The Self-Concept and Social Comparison Processes of Adolescents with Physical Disabilities

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Introduction
The development of a positive student self-concept is a widely valued and highly desirable outcome of education. For adolescents the development of self-concept comes about through critical changes in the way they think about and characterise themselves. Adolescents are able to make more specific judgements about themselves in a variety of areas; in this way their self-concept is said to be more differentiated (Harter, 1990). Adolescents are able to draw on a range of information sources in order to form their self-concept. One way adolescents gain information about themselves is through comparisons with other adolescents. Adolescents can use this social comparison information to make judgements about themselves.

Self-concept of adolescents with physical disabilities
The literature on self-concept in adolescents reveals little information on the self-concept and self-esteem of adolescents with physical disabilities. King, Shultz, Steel, Gilpin & Cathers (1993) in reviewing the literature in this area report a small number of
empirical studies concerning the self-concept and self-esteems of adolescents with physical disabilities have been conducted. These include a study of adolescents with cerebral palsy (Magill & Hurlbut, 1986); and studies of adolescents with spina bifida (Campbell, Hayden & Davenport, 1977; Lord, Varzos, Berhrman, Wicks & Wicks, 1990; Murch & Cohen, 1989; Pearson, Carr, & Halliwell, 1985). Other studies have looked at mixed groups consisting of adolescents with different physical disabilities or adolescents with chronic illnesses (King et al., 1993; Harper & Richman, 1978; Kellerman, Zeltzer, Ellenberg, Dah & Rigler, 1980; Ples, Cripps, Davies & Wadsworth, 1989; Tavormina, Kastner, Slater, & Watt, 1976).

In reviewing a number of these studies King et al (1993) asserted that there is little evidence to suggest that adolescents will have lower self-esteem or self-concept than other adolescents. However the King et al study found that adolescents with disabilities had lower self-concepts than the normative sample in several specific areas of self-concept. Adolescents with disabilities were lower in perceived athletic competence, romantic appeal, scholastic competence (for males) and social acceptance (for females).

However, the King et al. study does not attempt to examine the reasons behind the lower self-concepts for groups with physical disabilities and suggests further research should look at these reasons. This area needs further research not only to answer this question but to gain a deeper understanding of the reasons for the levels of self-concept shown.

Social Comparison

In recent times the role of social-comparison processes in affecting the self-concept has been a particular focus in self-concept research as exemplified by Marsh and his colleagues and their development of the BFLPE concept. Much of this work has been conducted in the area of academic self-concept with less research conducted on the social-comparison processes across the whole spectrum of self-concept. Harter (1989) points out that a strong interest in the development of comparison processes in young children has led to relatively little attention being paid to these processes in adolescents.

Friendships

It is thought that social comparison processes are affected by the particular reference group the individual is employing. It is thought that during adolescence the peer group assumes a greater role in providing a reference point against which to make social comparisons. Friendship groups in adolescence are also important for other reasons. The development of friendships is a pertinent issue in the assessment of adolescent self-concept as it is thought that close friendships become more salient in the adolescence years (Harter, 1988). Similarly
the development of friendships with both disabled and non-disabled peers is a key aspect of successful social integration. Friendships in adolescence are thought to fulfil a number of key functions such as forming the basis of affiliative networks through which information can be gained (Berndt, 1989), providing information about the self and the world in general (Hartup, 1992) and providing cooperative socialisation contexts (Hartup, 1992). Hartup (1992) claims that friendships in adolescence are characterised by greater intimacy and that friends may be developmentally advantageous in socioemotional development (1989). There is also a suggestion that the absence of friends or conflictual relationships with friends may constitute predictors of future psychological problems (Claes, 1992).

Friendships and students with special needs
The issue of friendships has greater significance for the student with special needs and people with disabilities as it has been suggested that educational and environmental contexts can shape the development of friendships (Meyer and Putnam, 1988). Administrative decisions such as the provision of special educational services and the characteristics of the school environment may shape the friendship patterns of students in terms of educational placement and access to other students in that educational placement.

Epstein (1983) points out that schools can influence children's friendships in that children do not have the same resources as adults to enable them to maintain friendships in the face of adversities such as geographical separation. This issue has particular relevance to the students with physical disabilities who may experience difficulties in maintaining friendships due to location of a special school or the issue of access to friends outside school hours.

The aim of this study was to add to the understanding of the practice of integration in schools by investigating the self-concept and the perceptions of friendships of a specific group of students, students with physical disabilities. This group of students is significantly under-represented in literature regarding social integration. Furthermore, students with physical disabilities, who do not have a concurrent intellectual disability are likely to be integrated in regular school environments. These students, because of their high rate of integration and because they do not have intellectual disabilities, are more likely to reflect the effects of integration and socialisation with non-disabled peers than some other disabled groups who may not be able to reflect so clearly their experiences and self-perceptions.

A case study approach was the main framework within which this study was conducted. The case studies reflect a micro level approach to examining these issues with the aim of providing indicators from which larger scale studies could develop.
Method
Subjects
The research involved case studies of ten high school students with physical disabilities. The study was based in four comprehensive state high schools in Metropolitan regions of Sydney. Students with a disability present since birth or a disability which occurred early in life were selected over students whose disability may have resulted from recent traumatic injury such as car accidents and burns. Similarly students were targeted for participation on the basis of no intellectual impairment. These criteria were devised to ensure relative uniformity of developmental stages and to minimise chances of self-concept effects which could be caused by recent traumatic injuries.

The ten participants consisted of eight male and female students with cerebral palsy, one male with Brittle Bone Disease and one female with Albers Schonberg Disease.

Procedure
Each participant was interviewed for approximately one hour during which time Harter's (1988) Self-Perception Profile for Adolescence was administered. Following this each student completed a social-comparison interview and a friendship measure, followed by an interview regarding the determinants of the self-concept. The Self-Perception Profile provides a measure of Global Self-Worth as well as measures of perceived competence across the domains of Scholastic Competence, Athletic Competence, Social Acceptance, Physical Appearance, Close Friendship, Job Competence, Romantic Appeal and Behavioural Conduct. The Romantic Appeal subscale was not included in this study due to it being extraneous to the interests of the study. An importance rating scale which accompanies Harter's Profile was also administered in the interest of assessing the determinants of Global Self-Worth and areas of self-concept that these adolescents are able to discount from importance.

The social-comparison interview was based on the questions in the original self-concept measure, with the most representative items from each subscale used to ask the students to compare themselves with peers in both an upward and downward direction. The friendship measure simply involved the students listing the friends they liked to 'hang around with' in school, outside of school and any other friends they liked to spend time with. This measure tapped the students' perceptions of their friendships and gave an insight into the nature of the friendship group and the extent to which the friendship group flowed over into the students' social-life outside school.

The interview assessing the determinants of self-concept was integrated
into the social comparison interview in order to draw on the most representative sample items in the same manner as the social comparison interview. Following the completion of the interview process each student was observed (when possible) in the playground for a period of 20 to 30 minutes.

Results

Self-concept

The results showed that the self-concept scores of the students fluctuated around a middle range of self-concept with most students having some areas of high and some areas of low self-concept. The areas of Athletic Competence and Physical Appearance were the lowest areas of self-concept for eight of the ten participants, while Behavioural Conduct and Global Self-Worth were the highest areas of self-concept for the ten participants. The results indicate younger students in this sample had a consistently lower self-concept than older students, except in the area of Scholastic Competence. Gender differences are also evident in the areas of Athletic Competence and Physical Appearance. Boys in this sample reported higher perceptions of Athletic Competence, while girls reported higher perceptions of their physical appearance.

Table 1 Self-concept scores, by domain for each participant.

Comparisons between students in the integrated school setting and their peers in the Support Unit setting show that Support Unit students had generally lower self-perceptions than their integrated peers. However Support Unit students had slightly higher self-perceptions in the areas of Social Acceptance and Behavioural Conduct.

Social comparison

The results from the social-comparison items were categorised in terms of positive and negative comparisons with disabled peers, non-disabled peers and peer friendship group. The results show very little difference in the nature of comparisons with disabled peers. The students compared themselves with disabled peers in positive and negative instances at virtually the same rate. However students were more likely to nominate non-disabled peers in positive contexts than negative contexts.

Students schooled in support unit settings did not compare themselves to a non-disabled reference group at all. In contrast, students schooled in an integrated setting consistently compared themselves more frequently with non-disabled peers than with disabled peers. Across the whole range of students the results show that the peer friendship group was employed as a basis of comparison at least fifty percent of the time.

Table 2 Social Comparisons (number of persons nominated in each area)
Determinants of self-concept
A common theme to emerge from the group in the assessment of the determinants of self-concept was the tendency to attribute the level of self-concept to their disability. This trend appeared frequently in the areas of Athletic Competence, Physical Appearance and Global Self-Worth. Disability was nominated as a determinant at least once in each of the areas assessed.

Table 3 Disability as a determinant of self-concept, by area of self-concept

Friendships
Each of the students in the study could report a friendship grouping at school, but integrated students reported fewer friendships with other disabled students while support unit students tended to report no friendships with non-disabled peers. While most of the students in the study had fewer than three friendships outside school, three reported no friendships outside school. Only two of these students had school friendships which extended outside school hours. In the case of these two students the interaction between friends outside school was limited to visits a couple of times a year.

Table 4 Numbers of disabled and non-disabled friends reported by students in school and outside of school

The observation sessions revealed several general patterns of behaviour across the ten students. Interaction between students with disabilities and non-disabled peers tended to occur only when the students was schooled in an integrated setting. However the integrated setting did not indicate a wider circle of interaction as most integrated students tended to return to support unit settings or specialised facilities and interact with disabled friends.

Support unit students tended to interact only with disabled peers. Only two of the ten participants interacted with both disabled and non-disabled peers. During the observation it was noted that no general interaction occurred between disabled and non-disabled students at all, whether they were schooled in a support unit setting or integrated.

Discussion
Two main aspects of the results will be discussed: the self-concept of the students, and the students' friendships. This study looked at the level of self-concept of students with physical disabilities in
different school settings. The results show that across the group of students the self-concept fluctuated around the value of 2.6, a medium level of self-concept. This score is lower than that of normative samples gathered by Harter (1988) which fluctuate around the value of 2.9.

The study of the determinants of self-concept revealed that areas of high self-concept are perceived by students as being the result of ability, effort, or naturally occurring attributes of the self. However, reported determinants of low self-concept in areas of Athletic Competence and Physical Appearance suggest that half of the students saw their low self-concept in these areas as caused by their disability. The results also show that students who attributed their low perceptions of physical appearance to their disability were integrated students. This finding echoes Stainback's (1994) concern about disabled students developing a positive self-identity which incorporates their disability when they are schooled in settings with a low incidence of students with similar disabilities. These integrated students have less chance of frequent contact with students who appear to be similar to themselves. These concerns may be justified as Support Unit students who have frequent contact with other students with disabilities did not attribute their assessment of physical appearance to their disability.

A number of students also made reference to the reflected appraisals and perceptions of others towards them as causing lower self-concept and negative self-feelings. Four students made references to the negative appraisals of other people. Case 10 illustrates this when she mentioned that people assume she won't amount to anything because of her disability, and Case Four mentions rejection from sporting activities because her peers perceive her to be incompetent.

While the determinants of the self-concept contribute to our understanding of why students may have low self-perceptions, some commonalities among students with high self-perceptions point to another conclusion. Case's 5, 7 and 10 each have high self-perceptions including high self-concept in the area of Athletic Competence. Two of these students are international sporting competitors and the other participates regularly in sport for her own enjoyment. For these students the perception of success in sport is a major contributor to high self-concept. It is quite possible that success in these areas has had a major impact on the self-concept because it occurred in the face of physical disadvantage. It is also possible that this success had a flow-on effect for these students, raising perceptions of the self in other areas.

The results indicate differences within this sample between the self-concept of older and younger students. Younger students had a
lower self-concept than older students in all areas except Scholastic Competence. The lower academic self-concept of older students may be caused by a negative reaction to heightened expectations in the final years of school.

The results also showed some gender effects particularly significant in the areas of Athletic Competence and Physical Appearance. Firstly, in the area of Athletic Competence, boys had a considerably higher perception of competence than did the girls. The girls' lower self-concept could be attributed to their negative experiences in sport, as three of the six female students reported quite negative sporting experiences. Two girls associated these experiences with boys having greater access to sporting equipment and one reported negative comments a male student had made about her sporting ability.

In the area of Physical Appearance, girls had a considerably higher self-perception than did boys. This finding is contrary to the King et al (1993) finding that males had higher physical appearance self-perceptions. One possible explanation may be differences in timing of male and female pubescent development. Females generally enter the period of puberty earlier than males. The female students in this sample could have experienced and resolved issues regarding physical appearance and development in puberty whereas the males may not have done so. Furthermore, increased muscle tone and development is a feature of male pubescent development, a feature male students with physical disabilities such as cerebral palsy may never develop due to the profound effect of the disability on muscle tone in some cases. One male student exemplified such concerns as he described a dream in which his body was well muscled and not disabled. Apparently such dream sequences are not uncommon reports from disabled people (Strax & Wolfson, 1984).

Although the results indicate that Support Unit students have generally lower self-concepts than their integrated peers it is difficult to determine why in such a small sample. It is interesting to note however that Support Unit students perceive themselves to more socially accepted than their integrated peers.

Friendships and social integration
Asking students about their friendships yielded some positive insights into social integration yet a number of disturbing features also emerged. The results indicated four main features of these students' friendships; firstly, student's in-school friendships do not extend outside school hours; secondly, these students lack friendships outside school; thirdly, there appears to be a discrepancy between some reports of friendships and the friendships actually observed. The fourth point to emerge is the indication of lower numbers of friends among students in Support Unit settings. To address the first finding, only two
students could report in-school friendships which extended beyond school hours. The function of these out-of-school friendships was extremely limited with each student reporting that they saw their friends outside of school only once or twice per year. Each of these first two findings can be explained by issues of access. Many of the students with disabilities are dependent on wheelchairs for mobility, require personal care assistance and private vehicle transport. Each of these factors would hinder social activities and interactions outside of the specialised school environment. If these students wished to attend social functions with regular school friends, as teenagers frequently do, then they would be dependent on wheelchair access and an adult to transport them to the location. Furthermore, many of these students had communication difficulties that could impede conversation. The students who reported the most friendships outside school were those with a number of social outlets outside school, such as sporting events and venues.

Addressing the third finding, a number of students reported friendships with mainstream peers which were not supported by observation or by teacher report. Teacher reports indicated that the observed or reported situation was the normal pattern of social interaction for these students. Observation revealed virtually no interaction between mainstream non-disabled peers and the disabled students in this study. Friendships with mainstream peers appeared to be dependent on disabled students seeking out the mainstream friends rather than the mainstream friends seeking out the disabled student.

One possible reason could be the nature of the Support Unit environment. The Support Units observed in this study were housed in separate buildings away from the main 'socialising' area of the school. The Support Units appeared quite removed from the general life of the school, having their own teachers, support staff and classrooms, none of which were shared with the mainstream population. The Support Unit settings were quite 'separate' from the regular life of the school. Mainstream friends were not a part of this environment and possibly never entered Support Unit premises even to visit a friend. In fact observations revealed that mainstream students did not enter the Support Unit settings at all. This may be a reason for the lower numbers of friendships for Support Unit students than for integrated students.

Conclusions
The study suggests several implications for school practice and opens up questions which only research on a larger sample could answer. The finding that Support Unit students had no mainstream friends and did not use mainstream students as a reference point for any area of self-concept raises issues about the isolation of students with disabilities, even when placed in high schools, when they are part of
Support Units. Programs to encourage mainstream students to include students with disabilities in their social activities could help alleviate this isolation, as could full integration. While the aim of the Support Unit is indeed to provide support to students with disabilities it was noted with concern that teachers in the Support Unit settings in this study provided students with the support normally expected of a peer friendship group. Some teachers stayed with, and talked to students during recess and lunch breaks and some students even mentioned teachers as their closest friends rather than mentioning students in their peer group. While close ties between students and teaching staff are not necessarily negative, these ties may have future negative consequences in that the students do not socialise with a variety of same age peers. Interaction with a larger peer friendship group can provide social skills and information about a range of issues that these students are going to need to take with them into adulthood.

References


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