# Social Comparison Theory and People With Mild Intellectual Disabilities: It Is More Complex Than You Think

# Roselyn M. Dixon

SELF Research Centre, University of Western Sydney, Australia; Faculty of Education, University of Wollongong, Australia and

Herbert W. Marsh and Rhonda G. Craven SELF Research Centre, University of Western Sydney, Australia;

## **Abstract**

Social comparison theory offers an understanding of the effect deinstitutionalisation on the development of self-concept for people with intellectual disabilities (Finlay & Lyons, 2000). Social comparison theory predicts that people with intellectual disabilities living in the community will make comparisons with nondisabled groups and as such their self-concept will decrease because of negative frame of reference effects (Tracey, 2002). However, there are indications that this conceptualisation may be too simplistic (Crocker & Major, 1989, Finlay & Lyons, 2000). Newer developments in social comparison theory and research emphasise the active nature of social comparisons (i.e. people have a choice in whom they compare themselves and on what dimensions, Dixon, 2004).and that people with disabilities may use selective processes in relations to groups and processes to bolster their selfconcept(Finlay & Lyons, 2000). This paper presents the preliminary results of a larger qualitative study of 5 women who had been institutionalised for long periods of time but were deinsitutionalised. The research explored the overall patterns of social comparisons that people with intellectual disabilities who have moved to the community make and whether people with intellectual disabilities categorise themselves through these social comparisons.

### Introduction

People with intellectual disabilities are members of a stigmatised category (Edgerton, 1993). For a variety of reasons they are less likely to achieve socially-valued goals such as being employed, having children, living independently or living with partners. Evidence for negative evaluations by society are numerous (Finlay & Lyons, 2000). Social identity theory and research on stigma suggest that membership of a devalued social category can have negative implications for self-concept and that people might engage in coping strategies to restore or maintain their self-concept. This is reflected in people with intellectual disabilities (Edgerton, 1993; Jahoda, Markova & Cattermole, 1988; Sinason, 1992). However, whilst some researchers stress the salience of this aspect of identity and the consequent implications for self-

concept (Stokes & Sinason, 1992; Szivos-Bach, 1993) social comparison theorists point out that that the salience of particular social identities may vary. In order to be able to state that people with intellectual disabilities experience a negative social identity, it is important to show that this identity is salient. Self-categorisation may not necessarily follow from being designated as member of that group. The implication is that membership of a stigmatised group may not have the type of implications for the self-concept and for behaviour that would be suggested for a negatively-valued social group. Newer conceptualisations in social comparison theory suggest that people with intellectual disabilities may use selective processes in relation to groups and dimensions that may bolster their self-concept.

## **Social Comparison Theory**

Social comparison theory is a theoretical orientation that is now considered to have influence in the field of intellectual disabilities (Dagnan & Sandhu, 1999). According to this theory, one's self-concept is largely determined by the ways in which one is treated by significant others.

Social comparison research emphasises that, in situations where the self-concept is threatened, there are three possibilities: people may minimise comparisons (Brickman & Bulman, 1977), avoid upward comparisons (Steil & Hay 1997,) or try to self-enhance by making downward comparisons (Crocker, Thompson, McGraw & Ingerman, 1987). In the face of a threat to self-concept people may prefer to compare themselves with others they perceive as 'worse off' than themselves. This can result in an increase in subjective well-being because downward comparisons appear to boost self-concept and reduce anxiety (Gibbons, 1986).

# Research Relating to Social Comparison Theory and People with Intellectual Disabilities

Leary, Tambor, Terdal and Downs (1995) found that rejected people, such as people with disabilities who have been institutionalised, showed greater negative feelings than a comparison group drawn from the normal population. Another study

also showed that behaviours or situations associated with exclusion are also linked with decrements in self-concept (Suls & Wheeler, 2000). In a study that examined the relation between social comparison, self-concept and depression for people with intellectual disability, Dagnan and Sandhu (1999) found that positive correlation occurred between self-concept and social comparison on the achievement dimension. Depression was significantly related negatively to social comparison on the social attractiveness and group belonging dimensions, and with positive self-concept. It can be concluded from the results of this study that social comparison, and self-concept and depression are interacting in the same way as they do for people without an intellectual disability.

Downward comparisons have been demonstrated in people with intellectual disabilities. Gibbons (1985) showed that people with intellectual disabilities engaged in derogation or downward comparison of other stigmatised group members. Zetlin and Turner (1985) confirmed this pattern.

Tracey's (2002) more up to date research with children with mild intellectual disabilities, found that those children who were integrated into regular classes, had a lower self-concept than a comparison group of children who were placed in a special class. environment (e.g. institution or the special class). The implications of Tracey's research suggests that the move to community living may have deleterious effects on the self-concept of people with intellectual disability. The closer they come to living in the community, the more likely they will experience feelings of negative difference

Social comparison theory (Gibbons, 1986; Szivos-Bach, 1993), would predict that people with intellectual disabilities living in the community will make comparisons with 'normal' groups and as such their self-concept will decrease because of negative frame of reference effects. Again, there are indications that this hypothesis is too simplistic and does not take into account developments in social comparison theory or research (Wills, 1991; Buunk, Collins, Taylor, Van Yperen and Dakof, 1990) because participants may view context in different ways (Haslam and Taylor, 1992) and display 'selective industry of the mind' (James, 1890). For example, people may choose to make either upward or downward comparisons and be quite selective as to which groups they use for comparison.

One important example of recent research is Finlay and Lyons' (2000) study which used social comparison theory to show that people with disabilities use strategies to present themselves in positive ways. These include emphasising similarities between themselves and those without intellectual disabilities, avoiding upward social comparisons relevant to intellectual disabilities (intra-subject comparison or discounting), and by making downward comparisons with those who are less able or have less acceptable moral behaviour. These findings correspond to Crocker and Major's (1989) view that belonging to a stigmatised group may facilitate in-group comparison and attribution of unwanted feedback to the group perception rather than to the self.

These assumptions paint an overly gloomy outcome for the impact of deinstitutionalisation upon the self-concept of people with intellectual disabilities. Recent conceptualisations of social comparison processes emphasise the active nature of social comparisons (i.e. people have a choice in whom they compare themselves with and on what dimensions). The presence of 'normal' others in the social environment does not mean that people with intellectual disabilities will use them for comparison processes. The implication of this more dynamic conceptualisation of social comparison processes suggests that it is crucial to examine the social comparisons people with intellectual disabilities make in order to assess the extent to which a stigmatised or negative social identity is presented. The research to date has shown that upward comparisons are rarely made by people with intellectual disabilities (Festinger's theory predicts few upward comparisons being made by low social value groups) and downward comparisons were made mostly with other people with intellectual disabilities (Gibbons, 1985, Szivos, 1990).

In addition, there is recognition that participants may view context in different ways (Haslam and Turner, 1992). For example people may choose to make either upward or downward comparisons and be quite selective as to which groups they use for comparison.

## Zetlin and Turner's Typology

The most comprehensive description of responses to being labelled, and the impact on the self-concept was presented by Zetlin and Turner's (1984) research. They developed an extensive typology based on their findings of the modal attitudes each participant had towards their disability. The typology was based on four distinct attitudes of participants based on their willingness/reluctance to discuss their disability, the anxiety related to the acknowledgement of having problems, the importance they gave to their disability in day to day living and the strategies they used to cope with their disability. The results led to the development of the four different types of people who differed in their self-perceptions and the strategies they used to cope with their social reality.

This typology has potential because it presents a model for the social comparison strategies such as upward/downward comparison and the reference groups that they are using to make these comparisons. It may offer insights into the way people with disabilities respond to stigma and labelling and into the coping strategies they use to protect their self-concept. Therefore, it seems particularly appropriate for the participants in this investigation.

In their typology, people with disabilities cope socially by using strategies that they then use to define their self-image. They suggest that there are four possible responses:

- 1. Acceptors they accepted their disabilities and took all of the blame onto themselves.
- 2. *Tactical dependents* these sought out and perhaps even manipulated benefactors who compensated for what they could not do.
- 3. *Blame Attributors* they acknowledge their disability but blame significant others for their failures.
- 4. *Deniers* this group refused to accept their handicap and went to great lengths to prove their competence. See Table 1

Table 1: Zetlin and Turner's (1984) Typology – Summary of Descriptive Characteristics for Each Attitude Group

Attitude Towards Handicap (sic)	Acceptance	Qualification	Vacillation	Denial
Willingness to discuss handicap	Open/casual	Casual/ guarded	Reluctant	Very reluctant / avoid topic
Parental attitude towards handicap	Acceptance	Acceptance/ qualification	Ambivalence/avoidance	Ambivalence/avoidance
Parental practices	Promotion of self-sufficiency	Promotion of self-sufficiency	Overprotection	Overprotection/ overregulation
Sample members' focal concerns/strategic	Normative/ accomplishment	Progress/ growth	Deviance disavowal	Routinisation
goals Current attitude toward parental	Positive	Positive	Negative	Negative
and agency dependence Past use of	Low use	High use	High use	Low use
services Affiliative	Prefer	Prefer mildly	Prefer mildly	Few or no peers; prefer
relationships	nonhandicapped/ nurturant or authoritative toward handicapped peers	handicapped; warm relationships; reject severely handicapped	handicapped or non- handicapped; shallow, unstable relationships, reject severely handicapped	family relationships
Well/being quality of life (self-report)	Content	Content	Miserable	Content
Reference group (Social comparison group)	Positive reference group-normals Upward comparison on goals and attainments not related to intellectual disability	Negative reference group- severely handicapped Downward comparison	Negative reference group- severely handicapped- Downward comparison	Positive reference group-normals Deny disability- try to pass as normals

In conclusion, the older conceptualisations of social comparison theory may be too simplistic to address the formation of the self for people with intellectual disabilities who have been deinstitutionalised. The new conceptualisations suggest ways by which people who are members of stigmatised groups can construe themselves positively. They may use small numbers of comparisons and they may use temporal comparisons whereby they may make intra-subject comparison or 'discount' the importance of certain attributes where they will be judged as inferior. To determine if the new conceptualisations of social comparison theory apply to long term institutionalised people who have moved to the community, this research study investigated the following questions

- 1. What are the overall patterns of social comparisons people with an intellectual disability who have moved to the community make and do people with intellectual disabilities categorise themselves through these social comparisons?
- 2. Is Zetlin and Turner's typology valid for long term institutionalised women who have moved to the community?

# **Research Design**

## **Participants**

Five women took part in this study (Alison, Ruby, Lorraine, Agnes and Violet). The age of the participants ranged from 39 to 58 years, one of these participants had a hearing impairment and one was on mood altering medication at the start of the research period. At the commencement of the 30 month study, three of these participants had just moved to transitional housing at a residence very close to the residential service. The other two participants were still resident in the service. At the end of the research period all of the participants were living in the community. The five participants in this study were chosen because they were assessed as being socially competent by their personal care workers, and were the first people chosen to move to living in the community.

#### Measures

Ethnographic measures that were employed in this study included: literature review, in-depth life history interviews, interviews with personal care workers and administrators, perusal of case files and participant observation in different settings. The guide to developing the ethnographic interview recommended by Spradley (1979) was used to structure the interviews. The major documents were the extensive files maintained for each resident.

## **Procedures**

Participants were selected by administrators as being socially and verbally competent. The researcher approached the participants and asked them for their permission to be involved in the research. Once the participant agreed they were interviewed and asked to recount the story of their lives. If they agreed their personal case files were also accessed and personal care workers were interviewed. Tape recordings were made of the interviews and transcribed and, in addition, other memos were kept of each contact that the researcher had with the participants. The resulting field notes were then developed into case studies.

## Research Design

This investigation was an ethnographic study where the researcher spent intensive periods of time over 30 months with the participants. This prolonged contact allowed the researcher to establish the emic (insider's perspective). The study used measures outlined above. The study followed the principles outlined by Edgerton (1984), in that there should be multiple points of view, a longitudinal perspective and an ecological perspective. All of these perspectives were gained through using interviews, observation and document study, length of time and close contact with the participants and observing them in different settings.

## Data Analysis

Data was analysed using Zetlin and Turner's (1984) typology. Zetlin and Turner identified four distinct attitudes based on people's willingness to discuss their disability, the salience they assigned their disability in day to day living, and the strategies they used to protect themselves from stigma and protect their self-concept. The four categories they identified were: (a) acceptance, (b) qualification, (c) vacillation and (d) denial. Once the participants were classified according to their initial attitude to their disability, then relations with other indices of socio-emotional adjustment including strategic goals, peer relations, involvement with delivery system, employment record, socialisation history and well-being were formulated. (See Table 1)

#### **Results**

Alison-(Acceptor) Analysis using Zetlin and Turners" typology.

Under Zetlin and Turners" typology (1984) Alison was an acceptor. She accepted the diagnosis of intellectual impairment in her self-definition. She did not appear to feel that having a disability was all that important in her day to day life. Instead she emphasised her accomplishments, such as being able to read, and took pride in the normal life-style that she had achieved in the community. She had a positive self-concept. When she made social comparisons she chose to make comparisons with normal people in the community. She made downward comparisons with other people with intellectual disabilities. She was able to maintain her self-concept when she made upward comparisons because she discounted any differences and emphasised the similarities with this reference group.

*Ruby-(Vacillator/Qualifier)* Analysis using Zetlin and Turners" typology.

Under Zetlin and Turners" typology (1984) Ruby displayed characteristics of both a qualifier and a vacillator whilst she was institutionalised but, she had moved to being a qualifier since the move to the community. Whilst she was resident in the institution she was open about her disability but had a low self-image. Vacillators are

usually frustrated by their lack of achievements and rely greatly on family/ or friends and staff. In the community she was still dependent but she had transferred this to Alison. In terms of social comparison processes, Ruby was using downward comparison with the members of her social group who were more severely disabled than she was. When she made upward comparisons she did not choose members of the non-disabled population. She chose someone with superior status in her own social group (i.e.Alison).

## *Lorraine-(Vacillator)* Analysis using Zetlin and Turners' typology.

Under Zetlin and Turners' typology (1984) Lorraine was a vacillator. She pursued associations with people who were at least comparable to her and actively avoided contact with lower functioning people. She used social comparison strategies in a very similar way to Ruby. She used downward comparisons with people who were more severely disabled than herself. She avoided upward comparison with non-disabled groups and engaged in lateral comparison to people she could assimilate with. Her self-concept was not that buoyant but she was not miserable as identified by the typology.

## Agnes-(Blame Attribitor) Analysis using Zetlin and Turners' typology.

Under Zetlin and Turners' typology (1984) Agnes was a "blame attributor" and a denier. She preferred to see herself as brain damaged and a psychiatric patient rather than as intellectually disabled. She did not used downward comparison to other people with intellectual disabilities because she did not identify with this social grouping. She used lateral or upward comparison with the non-disabled population.

# Violet-(Denier) Analysis using Zetlin and Turners' typology.

Under Zetlin and Turners' typology (1984) Violet was a denier. She was able to deny the importance of her intellectual disability. The social comparison processes she used were similar to Agnes. Her selective group was the non-disabled population. However, to maintain the denial of her disabilities she had to socially isolate herself. She did not use downward comparison she protected her very low self-image by reducing the number of comparisons she made.

## **Discussion**

Only one of the participants (Alison-Acceptor) had a positive self-image before the move to living in the community. However, after the move Ruby (Qualifier), Lorraine (Vacillator), Violet (Denier) and Agnes (Blame Attributor) expressed more positive feelings about themselves. The analysis of the data, guided by Zetlin and Turner's typology, indicated that different socialisation experiences had a profound effect on the participants' attitudes to their disability and attitudes to themselves as adults. The acceptor (Alison) and the qualifier (Ruby) believed that they were capable of normalised goals (e.g. Alison and Ruby were living as normalised senior citizens in the community). These participants wanted to achieve normalised goals, such as self-sufficiency. Alison and Ruby's successful achievement of this normalised lifestyle reassured them that they were successful adults and therefore enhanced their self-concept. In comparison to this, the vacillators and deniers (Lorraine, Violet and Agnes) had greater difficulty establishing an identity and a coherent sense of self. They had tended to be more overprotected or overregulated, than Alison and Ruby, and had been offered very restricted experiences in their developmental period. This resulted in individuals who had not always achieved their potential, and as adults had not always tried to achieve normalised accomplishments, (e.g. Lorraine had a history of not achieving her goals, and Violet failed in her first attempt at competitive employment). These participants still exhibited a more vulnerable self-concept at the end of the research project.

In Zetlin and Turners' typology both the acceptors and deniers refer to normal adults for social comparison and are seen as establishing a positive reference group. The qualifier in this study was close to achieving her goal (i.e. increased self-reliance). Both qualifiers and vacillators are conceptualised as being uneasy about their status as people with a disability and one of their goals was to project a positive social image. They did this by contrasting themselves to members of the population of people with intellectual impairment who had more severe disabilities than they did. Acceptors and deniers compared themselves laterally to non-disabled people and can use affiliative effects to make coherent images of themselves. Qualifiers and

vacillators emphasize their differences. In Zetlin and Turner's typology, the use of a negative reference group does not allow for a healthy sense of self. However, this finding was not replicated by this study in that the acceptor in the present investigation (Alison) was the person with the most buoyant sense of self and the person with the poorest self-concept (Violet) was a denier.

The results also showed that the self-concpet of adults with intellectual disabilities in this study was quite depressed but that a significant change of context can lead to an increase in self-concept even for those people who have a long history of institutionalisation (e.g. Ruby changed from a vacillator to a qualifier throughout the research period).

The coping strategies that the participants had employed to deal with their attribution of disability were quite diverse. These coping strategies had allowed the women to establish some image of their own identity. As outlined by Zetlin and Turner (1984), they were then able to convert these coping strategies into reasonable adaptations in the community. For example, Ruby was still a tactical dependent but this dependency was now based on a genuine friendship. Agnes (Blame Attributor) will always claim that her disabilities were caused by head injuries from accidents at school but she no longer needs to attribute blame to those around her. Lorraine (Vacillator) had maintained her identity as a person with an intellectual disability but she was mixing with people who are, at least physically, integrated into the community. Most of these friendships and contacts were real relationships based on common background and interests and not paid carers. Thus, they could all be seen as having made successful adaptations, but they all made adaptations that were different and coherent with their previously internalised self-image.

The above results suggest that there is a relation between the social coping strategies of deinstitutionalised adults with mild intellectual disabilities, as suggested by Zetlin and Turner (1984) and the development of consistent self-images. People with strong self-images, such as Alison, chose to cope by means of strategies that have allowed her to minimise the effects of the disability. She had integrated her disability more or less comfortably into her self-concept and therefore had no need to

deny it. Conversely, Violet's (Denier) self-image was very negative but her feelings were not the result of stigma from her disability. For her, denial was possible because her intellectual disability is probably the least of her burdens. Ruby (Qualifier) had coped by acknowledging her disability and enlisting the support of powerful others to achieve her goals. She was still using tactical dependency but it was employed now in more positive ways. Lorraine (Vacillator) had enhanced her self-concept by assuming the identity of the member of a minority group. These adaptive strategies were more than just momentary responses. They reflect the person's pre-existing internalised self-concept by facilitating social interactions and gaining independence.

The patterns of social comparison that these women used were complex. Upward comparison with the non-disabled was used by both the acceptor and a denier (Alison and Violet). These patterns reflect the findings of the Finlay and Lyon's (2002) study. The upward comparison and assimilation effects were used on dimensions that emphasised the non-disability of achievements, on dimensions such as independence, socially valued goals and normalised accomplishments. Upward comparison was also used by the deniers (Violet) but they had to resort to denial of their intellectual disability to be able to protect their self-concept. Downward comparisons were used much more by the vacillators (Lorraine) and the qualifiers (Ruby), to enhance their self-concept. They did not use upward comparison and assimilative effects with the non-disabled populations. The qualifier (Ruby) used upward comparison to a higher status member of her social grouping. The vacillator used lateral comparison and assimilative effects to a similar group to herself.

The results of this study show that people with intellectual disability will try to present themselves as positively as is possible, by emphasising similarities and by not making intergroup comparisons with the non-disabled population on the dimensions of skill and intelligence but making comparisons with subgroups who are less able.

Social comparison theory has emphasised that the dimensions for comparisons are flexible (Finlay & Lyons, 2000). It is an important finding that the participants are not using the category intellectual impairment as their social category because their

assignment to this category has been a major determinant of many different aspects of their lives. The participants were also able to construct social comparisons differently, through selecting normative accomplishments which they shared with non-disabled people, through focusing on dimensions selectively and through making comparisons with people with more severe intellectual impairments than themselves.

Some of the participants in this study were able to present themselves positively by comparison with people who were non-disabled. They used dimensions, such as normative accomplishments and avoided making comparisons on dimensions such as intelligence and skills, where their group is known to be vulnerable. Other participants with poorer self-concept, used downward comparison with other people with more severe intellectual disabilities and avoided making comparisons with groups that were more advantaged than they were. Hence a variety of social comparison processes consistent with social comparison theory were utilised to protect and enhance self-concept.

### **Conclusions**

Social comparison theory gave insight into the mechanisms by which the participants had maintained their self-concept in spite of membership of a vulnerable group. Qualifiers and vacillators, as suggested by Zetlin and Turner, used downward comparison with other people who are more severely impaired than they are, thus maximising contrast effects and use lateral comparisons only to members of their own group. Acceptors and deniers used upward and lateral comparisons to non-disabled people as their reference group, but did so on selected dimensions. As such, Zetlin and Turner feel that deniers and acceptors are able to establish a more positive sense of self. This contention was not replicated by this study. The person with the highest self-concept in this study was the acceptor (Alison) but the person with the lowest self-concept was a denier (Violet). However, the qualifier (Ruby) and the vacillator (Lorraine) were the participants who used downward comparison to enhance their self-concept. Overall, the study suggested that the major use of social comparisons, whether upward, lateral or downward, was to protect the self-concept.

## **Implications of the Research**

These results suggest that self-concept enhancement programs should be designed to account for the complexity of comparison processes that people with intellectual disabilities can use to protect their self-concept. As such interventions could be developed to teach people to protect their self-images from comparisons that are overly negative. For example, if their self-concept is threatened they could be encouraged to make upward or lateral comparisons to the non-disabled population (inter-group comparisons) based on selected dimensions where they are not vulnerable. Alternatively, they could be encouraged to make downward comparisons to more severely impaired members of their groups and then be able to use contrast effects to protect their self-esteem.

#### **References:**

- Brickman, P. & Bulman, R.J. (1977). Pleasure and pain in social comparisons. In J. Sulls, R. Miller (Eds), *Social Comparison Processes*, (pp.149-186). London: John Wiley & Sons.
- Buunck, B. P., Collins, R.L. Taylor, S.E. Van Yperen, N.W. & Dakof, G.A. (1990). The affective consequences of social comparison: Either direction has its ups and downs. *Journal of Personality and Social Psychology*, *59*, 1238-1249.
- Crocker, J., & Major, B.1989) Social stigma and self-esteem: The self-protective properties of stigma. *Psychological Review*, *96*(4), 608-630.
- Crocker, J., Thompson, L. L., McGraw, K. M., & Ingerman, C. (1987). Downward comparison, prejudice, and evaluations of others: Effects of self-esteem and threat. *Journal of Personality & Social Psychology*, 52, 907-916.
- Dagnan, D., & Sandhu, S. (1999). Social comparison, self-esteem and depression in people with intellectual disability. *Journal of Intellectual Disability Research*, 43, 372-379.
- Dixon, R.M..(2004). Moving Out: The impact of deinstitutionalisation on salient affective variables, social competence and social skills of people with mild intellectual disabilities. Unpublished PhD Thesis, University of Western Sydney, Australia.
- Edgerton, R. B. (1984). The participant-observer approach to research in mental retardation. *American Journal of Mental Deficiency*, 88, 498-505.
- Edgerton, R. B. (1993). *The cloak of competence revised and updated*. Berkeley: University of California Press.
- Finlay, W. M. L., & Lyons, E. (2000). Social categorizations, social comparisons and stigma: Presentations of self in people with learning difficulties. *British Journal of Social Psychology*, *39*, 129-146.
- Gibbons, F. X. (1986). Social comparison and depression: Company's effect on misery. *Journal of Personality & Social Psychology*, *51*, 140-148.
- Haslam, S. A., Turner, J.C. (1992). Context -dependent variation in social stereotyping 2: The relationship between frame of reference, self-categorisation and accentuation. *European Journal of Social Psychology*, 22,

- 251-277.
- Jahoda, A., Markova, I., & Cattermole, M. (1988). Stigma and the self-concept of people with a mild mental handicap. *Journal of Mental Deficiency Research*, 32, 103-115.
- Leary, M. R., Tambor, E. S., Terdal, S. K., & Downs, D. L. (1995). Self-esteem as an interpersonal monitor: The sociometer hypothesis. *Journal of Personality & Social Psychology*, 68, 518-530.
- Marsh, H. W., & Craven, R. (2002). The Pivotal Role of Frames of Reference in Academic Self-concept Formation: The Big Fish Little Pond Effect. In F. Pajares & T. Urdan (Eds), *Adolescence and Education*, (Volume II pp. 83-123). Greenwich CT: Information Age Publishing:,.
- Spradley, J. P. (1979). *The ethnographic interview*. Fort Worth: Harcourt, Brace, Jovanovich College Publishers.
- Steil, J. M., & Hay, J. L. (1997). Social comparison in the workplace: A study of 60 dual-career couples. *Personality & Social Psychology Bulletin*, 23, 427-438. Stokes & Sinason, 1992;
- Suls, J., Wheeler, L. (2000). *Handbook of Social Comparison: Theory and Research*. New York: Kluwer Academic/ Plenum Publisher.
- Szivos-Bach, S. E. (1993). Social comparisons, stigma and mainstreaming: The self esteem of young adults with a mild mental handicap. *Mental Handicap Research*, *6*, 217-236.
- Tracey, D.K. (2002). Self-concepts of preadolescents with mild intellectual disability: multidimensionality, measurement and support for the Big-Fish-Little-Pond-Effect. Unpublished PhD Thesis, University of Western Sydney, Australia.
- Wills, T. A. (1981). Downward comparison principles in social psychology. *Psychological Bulletin*, *90*, 245-271.
- Zetlin A.G. & Turner, J. (1984). Self perspectives on being handicapped: Stigma and adjustment. In R. B. Edgerton (Ed), *Lives in Process: mild retarded adults in a large city*, (pp.93-120). Washington DC: American Association on Mental Deficiency.