THE SELF CONCEPT OF DEVELOPMENTALLY DELAYED STUDENTS AT A VOCATIONAL COLLEGE: A PRELIMINARY REPORT

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ABSTRACT

Affective characteristics, such as self-concept, are now being recognised for the significant interaction they have with achievement. Academic self-concept has an important mediating influence on academic behaviour, academic choices, educational aspiration and academic achievement.

Given the interactions of self-concept and achievement outcomes it is hardly surprising that research has shown that people with an intellectual disability have lower general self-concepts than their regular peers.
These results are of concern to special educators because such negative personal characteristics can ultimately have a profound impact on the individual's post-school placement.

Unless self-concept and other affective characteristics are closely monitored many interventions and vocational efforts at training will be wasted.

This paper reports on the self-concept of both students with an intellectual disability and regular students at the beginning of their course at a vocational college. The Self-Esteem Inventory and the Self-Description Questionnaire II (SDQ II) were administered to assess the impact of inclusion in an integrated program on all students.

Individual profiles were developed from the SDQ II results and comparisons of self-concept development were made between the special needs and regular students.

Implications of the results for the assessment of children and young adults with special needs will be discussed.

Introduction

Affective characteristics, such as self-concept, are now being recognised for the significant interaction they have with achievement. Bloom (1976) has asserted that the affective variables can enhance or inhibit an individual's academic potential because they predetermine whether a person will be sufficiently motivated to persevere in the achievement situation.

Marsh and Johnston (1993) suggest that academic self concept has an important mediating influence on academic behaviour, academic choices, educational aspiration and academic achievement.

Self Concept of Individuals with Intellectual Disability

Given the interactions of self concept and achievement outcomes,
it is hardly surprising that research has shown that people with an intellectual disability have lower general self concepts than their regular peers (Battle and Blowers, 1982; Beaty, 1991; Chiu, 1990; Coleman, 1983; Jupp and Looser, 1988; Mulcahy, 1990;)

Widaman, McMillan, Helmsley, Little and Balow (1992), showed in a survey of 1,140 high school students that regular students had higher levels of self concept than did students who were developmentally delayed or had learning disabilities. In a study of 120 "handicapped" elementary students, Jones (1985) indicated that these students had significantly more negative self concepts, higher anxiety levels, more negative perceptions of their intellectual abilities, school status and popularity and more feelings of insecurity, inadequacy and guilt, impulsivity and immaturity.

Ryba, Edelman and Chapman (1984), in an examination of relationships between academic self concept and personal adjustment of 233 adolescent developmentally delayed students, demonstrated that these students tended to rate themselves at a lower level of academic and social ability than normally achieving children in regular class.

These results have been of great concern to special educators because such negative achievement-oriented characteristics undoubtedly impact on academic progress and have profound effects on the individual's post-school placement, work involvement and ultimately quality of life. Unless self concept and other affective characteristics are closely monitored, many interventions and much educational and vocational training effort will be rendered ineffective (Marsh and Johnston, 1993).

Impact of Interventions on Self Concept for People with Special Needs

The literature is mixed as the whether short-term interventions can have a positive impact on self concept of learners with special needs. Thorildsen and Lowry (1989) report that a 2 year maths intervention for integrated students with an intellectual disability brought about significant increases in self concept. Polatjiko (1991) found that a 6 month reading intervention improved skills but had little effect on self concept. Jupp and Looser (1988) using a social skills training program with 40 New Zealand adolescents with mild intellectual disability, found that while the subjects showed modest gains in the specific skills taught by the program, the students' self perception did not change. Musgrave and Fifield (1981) found that an instructional module designed to enhance the self concept of
students with an intellectual disability at junior high school was successful.

These findings may be explained from some of the new insights gained from recent developments in Self Concept Theory, particularly the multidimensionality of the self and frame of reference effects. Marsh and Johnston (1993) outline the need for special educators who are designing interventions to abandon the notion of the general self and understand the significance of the multifaceted nature of self concept in design and evaluation of interventions. For example, in the Thorkildsen and Lowry study, it would now be recommended that as maths was the focus of the intervention, greater gains would be gained from the evaluation of maths self concept changes. Significant gains may have been found in the Poltjko (1991) study if they had evaluated their program using a reading self concept.

Frame of reference effects may have had considerable impact on the Jupp and Looser (1988) intervention. Here both actual accomplishments and frame of reference effects might have been operating. The subjects may have made gains in social skills training but the intervention may have alerted the subjects to their deficiencies and led them to adjust the standards they use for self evaluation.

To conclude, Marsh and Johnston (1993) recommend that special educators assess general self concept but also:

1. use multidimensional or "domain specific" measures of self concept; and,

2. if maintenance of improved performance in interventions relies on self concept then design interventions that will enhance both.

Social Comparison Theory and Integration

There are two major theories explaining self concept that have serious implications for people with special needs and for professionals who are designing programs for them. These are the Labelling and Social Comparison Theories.

Labelling theory was very influential in the 50's and 60's and was one of the arguments used against segregation. However, more recent theoretical insights and research have combined to support social comparison theory, which implies that placing students with special needs in regular classes can result in the development of poor self concept.

Despite social comparison effects, integration of children with
special needs is now accepted policy. Therefore, in an effort to
synthesize recent developments in self concept theory and
measurement, it was decided to employ a number of strategies to
assess self concept as part of a larger research project. The
prime aim of this larger research project was to assess a nine
week intervention in the cognitive problem solving approach,
known as Self-Instructional Problem Solving (SIPS), by measuring
colateral variables such as self-concepts and quality of life.

The strategies to assess self concept were:
1. the measurement of general self concept using the Coopersmith
   Self Esteem Inventory;

2. the administration of the Self Description Questionnaire II
   (Marsh, 1990) as a multi-dimensional assessment of self concept;
   and,

3. the use of the Vocational Skills Self Esteem Inventory as a
   specific domain measure, particularly relevant to this study.

Specific Aim

The specific aim of this study was to examine self-concepts of
participants before the implementation of an intervention that
was designed to enhance the adaptive capacity, quality of life,
self concept and locus of control.

Materials and Methods

Subjects

The subjects were 6 students enrolled at the Wivenhoe Vocational
College in 1993. Three students have intellectual disabilities
(1=m, 2=f). One of these students has mild cerebral palsy and
some articulation difficulties. Three of the students were
without intellectual disabilities. At the time of testing the
students were aged from 17 to 21 years.

All of the students with intellectual disability had been
previously educated in integrated classes and had
completed either year 11 or 12. All of the regular students had
attended local high schools: the 2 males completed year 12 and
the female year 10.

Research Design
Because of the small number of students enrolled, it was not possible to institute a pre-test/post-test control group design. Instead, the project for the first year of the study a longitudinal action research project with a fusion of both qualitative and quantitative data. Additionally, in-depth case studies were developed on the participants.

Instrumentation

To assess global self-concept the Coopersmith Self Esteem Inventory (Adult Form) was chosen. The Coopersmith Self Esteem Inventory has been used extensively with students with special needs in the past (Chiu, 1990; Young, 1985;).

To assess the multidimensionality of self concepts of the students, the SDQ II was chosen. It has excellent psychometric properties and is one of the three most commonly used tests for assessing self-concept.

The SDQ-II is designed to measure self concept in adolescents. It specifically measures three areas of academic self concept (Maths, Verbal and General) and eight non-academic areas of general self concept (Physical Abilities, Physical Appearance, Same Sex, Opposite Sex, Parental Relations, Emotional Stability, Honesty/Trustworthiness and a formal Self Scale). These eleven scales can be summed to yield a Total Self Concept Scale.

All of these tests were individually administered by reading them to the subjects. Raw scores for both tests were then converted to percentiles. T scores of the SDQ II were plotted as individual profiles for each subject.

Results and Discussion

There was a wide range of scores on the Coopersmith Self Esteem Inventory (Table 1). There was no consistent pattern for either the students with special needs or the regular students. However, the scores provide some measure of validity for the results on the SDQ II.

Subject 2 scored below the norming sample on the Coopersmith and on one subscale of the SDQ II. Subject 1 and 4 had consistently high scores on both tests. Subjects 3 and 6 had similar scores on
the SEI and they had similar profiles on the SDQ II. Subject 5 had a low estimate of self-esteem on the Coopersmith SEI. His scores on the SDQ II were higher but they were influenced by his fairly high self assessments of his academic abilities. The Adult Form of the Coopersmith SEI does not have a factor that reflects academic evaluations of self esteem (Haines, 1988).

The results for the SDQ II are presented in Table 2.

INSERT TABLE 2 ABOUT HERE

The depression of self concepts often assumed for people with intellectual disabilities was not demonstrated. All of the subjects had relatively average to high total self concept scores except for Subject 2. However, there was a wide range of within-subject scores particularly for the subjects with intellectual disabilities.

Some interesting patterns emerged:

Subject 1

This subject had the highest self concept scores of any of the participants with little variation across subscales. There are two possible explanations. First, if he was still using as his previous educational setting (IM Class) as his reference point he would assess his abilities favourably. Alternatively, the experience of being selected for Wivenhoe Vocational College and the shift to a fairly supportive, close reference group may also be enhancing his self concept.

Secondly, the tendency to make overly positive self evaluations by students with significant learning problems has been noted (Alvarez, 1986, Riches,1980). These results then could be interpreted as a form of self protective behaviour, rather than realistic self evaluation. However, his percentile rank on the SEI was 75 would suggest that he does hold fairly positive evaluations about himself.

Subsequent retesting, should help to clarify these 2 very differing interpretations.

Subject 2

This subject had the widest range of scores. On the
Emotional/Stability subscale she scored below the lowest percentile ranks and T score in the norming sample. Her Maths self concept was also very low as were most of her Social Self Concept scores. Apart from the anomaly of the Emotional Scale, she exhibited the self concept profile most traditionally associated with students with an intellectual disability than either subject 1 or 3. Her relatively depressed self concept scores are interesting given that she is the most academically capable of this group of students. However, she had only just enrolled at the College prior to testing and she may not have established a new frame of group reference. She had also been unemployed and at home since completing year 12 and may no longer be using her previous school milieu to assess her academic abilities. Interestingly, her aspirations for employment are at the management level in the hospitality industry.

Subject 3

This subject again had a wide spread of scores, obtaining fairly high scores in all of the social subscales and fairly low scores in the academic scales. This woman has major learning difficulties and limited understanding of the finer meanings of language. Her high/low pattern of scores could be interpreted as being a reflection of her inability to use a 6 point response scale. Alternatively, given that while she has multiple disabilities she has many non-disabled friends, her high perceptions of social ability might be quite realistic.

Regular subjects

The regular subjects exhibited a more consistent pattern of results. Subject 5 displayed a clear delineation between academic and social self concept with academic scores significantly higher. Subject 6 displayed the reverse profile. Interestingly, Subject 6 has a very similar profile (except for extremes) to Subject 3. These 2 subjects have formed a close friendship and support bond.

Conclusions

These results highlight difficulties that can result when administering scales designed for normal IQ students on students with special needs. First, the numbers may be too small to meet quantitative data requirement. One of the major teaching modifications of this college is small group instruction and in special education in general groups are nearly always smaller. It can be very
difficult to gain measures on large groups that are traditionally assessed in quantitative studies. Perhaps for special education populations it is preferable to examine validity of individual results in light of additional data to assess these variables.

Secondly, administration conditions may have to be modified in that extra explanations or standardised training of gradated scales may be necessary. Cummins (1991) has developed a regime that assesses understanding of Likert-type scales before the test is administered. Subjects 1 and 2 would have benefitted from more explicit instructions and may have been able to make more perceptive evaluations. Care must also be taken so that subjects do not become tired and stressed and start to give random or inconsistent responses.

Thirdly, Coopersmith (1990) advocates the development of local norms or of norms that apply to specific populations. Cline (1975) has established SEI norms for an EMR sample at a school level (which could be of assistance in future administrations of this test) but there are no norms established for an adult special needs population. It may also be necessary to develop norms for special needs population for the SDQ II as well. In addition to the development of norms for special needs populations, Silon and Harter (1985) found that the factor structures of instruments designed for normal children were significantly different when used with children with intellectual disabilities. They recommended that instruments may need to be revised if they are used with students with intellectual disabilities.

The results from this preliminary study must be interpreted with extreme caution. The small numbers increases the likelihood of Standard Error. However, the two tests display some convergent validity which is further supported by qualitative observations by a researcher and supervisors at the vocational college.

As all of the students have had difficulties in previous learning situations it is perhaps not surprising that there was not a greater differential between the students with intellectual disability and the regular students. However, subsequent testing could elucidate an as yet unproven but exciting development in the field i.e. that self-concepts of student with disability are not depressed of delayed (which is the most common explanation offered in the literature) but that they may have a unique structure and developmental pattern.

The results on the SDQ II would appear to be more useful than the results of SEI. They present an interesting range of individual
differences and allow the development of an individual profile of strengths and weaknesses that could form the starting point for individual interventions such as SIPS. They alert educators, parents and individuals themselves to specific areas of difficulty that may be impeding learning and eventually employment.

Marsh (pers. comm.) has suggested that it would be worthwhile to retest the subjects several times to see if the same patterns emerge before the implementation of any intervention. Hence it is planned to retest the subjects several times. Both of these instruments will be readministered at the end of the intervention to assess any impact it might have had on the self-concept of the subjects.

The longitudinal nature of the results should shed further light on the interaction between academic provisions and self-concept of young adults with an intellectual disability in a vocational setting. They should be able to offer some assessment of the impact that attending an integrated/inclusive setting can have on affective variables.

References


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mentally handicapped children. Psychology in the Schools 27: 263-268


Mulcahy, R. (1990): Perceived competence, self-concept, and locus of control for high ability students, as compared to average and learning disabled students. Canadian Journal of Special Education 6:42-49


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TABLE 2: RESULTS OF THE SELF DESCRIPTION QUESTIONNAIRE II FOR 3 INTELLECTUALLY DISABLED AND 3 REGULAR STUDENTS AT A PRIVATE VOCATIONAL COLLEGE

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508 PERCENTILE 99 72 57 84 49 39 54 60 51 72 77 82

T SCORE 67 57 54 60 52 47 52 55 52 56 58 59

*2 F DD 10 8 51 60 30 47 12 27 28 43 17 333

PERCENTILE 1 2 58 99 28 6 0 13 8 18 6 6

T SCORE 32 30 54 66 45 55 0 38 35 42 32 35

F DD 15 38 51 60 29 24 66 48 28 55 48 462

PERCENTILE 2 81 58 99 25 6 99 94 8 75 98 65 T SCORE
27 59 54 66 44 33 71 60 35 58 66 54 *4 M

R 35 40 52 44 46 42 49 39 50 52 45 504 PERCENTILE

41 68 53 52 82 86 77 39 70 75 84 80 T SCORE48

56 53 52 59 62 58 50 56 57 61 59 *5 M R

51 31 53 41 33 37 39 32 54 43 24 438 PERCENTILE82

35 57 42 25 42 37 18 84 33 12 44 T SCORE60 47

54 49 44 48 47 41 60 46 38 50 *6 F R 13

38 54 43 33 29 49 35 34 56 44 428 PERCENTILES 81

71 33 37 12 84 27 17 80 88 44 T SCORE34 59 57

47 48 38 60 46 41 59 62 49

*STUDENT IDENTIFICATION NUMBER
DD: DEVELOPMENTALLY DELAYED
R: REGULAR

TABLE 1: RESULTS ON THE COOPERSMITH SELF ESTEEM INVENTORY FOR
YOUNG ADULTS AT A PRIVATE VOCATIONAL COLLEGE

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