and valuable "life skills". The stick-out handle could represent the assessment and evaluation tools needed to hold students accountable for mastery at appropriate levels and become aware that they are learning. The importance of perceived physical selfcompetence highlights the need for students to see improvement and experience some mastery, in order to increase their confidence.

Fun connects with both these factors. The results of a study by Wankel and Sefton (1989) suggested that "fun in youth sport is a positive mood state largely determined by

one's perception of personal achievement and the matching of one's skills against a realistic challenge" (p. 355). If a correlation exists between youth sport and PE in this aspect then the need to set appropriate challenges for individual students and the importance of experiencing mastery is highlighted.

The wise Skin Horse stated, "It is not going to happen all at once. In fact, it may not happen at all." I know that it will not

happen all at once, but I hope that teachers will become aware that a positive attitude toward PE, while very important, is not enough. Initiatives such as games for understanding and sport education although closely connected to sport, have the potential to increase students' awareness and ensure that a range of skills and theory are being learned "through, in, and about" the physical. Another possible approach is being trialled in the senior PE syllabus in

Queensland, Australia. They have adopted a process-information approach that involves students acquiring knowledge and concepts, and then applying and evaluating them. This approach could also be adopted in younger year levels. We need to consider changes in the curriculum and in the way we teach and assess the subject so that we assist students to realise that physical education is a valuable and "real" subject.

NOTES

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Fax: +61 7 3365 6877. E-mail: terry@ hms.uq.edu.au The "What is real?" quotes are from pages 12, 13 of: Williams, M. (1975). *The velveteen rabbit*. New York, NY: Avon Camelot.

For further details of this research, see:

Carlson, T. B. (1994). Why students hate, tolerate or love gym: A study of attitude formation and associated behaviors. Unpublished doctoral dissertation, University of Massachusetts, Amherst.

Carlson, T. B. (1994, December). Expectations of physical education and their effect on student attitude toward the subject. Paper presented at the Australian Association of Education Research Conference, Newcastle, NSW.

Carlson, T. B. (1995, April). *Student expectations of attitudes toward physical education: A model.* Presented at the American Education Research Association Conference. San Francisco. CA.

That decisions made by adolescents carry into adulthood is noted in:

Fox, K. (1994). Understanding young people and their decision about physical activity. *The British Journal of Physical Education*, *25*(1), 15–19.

Studies which indicate that some students find PE irrelevant include:

Carlson, T. B. (1995). We hate gym: Student alienation from physical education. *Journal of Teaching in Physical Education*, *14*, 465–477.

Tannehill, D., Romar, J., O'Sullivan, M., England, K., & Rosenburg, D. (1994). Attitudes toward physical education: Their impact on how physical education teachers make sense of their work. *Journal of Teaching Physical Education*, *13*, 406–420.

Tinning, R., & Fitzclarence, L. (1992). Postmodern youth culture and the crisis in Australian secondary school physical education. *Quest*, *44*, 287–303.

Studies showing that a high proportion of students enjoy PE include:

Carlson, T. B. (1994). Why students hate, tolerate or love gym: A study of attitude formation and associated behaviors. Unpublished doctoral dissertation, University of Massachusetts, Amherst.

Rice, P. L. (1988). Attitudes of high school students towards physical education activities, teachers and personal health. *The Physical Educator*, *45*, 94–99.

The influence of physical ability on enjoyment of PE is noted in:

Fox (1994), see above.

Hoddle, C., & Graham, G. (1995). What children think, feel and know about physical fitness testing. *Journal of*

Teaching in Physical Education, 14, 408–417.

Portman, P. A. (1995). Who is having fun in physical education classes? The experiences of sixth grade students in elementary and middle schools. *Journal of Teaching Physical Education*, *14*, 445–453.

The link between self-esteem and perceived physical self-confidence is noted in:

Greendorfer, S. L., Lewko, J. H., & Rosengren, K. S. (1996). Family and gender-based influences in sport socialization of children and adolescents. In F. L. Smoll & R. E. Smith (Eds.), *Children and youth in sport: A biopysychosocial perspective* (pp. 89–111). Madison, WI: Brown & Benchmark.

Weiss, M. & Duncan. S. (1992). The relationship between physical competence and peer acceptance in the context of children's sport participation. *Journal of Sport and Exercise Psychology*, *14*(2), 177–192.

Studies showing that students with low self-esteem dislike PE more frequently than students with higher self-perceptions include:

Figley, G. E. (1985). Determinants of attitudes towards physical education. *Journal of Teaching in Physical Education*, *4*, 229–240.

Luke, M. D., & Sinclair, G. D. (1991). Gender differences in adolescents' attitudes toward school physical education. *Journal of Teaching Physical Education*, *11*, 31–46.

Studies showing the importance of families in participation patterns include:

Godin, G., & Shephard, R. J. (1986). Psychological factors influencing intentions to exercise of young students from grades 7 to 9. *Research Quarterly For Exercise and Sport, 57*, 41–52.

Greendorfer, Lewko, & Rosengren (1996), see above. Higginson, D. C. (1985). The influence of socializing agents in the female sport-participation process. *Adolescents*, *20*(77), 73–82.

Kirk, D., Carlson, T., O'Connor, A., Burke, P., Davis, K., & Glover, S. (1997). The economic impact on families of children's participation in junior sport. *The Australian Journal of Science and Medicine in Sport*, *29*(2), 27–33.

The importance of media in forming perceptions of physcial activity has been noted by:

Kirk, D., & Tinning, R. (1994). Embodied self-identify, healthy lifestyles and school physical education. *Sociology of Health and Illness, 16,* 600–625.

Oskamp, S. (1991). *Attitudes and opinions*. Englewood Cliffs, NJ: Prentice Hall.

Tinning & Fitzclarance (1992), see above.

The importance of peers is noted in:

Berndt, T. J. & Keefe, K. (1992). Friends' influences on adolescents' perceptions of themselves at school. In D. H. Schunk & J. L. Meece (Eds.), *Student perceptions in the classroom* (pp. 51–73). Hillsdale, NJ: Lawrence Erlbaum. Fox (1994), see above.

That popularity is achieved through athletic prowess, especially for males, is noted in:

Adler, P. A., Kless, S. J., & Adler, P. (1992). Socialization to gender roles: Popularity among elementary school boys and girls. *Sociology of Education*, *65*, 169–187.

Eder, D, & Parker, S. (1987). The cultural production and reproduction of gender: The effect of extra-curriculum activities on peer-group culture. *Sociology of Education*, *60*, 200–213.

That this connection is less for females, is noted in:

Greendorfer, Lewko, & Rosengren (1996), see above.

The importance of appearance and attitude in friendship of females is noted in:

Alder, Kless, & Alder (1992), see above. Eder & Parker (1987), see above.

The importance of the teacher's behaviour on students' attitudes is noted in:

Figley (1985), see above.

Portman (1995), see above.

The importance of the environment on students' attitudes is noted in:

Luke & Sinclair (1991), see above.

The importance of the curriculum on students' attitudes is noted in:

Tinning & Fitzclarence (1992), see above.

That "fun" is a reason for participating in physcial activities is noted in:

Australian Sports Commission. (1991). *Sport for young Australians: Widening the gates to participations.* Canberra: Author.

Wankel, L. M., & Sefton, J. M. (1989). A season-long investigation of fun in youth sports. *Journal of Sport and Exercise Psychology*, 11, 355–366.

Useful resources for those seeking an educational angle for physical education include:

Griffin, L. (1996). Tactical approaches to teaching games: Improving net/wall game performance. *Journal of Physical Education, Recreation and Dance, 67*(2), 34–37.

MacDonald, D. & Brooker, R. (1997). Moving beyond the crisis in secondary physical education: An Australian initiative. *Journal of Teaching Physical Education, 16,* 155–175.

Siedentop, D. (1994). *Sport education*. Champaign, IL: Human Kinetics.

Werner, P., Bunker, D., & Thorpe, R. (1996). Teaching games for understanding: Evolution of a model. *Journal of Physical Education, Recreation and Dance*, 67(1), 28–32.

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