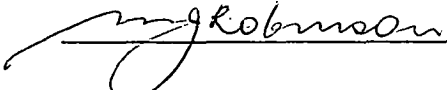# Factors Affecting Peer Acceptance of Children with Disabilities in Regular Schools

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**A report submitted in partial requirement for the degree of**

**Master of Psychology (Ed.) at the**

**University of Tasmania, 2004**

# Statement

*I declare that this thesis is my own work and that, to the best of my knowledge and*

*belief, it does not contain material from published sources without proper*

*acknowledgement, nor does it contain material which has been accepted for the*

*award of any other higher degree or graduate diploma in any university.*

(Meegan Jane Robinson)

# Acknowledgements

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# Literature Review

**Factors affecting Peer Acceptance of Children with Disabilities in Regular Schools**

# Abstract

One of the major changes in education in recent decades has been the shift away from segregated school settings, to including children with disabilities in regular school settings. This process, variously known as mainstreaming, integration or inclusion, has been evident in the United States, Britain and Australia. This review addresses some of the social aspects of inclusion, notably peer acceptance of these children in regular settings and the factors that may contribute to the likelihood of acceptance. The major impetus for inclusion was the idea that children with disabilities would benefit socially from regular school settings. However, a large body of research definitively claims that children with disabilities, who are educated in regular settings, are less accepted by their non-disabled peers. Furthermore, numerous studies have revealed that certain factors appear to determine peer acceptance of children with disabilities: for example, individual characteristics of the child, peer perceptions, teacher perceptions attitude or style, and classroom environment. There has been no research to date that has considered the degree to which each factor contributes to peer acceptance. Nor has there been an attempt to relate theories of interpersonal attraction, social exchange and social identity to an understanding of peer acceptance for children with disabilities. In conclusion, future research ought to focus on the factor(s) that make the greatest contribution to peer acceptance for these children, and consider how theories may assist in understanding why children with disabilities are not well accepted by peers. In doing so, it is more likely that any practical interventions for these children will be appropriate and successful.

## Introduction

There appears to be little debate about the philosophical underpinnings of legislation and policies associated with inclusion. However, consensus about the effectiveness of inclusion for children with disabilities remains a highly contentious issue (Center & Ward, 1987). The purpose of this review is four-fold. First, the review aims to consider the growing trend towards inclusion over the last 20-30 years and how this has impacted on the education of children with disabilities. The philosophical principles, legislation and policy associated with inclusion will be noted. The second aim is to examine some of the research concerning peer acceptance of children with disabilities in regular settings. The third aim is to consider the links between research outcomes and some of the well-known theories of interpersonal attraction, social identity and social exchange. Finally, relevant areas for future research are discussed. It is concluded that research needs to consider the contribution of a range of factors in predicting the likelihood of peer acceptance. Also, research ought to explore how a theoretical understanding of interpersonal attraction and social identity may assist in an understanding of empirical findings as to why children with disabilities are less likely to be accepted by their non-disabled peers. Such research would provide a sound basis for the later development of appropriate practical interventions aimed at enhancing acceptance for children with disabilities.

## The Concepts of Inclusion, Integration and Mainstreaming

The term inclusion is one of several terms that have been adopted to represent the changes in educational practice for children with disabilities in recent times. Other

terms are integration and mainstreaming. Integration is a broad term that refers to a child with a disability attending a regular school. It also refers to "the process of transferring a student to a less segregated setting" (Foreman, 2001, p. 16). The term also applies to students who are enrolled in a regular school, but participate in a special unit or class within the school. Ideally, the child with a disability who is integrated has a greater opportunity to interact with other children in the general school community than they would have in a segregated setting. Mainstreaming refers to the process whereby children are enrolled in or participate in a regular class. In other words, they are involved in the mainstream of education but this may not necessarily be for the entire school day. Integration and mainstreaming are often viewed as synonymous (Ashman & Elkins, 1998). The term inclusion or inclusive education has become increasingly popular in Australia. This concept although leading to integration and mainstreaming, has a somewhat different philosophical base. Inclusion implies that all children have a right to attend their local neighbourhood (regular) school and that schools have a responsibility to provide for all children regardless of difference (Foreman).

All three concepts refer in a broad sense to the growing trend away from segregation and towards educating children with disabilities in regular classroom settings. For the purpose of this review, the term inclusion will be given preference, as this is the predominant term used in Australia. In addition to this, the term "children with disabilities" a current phrase used in Australia will be used and this term will represent disabilities of an intellectual, physical, sensory or medical nature. In Britain and the United States the terms: "educable mentally retarded," "handicapped" and "mentally retarded" have been predominantly used and these are largely synonymous

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with the current Australian term "intellectual disability." However, in this review, whatever term is used in a particular study will be maintained, in order to respect the authenticity of the research. It is important to note that some of these terms may now be outdated or inappropriate to the Australian context.

**An Historical Overview**

Educational provision for children with disabilities was segregated in the early years of colonisation in Australia. Henderson (1988) states that Australia and the United States shared a similar history with respect to special education. In the beginning, residential schools were established for children with sensory impairments and these schools were often under the patronage of specific charities or religious organisations. Then, during the early 1900s, with the advancement in psychological instrumentation, more children were categorised into distinct educational groups. This fact, combined with the introduction of compulsory education in Australia at the turn of the twentieth century, resulted in the establishment of special schools, mainly for those children with sensory impairments or mild intellectual disabilities. It was thought that children with moderate or severe intellectual disabilities were not able to be educated and consequently they remained in residential institutions.

Around the time of World War II, many parents of the children with moderate or severe intellectual disabilities were dissatisfied with the exclusion of their children from regular schools. Also, the return of servicemen who had acquired disabilities whilst at war resulted in an increased demand for community-based provisions for people with disabilities. Thus, these parents organised self-help groups and began establishing day

schools with the help of volunteers. Many of these schools in both Australia and the United States are now part of the public school system.

In the 1950s and 1960s there was increased debate and dissatisfaction with the quality of service provision for children with disabilities. This became the subject of a number of litigation cases in the United States initiated by various parents and advocacy groups. In the 1960s, both educators and researchers were inclined to believe that special education was becoming a 'dumping ground' for those children who did not work well in regular classrooms. As a result, there was an increasing demand for the education of children with disabilities in regular school settings where they had the advantage of interacting with their non-disabled peers. By the 1970s, state governments in Australia were assuming responsibility for children with severe intellectual disabilities (Ashman & Elkins, 1998).

## Philosophical Principles

One of the key philosophical principles underlying the argument for inclusion was social justice. This concept focuses on the position and life experiences of individuals and concerns " . . . liberty, entitlements and the reduction of inequality..." (Christensen & Dorn, 1997 cited in Foreman, 2001 p. 36). With respect to children with disabilities, social justice is about maintaining equity and ensuring that these children have the same entitlements to education and participation in society. Social justice means that children with disabilities are seen to be a part of the total student body, which is made up of a range of abilities and variations in educational need. As Christensen (1992, cited in Foreman, 2001) states:

"Rather than a few students being seen to have 'special' needs, schools
must regard all students' needs . . . [and become] institutions which celebrate
rather than eliminate human difference" (p. 37).

A further aspect of social justice influencing the desegregation of special
education was normalisation, a principle that was first applied to services for people
with disabilities. Wolfensberger (1972) coined the term normalisation and defined it as:

"Utilization of means which are culturally normative in order
to establish, and/or maintain personal behaviours and characteristics
which are as culturally normative as possible" (p. 28).

Normalisation is about the basic entitlement of people with disabilities to lifestyle and
cultural choices that are afforded to the majority of people. The principle suggests that
children with disabilities have the right to access and participate in (as fully as possible)
an education at their local neighbourhood school. In doing so, the child has the
opportunity to develop normative behaviours.

In 1995, Wolfensberger reinterpreted the principle of normalisation and changed
the term to 'social role valorisation' which proposes that each person in the community
assumes a social role, for example, mother, daughter, worker, tenant and each of these
roles has an assigned value. However, Wolfensberger stated that people with disabilities
often did not fulfill a meaningful social role in society nor did they often occupy social
roles that were valued by society. Indeed, in some cases their roles were devalued. In
relation to education, social role valorisation suggests that children with disabilities need
to be perceived as valued members who occupy social roles within the school
community.

**International Legislation**

One of the first significant international documents concerning the education of

children with disabilities was the Salamanca Statement (UNESCO, 1994). This

document detailed principles, policy and practice with respect to special education and

was agreed upon by 92 governments and 25 international organisations. According to

the Salamanca Statement, schools should accommodate all children; all children have

the right to an education and the opportunity to achieve; each child has unique learning

characteristics and must have access to regular schools; and education systems should

take into account the wide diversity of children's needs (Ainscow, 1999). The

Salamanca Statement was influenced by key legislation that had been passed in the

United States of America and Britain almost two decades earlier.

**Legislation in the United States of America**

In 1975, landmark legislation in the United States regarding the education of

children with disabilities was passed. It was called the Education for All Handicapped

Children Act (PL 94-142), which was later modified to the Individuals with Disabilities

Education Act (IDEA) in 1990. The goal of this legislation was to:

"ensure educational equity and eliminate . . . chronic exclusion

experienced by children with disabilities" (Kavale, 2002 p. 201).

IDEA specified that funding to school systems would be based on the provision of an

appropriate and free educational service to all students (aged 3-21 years), regardless of

their disability type or their learning needs. The legislation mandated that financial

assistance would be given to schools to meet the needs of educating children with disabilities.

One of the key features of IDEA was the concept of least restrictive environment. This concept suggests that in order for children to develop skills to function later in the wider community, they need to experience as much time as they can in the environment which has the least restrictions on their opportunities. Consequently, the regular setting was seen as the preferred option for children with disabilities (Ashman & Elkins, 1998). IDEA was not based on empirical studies revealing that segregated special education was an inferior provision, but rather was driven by a belief in the principles of human rights, equity and social justice for all people, including those with disabilities. IDEA resulted in similar changes in countries such as Britain and Australia.

**Legislation in Great Britain**

In response to IDEA, Great Britain produced several pieces of legislation, although less prescriptive than that which was produced in the United States. The Warnock Report (1978) was a significant document because it involved a thorough review of special education across the country and served as the impetus for subsequent legislative change. The report espoused the education of all children in ordinary schools whenever possible. Later, the Education Act (1981) translated into law many of the recommendations from the Warnock Report, with a major focus on appropriate education for all children, especially those with special needs. Under British legislation,

greater responsibility was given to professionals for making educational decisions, and parents had less legal power over decision-making.

More recently, the Education Reform Act (1988) recognised access to the national curriculum for all students. The 1993 Education Act specified that schools have a responsibility to integrate children with disabilities into regular schools. However, the implementation of such legislation rested with local education authorities and therefore, variations in educational provision for children with disabilities occurred across the country.

**Legislation in Australia**

In Australia, the most significant pieces of legislation in relation to the education of children with disabilities in regular schools were the Disability Services Act (1986) and the Disability Discrimination Act (1994). The Disability Services Act was a direct result of a review of services to disabled groups in 1985, which criticised services for people with disabilities as being limited, institutionally based and non-accountable. The Disability Discrimination Act made it unlawful to discriminate against any person on the basis of disability in a range of areas, including education. In other words, schools were expected to offer the same educational opportunities to all students, and it was unlawful for schools to refuse an enrolment or offer a reduced enrolment because a child had a disability. In addition to this, children could not be excluded or expelled on the basis of their disability; and schools had to ensure that adequate measures were taken to protect children with disabilities from harassment, both direct and indirect (Disability Discrimination Act).

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In response to this legislation, Australian states and territories have each developed their own policies concerning the educational services offered to children with disabilities. The most notable policies in Tasmania are the Equity in Schooling Policy (1995a) and the Inclusion of Students with Disabilities Policy (1995b). The Inclusion Policy was designed to link the rationale and principles of the Equity in Schooling Policy to the implementation of strategies aimed at enhancing educational opportunities for children with disabilities. The policy states that placement in a regular school is the preferred educational option in Tasmania, and children with disabilities should be educated with their same-aged peers but also be provided with curriculum support to meet their individual needs.

**Social Inclusion of Children with Disabilities**

On the basis of the previous discussion, it is apparent that the shift towards educating children with disabilities in regular school settings is a result of a combination of social beliefs in key philosophical principles, international and national legislative mandates, and government policy. There has been a growing realisation that individuals with disabilities have the right to fully participate in regular schooling. This belief, as well as the growing disillusionment with segregated settings, has resulted in a focus on the proposed benefits of regular settings.

The benefits focused on academic, but also social gains for children with disabilities. In 1968, Dunn (cited in Jenkinson, 1987) reviewed a large body of research. This research suggested that when children with an intellectual disability were placed in special classes, they did not achieve at a higher academic level than did children of

comparable ability placed in regular classes. In relation to social benefits, it was argued that day-to-day contact between children with a disability and their non-disabled peers would result in a greater understanding of the child with the disability, thus removing misunderstanding and stigma, and encouraging a more favourable attitude towards disability generally (Jenkinson).

Furthermore, it was argued that frequent contact with non-disabled peers would allow for the modelling of appropriate social behaviour and in turn, an enhancement of the social status of children with disabilities (Roberts & Zubrick, 1992). This idea is often termed the "contact hypothesis" (Allport, 1954). However, Gresham (1986) notes that a considerable body of research has indicated that simply placing children with disabilities in regular classrooms, presupposing that this will result in an increase in contact between the two groups, does not result in increased interaction nor necessarily increased acceptance of children with disabilities by their non-disabled peers.

**Research into Peer Acceptance of Children with Disabilities**

Despite the enthusiastic move towards inclusive education in recent times and educators advocating its potential academic and social benefits, research does not consistently indicate that children with disabilities are well accepted by their peers in regular classroom settings. Indeed, a large number of studies in fact conclude that in regular settings these children are significantly less well accepted by their non-disabled peers. What follows are some examples of research examining the peer acceptance of children with different types of disability.

## Intellectual Disability

Since the 1950s, studies have indicated that children with intellectual disabilities experience a lower level of peer acceptance than their non-disabled classmates. Research by both Lapp (1957) and Miller (1956) suggested that in regular classes, educable mentally retarded children were not as well accepted by their peers. Lapp concluded that these children presented as passive rather than active and peers tolerated them, but did not actively seek them out for contact. Miller commented that peers were mildly accepting of educable mentally retarded children but more accepting of those children with average and superior intelligence.

Almost two decades on from these early studies, Goodman, Gottlieb and Harrison (1972) found that educable mentally retarded children were less accepted than non-disabled children. Van Osdol and Johnson (1973) found that acceptance was lower for children with an IQ of 45-65 compared to children with an IQ of 66-80. Iano et al. (1974) and later Gottlieb (1981) again confirmed earlier findings that educable mentally retarded children were less accepted than their non-disabled peers.

In a review of 40 studies examining children with an intellectual disability, Gresham (1982) concluded that handicapped children were less accepted than their non-handicapped peers. Two further trends in the research were noted by Gresham: handicapped children interacted less with non-handicapped children, compared to their peers in segregated settings; and the children did not tend to model the behaviours of their non-handicapped peers as a result of increased exposure to them. It is important to note that in several of the above studies, handicapped children were not participating in regular classes for the entire school day.

In contrast, a number of studies during the past two decades have found that children with more severe intellectual disabilities are well accepted by their peers. For example, Mitchell (1981) examined students with a moderate intellectual disability who were attending an intermediate level school in New Zealand where students were segregated academically but interacted during breaks and non-academic activities. The author noted that attitudes towards students with moderate intellectual disabilities were very favourable. Jenkinson (1982 cited in Jenkinson, 1987), in Australian studies found that acceptance by non-disabled peers of children with moderate intellectual disabilities in regular classes was negatively related to competence, especially with respect to language skills. Thus, the children with poor language skills were more likely to be accepted by their peers. The author concluded from this that the child with the disability is accepted because their peers perceive their need for positive support, not because they perceive them as companions or equals.

Similarly, Kemp and Carter (2002), also in Australia, found that children with moderate intellectual disabilities received a high level of peer acceptance and that there was no difference between the target students and their teacher-nominated peers with respect to mean ratings for social status. The authors concluded that perhaps because the disability is more severe, and it is more obvious to others, "acceptance is higher and inappropriate behaviour excused" (p. 408).

Hearing Impairment

There have been few studies of peer acceptance for children with hearing impairments. Early research by Elser (1959, cited in Cameron, 1979) and Force (1956, cited in Cameron, 1979) found that these children's social status was significantly lower

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than their non-disabled peers. Cameron (1979) found that sociometric ratings of hearing impaired children were lower than for non-disabled children. These children were also chosen less frequently as companions.

In contrast, Kennedy and Bruininks (1974) examined peer status of four children with mild-moderate hearing impairments and 11 children with severe to profound hearing impairments. They found no significant difference in social acceptance of these children compared to their hearing peers. A further finding was that children with severe to profound impairments were more accepted that those with a mild hearing loss and indeed four of the fifteen children were amongst the most popular in the classroom. This finding is consistent with the conclusions reached in the above studies by Kemp and Carter (2002), and Jenkinson (1983) in relation to children with an intellectual disability. A similar mechanism for a perceived need for support may be operating for children with profound hearing loss also.

Visual Impairment

There has been limited research examining peer acceptance of children with visual impairments. Early studies by Force (1956) and Havill (1970) using peer nomination assessment revealed that children with visual impairments of various ages, achieved a lower sociometric status than their sighted peers in regular classes. Bateman (1962) examined factors affecting peer perceptions of children with visual impairments. Results revealed that peers who had more experience with children who had visual impairments displayed a tendency to appraise them positively. Marten and Hoben (1977) concluded that the factors affecting acceptance of these children appear to be no different from the factors for sighted children. Furthermore, Jamieson et al. (1977)

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suggest that successful integration of visually impaired students is influenced most by personal characteristics of the child, such as intelligence, confidence, sociability and independence.

Physical Disability

In contrast to studies of children with hearing and visual impairments, there have been a number of studies examining the acceptance of children with physical disabilities. Low (1981) completed a study of children with spina bifida and found that these children were less accepted by their peers and interacted less with others. The author proposes that this may be attributable to limited mobility and long periods of hospitalisation. Similarly, Anderson (1973) found that there was a difference between children with a physical disability and children with not only a physical disability but also a neurological abnormality, such as hydrocephalus. The latter group received a significantly lower sociometric status whereas the children with a physical disability and no neurological impairment were still less accepted than non-disabled peers but this difference was not significant. Anderson argues that often children with a physical disability are at a disadvantage because their potential to interact with others is affected by factors such as immobility and incontinence.

Tin and Teasdale (1985) completed a study of children with spina bifida in South Australia, but excluded children with low average academic ability to determine whether average academic ability positively affects peer acceptance. These researchers found that peers initiated fewer interactions with children who had disabilities. The authors concluded that this result suggested lower levels of acceptance for the children with spina bifida.

Finally, Center (1981) in another Australian study examined factors affecting peer acceptance of children with mild cerebral palsy and average intelligence who attended regular schools. Findings indicated that there was consistency across both teacher and peer ratings, and these children received a lower sociometric status by their peers compared to non-disabled children. The factors most associated with acceptance related to individual characteristics of the child and family, such as high self-esteem of the child and parental attitudes of acceptance and tolerance. Center also suggested an interaction between these factors, in that if a child has above average intelligence this would compensate for a severe handicap and assist in maintaining a high self-esteem, thus promoting peer acceptance.

In summary, from the large body of research completed there are some studies, albeit few, indicating that children with more severe disabilities tend to have higher rates of acceptance. However, the majority of studies have indicated that children with disabilities are not as accepted by their non-disabled peers. As a result, the validity of the "contact hypothesis" is questionable and purposeful planning and intervention may be required in order to ensure that children with disabilities gain social as well as educational benefits from inclusion in regular school settings. This intervention is particularly important, as children with disabilities may be at greater risk of lower acceptance from peers because they already have developmental and adjustment challenges due to their disability.

Also, research has highlighted that children who are not well accepted by their peers may be predisposed to emotional and mental health problems in later life (Roff, Sells & Golden, 1972; Amidon & Hoffman, 1965; Miller & Ingham, 1976 cited in

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Putallaz, 1983). The review of studies has also highlighted that individual characteristics of the child appear to affect peer acceptance of children with disabilities when they attend school in a regular setting. Therefore, it would seem logical that an understanding of the factors that may influence, or indeed predict peer acceptance ought to precede the development of purposeful interventions aimed at enhancing peer acceptance for children with disabilities (Gresham, 1986).

**Factors Influencing Peer Acceptance of Children with Disabilities**

Much of the research has focused on differences in social status of children with disabilities compared to their non-disabled peers when placed in regular school settings (Garrett, 1979). However, it has been suggested that research needs to move beyond these differences and begin addressing the factors contributing to these differences in peer acceptance (Larivee & Horne, 1991; Garrett, 1979). As the abovementioned studies indicate, individual child characteristics such as intelligence, severity of the disability and high self-esteem appear to influence peer acceptance for children with disabilities. But, as Hayes and Livingstone (1986) note, there are likely to be a number of individual and other factors that might influence the social outcomes for these children, such as the attitudes, values and behaviours of peers, teachers and community members and factors associated with the school setting. The authors also suggest that social outcomes may depend on the interplay of these factors rather than simply just one variable. This review will now focus on some of the major studies that have highlighted the influence of various factors on peer acceptance for children with disabilities.

## Individual Characteristics

A number of studies have examined the degree to which the individual characteristics of children with disabilities influence the attitudes of peers towards these children. Jenkinson (1983) used parent, teacher and peer ratings to investigate the influence of competence and behaviour on the acceptance of mentally retarded children. Results revealed that high sociometric status correlated significantly with low levels of competence, particularly on the subscales of initiative-responsibility and language. The behaviours of the mentally retarded children appeared to have little influence on overall levels of sociometric status. Jenkinson concluded that the competence of these children was a key factor and peers were more likely to be supportive if the children were perceived as lacking competence in the areas of social interaction and communication.

Siperstein and Bak (1985) concluded that children's attitudes were a function of individual social competence. The authors found that non-disabled children responded favourably towards retarded children who displayed social competence and least favourably towards retarded children who displayed aggressive behaviours. It was concluded that the presence of prosocial behaviours had a positive and mediating influence on the attitudes of peers towards children with disabilities. Similarly, Gresham (1982) reviewed a number of studies and concluded that peer acceptance was low because handicapped children engaged in antisocial behaviours and displayed a lack of appropriate interactional skills.

Other studies examining children in the normal population have also found a predominant role for social competence in peer acceptance. For example, Dodge (1983) examined peer status of children without disabilities and found that boys who were

rejected displayed both inappropriate social interaction and anti-social behaviour. Consistent with Dodge's (1983) findings, Coie and Kupersmidt (1983) found that rejected boys displayed high rates of inappropriate and antisocial behaviour in comparison with popular boys who displayed high rates of active social interactive behaviour.

A number of other studies have concluded that the individual characteristics of the child with the disability do not influence or predict peer acceptance. For example, Roberts et al. (1991) examined the behaviours and interactional patterns of children with mild intellectual disabilities and found that there was little difference between this group and the group of children without disabilities. For example, both groups presented with low levels of negative, disruptive behaviour. However, differences were found in the frequency of interactions and of play. The authors suggest that the children with disabilities, although not entirely isolated or rejected, were more typical of children Dodge (1983) would label as neglected.

Similarly, Evans et al. (1992) examined the social status of children with severe physical disabilities and found that acceptance was not related to social competence and there was no significant correlation between the number of interactions initiated by children with disabilities and their level of acceptance. Results indicated that whilst some of the children were perceived by their peers as popular, others were not nominated positively by their peers at all. The authors concluded that social acceptance of children with disabilities is not solely associated with their characteristics as individuals and perhaps the values and perceptions of their peers play a significant role in determining peer acceptance.

Peer Factors

Evans et al. (1992) suggest that the social status of children with disabilities may be largely affected by the values and standards held by their non-disabled peers. The authors found that some of the children with quite a significant disability were viewed as popular by their peers, which they suggest might mean that children with very obvious disabilities are judged differently. For example, peers who reported not even playing with these children still described them as "friends." In addition, the authors suggest that perhaps some peers believe that it is socially unacceptable to interact in a negative way towards children with severe disabilities. These findings suggest that acceptance of children with disabilities may be largely determined by the values and perceptions of non-disabled peers.

Earlier research by Gottlieb et al. (1978), examined how peer perceptions of social and academic incompetence influence acceptance. Results revealed that educable mentally retarded children's social acceptance was associated with perceptions of academic incompetence, and social rejection was associated with perceived misbehaviour. This finding was consistent with teacher ratings also. Although the amount of variance accounted for was low, Gottlieb et al. concluded that both peer and teacher perceptions of social behaviour and academic competence were predictors of educable mentally retarded children's social status. Coie and Dodge (1988) who examined non-disabled children, report similar findings to those of Gottlieb et al. They collected behavioural data on peer social status from teachers, peers and other observers and found that rejected status was associated with limited prosocial behaviour, as

perceived by both peers and teachers, and popular or accepted status was associated with socially skillful and cooperative behaviour.

Finally, Kaufman et al. (1985) in a study known as Project PRIME (Programmed Re-entry into Mainstreamed Education), investigated the impact of a range of factors on the social status, social attitudes and social behaviour of children with disabilities in classes with non-disabled peers. Among the findings, the authors noted that peer cohesiveness in the classroom had a significant impact on the social status of children with disabilities. In other words, a low level of dislike among non-disabled peers was associated with highest social status of children with disabilities.

Teacher Factors

Other studies have focused on the influence of teacher perceptions. As mentioned earlier, Gottlieb et al. (1978) found that educable mentally retarded children's social acceptance was associated with teachers' perceptions of academic incompetence and social rejection was associated with perceived misbehaviour. Similarly, MacMillan and Morrison (1980) found that the factor accounting for most of the variance in both acceptance and rejection of children with disabilities was teacher perceptions of competence and misbehaviour.

In relation to teacher-child interactions, Larivee (1985) reported a negative relationship between teacher criticism and peer acceptance. In addition, the author noted a significant positive correlation between peer acceptance and the teacher asking another helping question to children who supplied incorrect answers. This appears to indicate the significance of teacher modelling and expectations. When teachers do not hold high expectations but are prepared to provide help to children with disabilities, these children

are more likely to succeed. Furthermore, in this situation the peers also display greater tolerance towards the child with the disability. Also, an association was found between teacher transition time (i.e. unstructured time) and low peer acceptance. One suggestion by the author is that unstructured time raises anxiety levels in children with disabilities, which leads to the display of inappropriate behaviours that, in turn, affects peer perceptions and acceptance.

Morrison, Forness and MacMillan (1983) explored the extent to which teacher perceptions and peer perceptions had a mediating influence on sociometric status of educable mentally retarded children. Results of a path analysis revealed that the actual behaviour and achievement of educable mentally retarded children is first influenced by teachers' perceptions which in turn influences peers' perceptions. The authors concluded that teachers are a most significant information source for children when they evaluate their peers. Consequently, it would seem that teachers have a great responsibility in monitoring the perceptions they may inadvertently communicate to children through their behaviour.

Classroom Factors

Horne (1985) proposes that there are other classroom variables that seem to impact on peer acceptance, such as classroom management and teacher-child interactions. For example, Larivee (1985) reported a significant correlation between peer acceptance of mainstreamed children and the amount of academic learning time. In other words, when teachers ensured that mainstreamed children completed tasks appropriate to their level of ability, it was more likely that peer acceptance would be high. There was also a significant relationship between academic learning time and the

behaviours of mainstreamed children. Larivee concluded that the greater the academic learning time, the less inattentive-withdrawn and external blame behaviours and the lower the achievement anxiety in these children.

Also in relation to classroom management, Fox (1989) found that pairing mainstreamed children on a weekly basis with their non-handicapped peers for the purposes of discussing mutual interests over a period of four weeks resulted in increased social acceptance ratings of mainstreamed children. Ballard et al. (1977) reported similar results for children when they worked in small cooperative groups with four to six non-disabled peers over an eight-week period.

Finally, Kaufman et al. (1985) examined the impact of a number of different classroom environments and learner background characteristics on the social status, social behaviour and social attitudes of mainstreamed and non-mainstreamed students. The authors defined socioemotional climate as the group dynamics operating between teacher and students and between the students themselves. The socioemotional climate was examined in relation to variations in peer cohesiveness and teacher leadership – warmth, influence and directiveness. The findings indicated that socioemotional climate was the most significant predictor of social status for all children – mainstreamed, non-mainstreamed and non-disabled. In classrooms where peer cohesiveness was high (a low level of dislike among non-handicapped peers) a warm, harmonious climate existed and the mainstreamed child was more likely to be accepted by their non-disabled peers. Furthermore, when classrooms were harmonious, friendly/cooperative behaviours were enhanced which resulted in higher levels of acceptance among classmates.

In relation to teacher directiveness, spending time in one large, teacher-directed group enhanced the social acceptance of mainstreamed children, compared with time spent in small self-directed groups. Kaufman et al. (1985) hypothesised that this management approach minimised the frequency of hostile, problematic incidents between students which, if occurring, may lead to the increased likelihood of rejection. The authors defined teacher-directed classrooms as those where the teacher has a greater degree of control over students and tends to initiate and direct student responses. Kaufman et al. concluded that the same classroom conditions that enhance academic performance, a well-ordered, teacher-controlled classroom, also enhance social status.

**Criticism of Research**

Much of the previous research has identified what appear to be key factors influencing peer acceptance of children with disabilities: individual characteristics, peer perceptions, teacher perceptions attitude and style as well as environmental factors. The research of Morrison, Forness and MacMillan (1983) and Kaufman et al. (1985) examined the influence of one or more factors. However, one of the major limitations of previous research is that there has been no attempt to determine how much variance in peer acceptance can be attributed to the various factors. Without this knowledge, it is difficult to determine the type of intervention that is most likely to enhance the social status of children with disabilities.

A further limitation of previous research is that it is empirically driven with very few attempts to apply theory to research. There has been no attempt to link the long established theories of interpersonal attraction and social identity to empirical research

into peer acceptance. If this were to occur, it might be possible to establish an explanation for why certain factors appear to influence or predict peer acceptance over others. For example, Social Identity Theory and Balance Theory focus on the importance of similarity or group-based factors in the development of social identity and interpersonal attraction. So, if research were to establish that the most important factor predicting peer acceptance was perceptions of group differences, or group-based factors, these theories may provide valuable explanations with regard to the possible processes involved in peer acceptance.

Also, the Reinforcement/Social Exchange Theories suggest that people decide whether they will enter into a relationship with someone based on the perceived costs and benefits. So, if research were to establish that the most important predictor of peer acceptance was peer perceptions or teacher perceptions, then this theory may provide appropriate explanatory value. As research has indicated, it may be the case that teachers' perceptions and the consequent behaviours they model, indirectly influence the cost-benefit analysis completed by children and thus influence peer perceptions of children with disabilities. This review will now provide a brief description of each theory.

**Tajfel and Turner's (1979) Social Identity Theory**

Tajfel and Turner's (1979) theory of social identity proposes that group membership occurs when an individual perceives themselves and are perceived by others as being a member of the group, and all its members perceive that they belong to the same social category. This process of social categorisation provides a degree of

social identity for group members and assists in establishing an individual's place in society. Social categorisation is based on such characteristics as race, nationality, gender or religion.

Tajfel and Turner (1979) note that social categories do not exist in isolation; they are only as meaningful as their contrasting category. For example, the category of Australian is only meaningful because it can be contrasted with other categories such as Vietnamese or Italian. Tajfel and Turner's theory also proposes that social categorisation and group membership have a direct impact on an individual's self-esteem. Membership of a dominant social group can elevate self-esteem, whilst membership of a subordinate group can lower self-esteem. The authors argue that groups strive to maintain a positive social identity and this is primarily achieved by making comparisons between their own in-group and relevant out-groups. These comparisons maximise the distinctions between groups and if favourable comparisons can be made, high self-esteem and positive social identity are maintained.

In terms of Tajfel and Turner's (1979) model, if comparisons are unfavourable and the group cannot positively distinguish themselves from another, then individuals will leave their in-group and seek out another more positively distinct group and/or attempt to change their in-group so that it is more positively distinct from out-groups. This theory may contribute an understanding of the influence of group-based factors on the acceptance of children with disabilities. In other words, the children with disabilities may constitute a category of their own because non-disabled peers deem these children to be out-group members. By drawing this distinction, the non-disabled peers strengthen

their membership with the in-group and further reinforce their own positive social identity.

**Heider's (1958) Balance Theory**

Heider's (1958) Balance theory focuses on the concept of interpersonal attraction and group membership. This theory proposes that a process of cognitive consistency determines interpersonal attraction. In other words, an individual strives for a balance between their personal beliefs and their feelings of attraction, which often results in them associating with similar people and developing a sense of belonging. For example, if an individual holds a certain attitude with which someone else disagrees, a state of imbalance occurs. This state is uncomfortable for the individual and as a consequence, they either change their attitude or change their feelings toward the other person. Similarities are based on both physical attributes such as appearance, as well as personal attributes such as interests or beliefs.

In 1961, Newcomb modified Heider's (1958) theory to take into account negative interpersonal relationships. Newcomb (1961) suggested that when a group perceives a negative relationship between two group members, cognitive imbalance occurs and the group then strives to restore balance. One means by which they may do this is to engage in attitude changes that, in turn, strengthen the similarity between group members. Somewhat similar to Tajfel and Turner's (1979) social identity theory, Heider's (1958) theory also may contribute an understanding of the influence of group-based factors on acceptance. In other words non-disabled peers may perceive themselves as dissimilar from children with disabilities, which reduces interpersonal

attraction, and further reinforces the similarities they have with others in their own in-group.

**Social Exchange/Reinforcement Theories: Homans (1950), Thibaut & Kelley (1959)**

The Reinforcement theorists propose that interpersonal relationships are determined by an individual's perception of reinforcement or social pay-off from the group. Homans' (1950) theory of social exchange proposes that individuals invest social effort into a group because they expect to receive interpersonal profits and that these profits will outweigh the personal costs associated with group membership. If this is indeed the case, their membership is strengthened. In turn, by associating with a valued group or group member, the individual's social value is enhanced. Thus, according to Homans, interpersonal attraction is based on a cognitive process of completing a cost-benefit analysis and assessing the overall value of membership in the group. If the individual perceives personal gains from group membership, interpersonal attraction is enhanced. However, if the individual perceives harmful effects from group membership, attraction is decreased.

Thibaut and Kelley (1959) propose that personal gains can be based on perceived similarities with the person (e. g. "We both like . . .") or perceived differences (e. g. "She is able to pick you up when you feel down . . .") and that a person must not only be *able* to provide personal gains but they must also be *willing* to do so. Also, an individual's behaviour can contribute to costs in that if a person believes that an individual will have little potential to reward them, they will perceive this as a potential cost. Therefore, reinforcement theories may contribute an understanding of the

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influence of peer perceptions of an individual's behavioural characteristics on acceptance of children with disabilities, but also the impact teachers may have on peer acceptance of children with disabilities. In their role as a model and reinforcer of appropriate behaviour they may inadvertently have a significant impact on the cost-benefit analysis completed by other children about the child with the disability.

**Future Research Directions**

Previous research has emphatically confirmed that children with disabilities who are placed in regular school settings are less likely to be accepted than their non-disabled peers. Research has also highlighted that a lack of acceptance by peers can have long-term implications for the mental and emotional health of a child. It is important that studies move beyond establishing that children with disabilities are less likely to be accepted.

Although research suggests that the individual characteristics of the child, peer and teacher perceptions and classroom factors influence peer acceptance for children with disabilities, there is no research to date that has considered the influence of these factors together, on peer acceptance. Nor has research explored the relative contribution of each factor or indeed, if there is one factor that most strongly predicts the likelihood of acceptance. This is undoubtedly a fundamental area for future research. Such research would inform educators about how to best provide for the educational and social needs of children with disabilities.

In addition, most of the research into peer acceptance has been empirically based, and no attempt has been made to relate empirical findings to a theoretical

understanding of the processes involved in interpersonal attraction or social identity. Future research ought to consider how such theories may further an understanding as to why children with disabilities are less accepted than their non-disabled peers. This research would provide a sound basis for the development of appropriate practical interventions to enhance the acceptance of children with disabilities in regular school settings.

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# Empirical Study

## Factors Affecting Peer Acceptance of Children with Disabilities in Regular Schools

# Abstract

The primary aim of this study was to explore the relative contribution of a range of factors to the prediction of social status for children with disabilities and their non-disabled peers in regular classroom settings. The factors under examination were peer perceptions of the individual behavioural characteristics of the child, peer cohesiveness, teacher management strategies and style, classroom climate and disability status. An attempt was made to link some of these factors to theories of social attraction and social identity. A second aim of this study was to establish whether the individual characteristics predicting acceptance and rejection differed for children with disabilities, compared to children without disabilities. In group-based sessions, students completed a sociometric instrument, the *How I Feel Toward Others Scale (HIFTO)* and the *Guess Who (GW)*, a peer appraisal of behaviours. Data from a total of 42 children with disabilities and 408 randomly selected children without disabilities were analysed ($N = 450$). A total of 42 teachers completed the *Teacher Classroom Climate Questionnaire (TCCQ)*. Teachers and a total of 40 teacher assistants also, completed the Teacher Inclusive Strategies Questionnaire (TIQ) in the form of a semi-structured interview. Results from hierarchical multiple regression analyses indicated that the most important predictor of peer acceptance for all children in the sample was peer perceptions of the behavioural characteristics of the child, followed by disability status and peer cohesiveness in the classroom. In stepwise multiple regression analyses, the behavioural characteristics significantly predictive of social status were different for children with and without disabilities. Implications for educational interventions are discussed and areas for future research considered.

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# Introduction

Since the 1940s and 1950s when sociometric techniques were first introduced, the study of peer relationships has steadily grown to become what is now an extensive body of research (Asher, 1983). Furthermore, in the past 20-25 years the number of sociometric studies completed in the area of peer status has grown rapidly in response to an increased awareness of the importance of peer relations in children's lives (Hartup, 1970), and research revealing that children who have poor peer relations or are rejected by their peers are at risk of later maladjustment in adult life (Asher, Oden & Gottman, 1977).

Numerous studies have indicated that maladaptive outcomes can be predicted from negative peer status in childhood (Roff, Sells & Golden, 1972; Amidon & Hoffman, 1965; Miller & Ingham, 1976 cited in Putallaz, 1983). Indeed, longitudinal research by Cowen et al. (1973) found that sociometric ratings supplied by peers in third grade were better predictors of later psychiatric disturbance than school records, intellectual performance and the judgements of performance and progress by teachers and clinicians. In addition, Blechman et al. (1986) used peer nominations to investigate a relationship between social incompetence and high levels of depression, and found that peers nominated socially skilled children as happier than academically skilled children. The authors concluded that social success is perceived to be more relevant to personal adjustment than is academic success.

**Sociometric research and the study of peer relationships**

Sociometric methodology refers to a general area of research as well as a method

of measurement (Hallinan, 1981). It can be defined as the:

"... process of assessing and describing the interpersonal attraction

among members of a group" (Renshaw, 1981, p. 12).

Sociometric procedures provide a simple, efficient and reliable investigation tool

for examining social relationships and social status, especially in children. Using

sociometric methodology, research has explored the concept of social status in children,

which can be defined as an individuals' social standing with classmates. Studies

generally tend to distinguish between a number of classification schemes (Coie et al.,

1982) in relation to social status. Among these are popular or accepted children who

receive many positive nominations, have many friends and are well accepted by their

peers; neglected children who receive some positive nominations, have few friends but

are not disliked by their peers (Gronlund & Anderson, 1957, cited in French & Waas,

1985); and finally, rejected children who receive many negative nominations, have few

friends and are often disliked by their peers (Coie, Dodge & Coppotelli, 1982). It would

seem that the latter two groups of children are those who experience problems (Asher &

Hymel, 1981).

In addition to this, Newcomb et al. (1993) would argue that there is a fourth

category, that of controversial children. The children in this group display

characteristics typical of both rejected and accepted children; higher rates of aggression

than are found in rejected children but higher levels of cognitive and social skills in

comparison with average children. It has been suggested that controversial children's

cognitive and social competencies act as a buffer against rejection from peers despite their display of aggressive behaviours (Coie et al. 1984 cited in Newcomb et al., 1993).

Much of the research that has used sociometric techniques to study peer status has focused on one of two sociometric procedures: peer nominations and peer ratings. However, other well-known procedures are the group preference record and the paired comparisons method. Each of these procedures will now be described briefly.

Peer nomination measures involve children naming a certain number of peers who fit a specific criterion e. g. "which three children do you most like to play with?" The advantage of this procedure is that multiple items, as opposed to singular or fewer items, often result in more reliable and richer sociometric descriptions (Mpofu, 1997). An example would be to ask children which three classmates they would prefer to sit with, play with, or work with. Nominations may also include a best friend nomination. An example of this measure is the *Guess Who* (Agard et al. 1978b) peer assessment instrument.

Peer rating scales provide a reliable measure of students' social acceptance in classrooms. In contrast to peer nomination measures, peer rating scales involve students rating all of their classmates on a Likert-type scale according to a specific criterion, for example play, study or sport. Paired comparisons involve presenting to children every possible pairing of students in their class using photographs or names. The child indicates their preference for one child in each pair. This technique also gives a measure of peer acceptance for each member of a class group but is very time-consuming.

Finally, the group preference record is often favoured over the peer nomination assessments and the peer rating scales because it combines some of the features of both

ratings and nominations. For example, it provides information on all the children in the class, and therefore a more comprehensive picture of group relations (as do peer rating scales), but in addition to this, it discriminates between different types of social status, accepted and rejected status, as do nominations. However, some group preference schedules also provide a third status category which indicates that a child is tolerated by classmates, as well as a fourth category to screen children who may not be well known to others. Group preference records provide a roster of group members and involve the individual child responding in terms of like, dislike or indifference in a forced-choice format. An example of this technique is the *How I Feel Toward Others Scale* (Agard et al. 1978a).

Researchers have made extensive use of nominations and rating scales in studies of sociometric status over the past 50 years. However the advantages of the newer technique, the group preference record have only become apparent in the last two to three decades. This technique is of particular importance in studies of children with disabilities, because it provides the additional status classification of tolerance or indifference, which may be highly relevant to the inclusion of these children in regular classroom settings (Kaufman et al. 1985).

**Behavioural Correlates of Social Status in Non-Disabled Children**

One of the priorities in recent research has been to identify the behavioural characteristics of children who appear to have difficulty with peer relationships (Coie & Kupersmidt, 1983). The findings of these studies have been used to develop preventive intervention programs for those children who are identified as at risk (Ladd, 1981; Oden

& Asher, 1977). Research has indicated that the distinction between rejected and neglected children is important. For example, studies show that rejected status is stable over time, whereas neglected status is not (Coie & Dodge, 1983; Coie & Kupersmidt, 1983). Coie and Dodge (1983) comment that over a 3-5 year period 30-50% of the rejected children maintained their rejected status. Therefore, it would appear that only rejected children, and not neglected children, have enduring behavioural characteristics that maintain their status and thus they may be at more serious risk of later maladjustment. There is little evidence to suggest that neglected children are more at risk of later maladjustment compared to rejected children (French & Waas, 1985).

The early landmark studies examining the behavioural correlates of social status have consistently demonstrated that there are distinct behavioural patterns associated with specific status categories (Ladd et al., 1990), and this has been supported by more recent findings. For example, Dodge (1983) examined the behavioural antecedents of peer social status amongst a group of second grade boys who were not familiar with each other. The results indicated that behavioural patterns significantly predict later acquired social status. More specifically, rejected status was associated with high frequencies of antisocial behaviour characterised by insults, threats and physical aggression. The results also indicated that boys who were later assigned with a rejected status were those who approached peers more frequently, had shorter interactions with others, and experienced frequent rebuffs from peers. Peers perceived them as highly aggressive, with poor leadership skills and an unwillingness to share.

In contrast, neglected status was found to be associated with little antisocial behaviour and with inept peer interaction. These boys were perceived as shy and

withdrawn by their peers. Finally, accepted status in boys was associated with

cooperative play, longer interactions with others with more positive outcomes, and less

inappropriate behaviour such as verbal or physical aggression. Dodge (1983) argues that

simply engaging in cooperative play does not seem to guarantee acceptance. It has to be

accompanied by an absence of inappropriate behaviours, such as physical aggression.

This study by Dodge (1983) was quite a significant piece of research in the area

of behavioural correlates of social status because it addressed the longstanding

controversy about whether certain behaviours are the cause of children's social status or

the consequence of children's social status (Moore, 1967 cited in Coie & Kupersmidt,

1983). Dodge concluded that because the boys in the study were not familiar with each

other, their behavioural traits had to be a cause of acquired status rather than a

consequence.

Coie and Kupersmidt (1983) completed a similar study to that of Dodge (1983)

but with boys who had already been assigned a social status by their peers. Results were

similar to those reported by Dodge (1983) and revealed that previously rejected boys

were the least interactive, displayed physically aversive behaviour such as starting fights

and displayed high levels of physical activity. In contrast, popular boys displayed more

prosocial behaviours and were involved in more norm setting. A further study by Dodge

et al. (1990) found that boys who were rejected displayed high rates of solitary play, low

positive social interactions and were also frequently reprimanded by the teacher for

inappropriate behaviour. However, popular boys who were accepted by their peers

spent little time in solitary play and spent more time in social conversation. They were

perceived by their peers as good leaders and willing to share with others.

In relation to more specific social skills, Putallaz (1983) reported distinct differences in the way that accepted as opposed to rejected children entered a group of unfamiliar peers. Children who were later more accepted by their peers, were those who contributed relevant comments to the conversation and seemed able to perceive the activity of the group, whereas those children who were later rejected by their peers had attempted to divert the group's focus to themselves, a behaviour which was highly likely to result in the group ignoring or rejecting them.

Much of the research into behavioural correlates of social status is based on the assumption that some children are unable to develop effective peer relationships because of limited social skills. This idea became known as the social skill deficit hypothesis (Asher & Renshaw, 1981), and prompted an outgrowth of studies that focused on skill-training. One such study by Oden and Asher (1977) demonstrated that coaching resulted in long-term sociometric change. The study incorporated the concepts of participation, cooperation, communication and validation-support into a four-week training program. A one-year follow-up assessment revealed that children who had been in the coaching program continued to experience increased peer acceptance and children in the controlled condition retained their status from a year before (Oden & Asher). Ladd (1981) reported similar findings over a three-week period, but behavioural as well as sociometric changes were observed.

Based on the present review, it can be concluded that research to date has focused mainly on behavioural correlates of social status in the general population, specifically for boys. These studies have consistently shown that certain behaviours precede or contribute to children's status, as evaluated by peers. For example, displays

of prosocial behaviour and a lack of antisocial, aggressive behaviour has been associated with peer acceptance and displays of limited or negative social interaction and antisocial, aggressive behaviour has been associated with rejection. Furthermore, research has indicated that children who are rejected, as opposed to those who are neglected by their peers, appear to maintain this status over time and are therefore considered to be at higher risk. Indeed, Coie et al. (1992) report that both aggression and rejection significantly predicted later adolescent disorder and that each on their own made a unique contribution.

**Correlates of Social Status in Children with Disabilities**

There is a large collection of studies in the area of peer acceptance and social status that has focused more specifically on subgroups of children in which the percentage of those experiencing difficulties may be higher than in the general population (Asher, 1990). One such subgroup is children with physical, intellectual and sensory disabilities. These studies indicate that rejection may have a greater psychological impact on these children because they already have developmental and adjustment difficulties due to their particular disability.

There are two main reasons why researchers have been interested in the social status of children with disabilities. The first is due to the move towards desegregated education for children with disabilities, variously known as mainstreaming, integration or inclusion. Initially, it was argued that day-to-day contact between children with a disability and their non-disabled peers would result in a greater understanding of the child with the disability, thus removing misunderstanding and stigma, and encouraging a

more favourable attitude towards disability generally (Jenkinson, 1987). This idea was termed the "contact hypothesis."

The second reason is that since the move towards educating children with disabilities in regular school settings, research has highlighted that contrary to what was expected, in these settings the children with disabilities are less likely to be accepted and more likely to be rejected by their non-disabled peers (Lapp, 1957; Miller, 1956; Goodman, Gottlieb and Harrison, 1972; Van Osdol and Johnson, 1973; Iano et al. 1974; Gottlieb 1981). Researchers assumed that children with disabilities were rejected because they had a disability, but when studies began to examine in more detail why these children were more likely to be rejected, it became increasingly clear that it could not be explained by the disability alone. Iano et al. (1974) reported an overlap in status between retarded and non-retarded groups of children and concluded from this that a diagnosis of retardation is not in itself sufficient to predict low sociometric status.

Thus, research into peer acceptance of children with disabilities, as with studies of the general population, began to consider how the individual behavioural characteristics of the child with a disability might influence or predict levels of acceptance or rejection. However, instead of focusing specifically on behavioural correlates, research assumed a wider focus and began to consider how factors beyond the child might predict peer acceptance. For example, factors such as peer perceptions, teacher perceptions as well as attitude and style, and classroom climate were investigated. Some of the findings from these studies are consistent with studies of the behavioural correlates of social status in the general population, but others have indicated that indeed these additional factors are better predictors of peer acceptance.

In relation to individual behavioural characteristics and the influence on social status, Gresham (1982) reviewed a number of studies and concluded that peer acceptance was low for children with disabilities because they engaged in antisocial behaviours and displayed a lack of appropriate interactional skills. However, Roberts et al. (1991) found that there was little difference between the children with disabilities and the group of children without disabilities, in terms of negative, disruptive behaviour. The authors suggested that the children with disabilities, although not entirely isolated or rejected, were more typical of neglected children. Similarly, O'Keefe et al. (1991) found that retarded children who were rejected by their peers engaged in aggressive or disruptive behaviour and retarded children who were accepted by their peers were perceived as sociable. The authors noted that the relationship between perceptions and social status was no different for retarded children as non-retarded children.

It has been suggested by some researchers that peer perceptions of a child's competence may have a greater impact on peer acceptance and rejection than the individual behaviours of the children. For example, in an Australian study of children with disabilities, Jenkinson (1983) found that parent, teacher and peer ratings revealed that high sociometric status correlated significantly with low levels of competence, especially with respect to language and in activities involving initiative and responsibility. The behaviours of the children appeared to have little influence on overall levels of sociometric status. The author concluded that children with disabilities seemed to be "...chosen on the basis of perceived need for positive support rather than as companions or equals" (Jenkinson, 1987, p. 69).

In relation to academic competence, Larivee (1985) reported a significant

correlation between peer acceptance of mainstreamed children with disabilities and the

amount of academic learning time (ALT) they are given. There was also a significant

relationship between ALT and the behaviours of mainstreamed children. The greater the

ALT, the less inattentive-withdrawn and external blame behaviours and the lower the

achievement anxiety in these children. Evans et al. (1992) found that for children with

disabilities, acceptance seemed unrelated to social competence because no significant

relationship was found between acceptance and the number of social approaches they

made or received. Peers perceived some of the children with disabilities as popular,

whilst others did not nominate these children positively at all. The authors concluded

that perhaps peer perceptions of an individual child more accurately determine

acceptance than the interactional skills of the child.

In an investigation of the influence of peer perceptions on acceptance, Gottlieb et

al. (1978) found that educable mentally retarded children's social acceptance was

associated with peer (and teacher) perceptions of academic incompetence, and social

rejection was associated with perceived misbehaviour. MacMillan and Morrison (1980)

found that the factor accounting for most of the variance in both acceptance and

rejection of children with disabilities was teacher perceptions of competence and

misbehaviour.

Furthermore, Morrison et al. (1983) completed a path analysis which revealed

that the actual behaviour and achievement of educable mentally retarded children is first

influenced by teachers' perceptions which in turn influences peers' perceptions. A

further study by Coie and Krehbiel (1984) found that when teachers change their

behaviour towards an unpopular child, peers perceived the change in status with the teacher and consequently changed their perceptions of the unpopular child and held them in higher esteem.

In relation to classroom climate, Kaufman et al. (1985) in a large-scale study, known as Project PRIME (Programmed Re-entry into Mainstreamed Education), examined the impact of socioemotional climate or the group dynamics operating between teacher and students and between students themselves. Findings indicated that socioemotional climate was the most significant predictor of social status for all children – mainstreamed, non-mainstreamed and non-disabled. In classrooms where peer cohesiveness was high (a low level of dislike among non-handicapped peers) a warm, harmonious climate existed and the mainstreamed child was more likely to be accepted by their non-disabled peers.

**Limitations of Previous Research and Directions for Future Research**

The present review of studies shows that there are a number of factors, beyond the characteristics of the child that may influence and indeed predict the likelihood of peer acceptance for children with disabilities. However, only two studies by Morrison et al. (1983) and by Kaufman et al. (1985) have considered the influence of more than one factor simultaneously on peer acceptance for children with disabilities. There has been no research to date that has investigated the contributions of a range of factors concurrently to the prediction of social status, nor has there been research that has considered the relative contribution each factor may make in predicting peer acceptance.

A further limitation of research in this area is the separate and independent investigation of the predictors of social status in children with disabilities and those without. It is interesting to note that Gottlieb and Leyser (1981) suggest that there are few differences between the social-behavioural correlates of children with or without disabilities and that differences would be a matter of degree rather than substance. Indeed, some of the abovementioned studies have indicated little difference between factors impacting on the social acceptance of children with disabilities and their non-disabled peers (Roberts et al., 1991).

Thus, the results of the two strands of investigation suggest that the behavioural correlates of social status do not differ between the two groups. Nonetheless, there appear to have been no studies that have examined the factors impacting on social status for children with disabilities and also for children without disabilities concurrently. Such a study would establish definitively whether the factors predicting peer acceptance differ for children with disabilities, compared to children without disabilities both of whom coexist in the same classroom. If these factors do differ between the two groups, it would suggest the need for specific interventions targeting children with disabilities. If they do not differ, then research may highlight underlying common causes regardless of the presence of disability. These may then form the basis of programs to identify and assist children at risk. Clearly, it is necessary that this be established empirically before purposeful intervention can be developed and implemented (Gresham, 1986).

A further limitation of previous sociometric research is that many studies have been empirically driven and few attempts have been made to test theoretical models in terms of uncovering the mechanisms of social status among children with and without

disabilities. It is suggested that the long-established theories of interpersonal attraction

and social identity, more often applied to adults, could provide a theoretical framework

to understand these mechanisms and which in turn, could propel future research in this

area. Such a link would also provide a sound theoretical basis upon which to identify

children at risk and to implement appropriate forms of intervention. Theories of

possible relevance to peer acceptance are Heider's (1958) Balance Theory, Tajfel and

Turner's (1979) Theory of Social Identity, Homans' (1950) Theory of Social Exchange,

and Thibaut and Kelley's (1959) Theory of Social Interdependence. These theories will

now be reviewed.

**Theoretical Models for the Explanation of Social Status**

Balance Theory (Heider, 1958) focuses on the concept of interpersonal attraction

and group membership. The theory states that we are attracted to people who have

similar interests and attitudes, and individuals are motivated to maintain a state of

cognitive consistency. In other words, people strive for a balance between their personal

beliefs and their feelings of attraction. So for example if an individual holds a certain

attitude with which their friend disagrees, a state of imbalance occurs. This state is

uncomfortable for the individual and as a consequence, they either change their attitude

or change the feelings they have towards their friend.

In 1961, Newcomb modified Heider's (1958) theory to take into account

negative interpersonal relationships. Newcomb (1961) suggested that when a group

perceives a negative relationship between two group members, cognitive imbalance

occurs and the group then strives to restore balance. One means by which they may do

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this is to engage in attitude changes that, in turn strengthen the similarity between group members.

Tajfel and Turner's (1979) Theory of Social Identity is somewhat similar to the ideas of Heider (1958). They propose that group membership occurs when individuals perceive themselves and are perceived by others as being members of the same social category or in-group. Others not possessing the requisite characteristic are seen as the out-group. This process of social categorisation provides a degree of social identity for group members and assists in establishing an individual's place in society. Social categorisation is based on such characteristics as race, nationality, gender or religion. Dimensions are evaluated in order to maximise in-group similarities and the distinctiveness of the in-group from the out-group.

Cognitive consistency theories of interpersonal attraction and the theories of social identity underline the importance of group-based factors in social status. In other words, non-disabled peers may perceive themselves as dissimilar from children with disabilities, which produces cognitive dissonance and a lack of interpersonal attraction, thus further reinforcing the similarities they have with others in their own in-group. Research that examines the contribution that a factor such as disabled status makes to peer acceptance could directly test the application of this theory to empirical research. If it was established that group-based factors such as perceptions of group differences were most predictive of peer acceptance, then intervention might focus on promoting and enhancing the similarities between peers in the classroom group.

Another group of theories, reinforcement theories, may provide explanations of the impact of peer perceptions because they emphasise the importance of individual

behavioural characteristics on social status. Homans' (1950) theory of social exchange proposes that individuals invest social effort into relationships with others because they expect to receive interpersonal profits and that these profits will outweigh the personal costs associated with the relationship. If the individual perceives personal gains, interpersonal attraction is enhanced. However, if the individual perceives harmful effects, attraction is decreased. Similarly, Thibaut and Kelley (1959) propose that personal gains can be based on perceived similarities with a person or perceived differences and that a person must not only be *able* to provide personal gains but they must also be *willing* to do so. Also, an individual's behaviour can contribute to costs in that if a person believes that an individual will have little potential to reward them, they will perceive this as a potential cost.

The reinforcement theories may provide appropriate models that explain the impact of peer perceptions of individual behavioural characteristics on social status. Characteristics that are valued (i.e., prosocial behaviours) and those that are not valued (i.e. antisocial behaviours) may be weighed up by the individual in the cost-benefit analyses of attraction and friendship suggested by such theories. The reinforcement theories suggest a common model of explanation for the social status of all children, regardless of disability status. Such a model would be based on individual appraisal of behaviours that is not influenced by group-based perceptions or group inclusion. Thus such models would be incompatible with the cognitive consistency theories and social identity theories as explanations for social status in children with disabilities and their non-disabled peers.

## Rationale and Aim of the Present Study

The aims of the present study were twofold. The first aim was to examine the extent to which a range of factors predicts social status in children with and without disabilities, who are schooled in the same classroom. The factors chosen for the present study were based on previous research that has discovered a number of significant predictors of peer acceptance and rejection: the individual behavioural characteristics of the child as perceived by peers; peer cohesiveness; teacher management strategies and style; classroom climate and disability status.

Using hierarchical multiple regression analysis, the relative contributions of the factors and their significance were used to test five different models explaining social status for children in general, and in particular for children with disabilities in regular classroom settings. Previous research has suggested that peer perceptions of behavioural characteristics are powerful and significant predictors of social status for children both with and without disabilities. This model was tested first by entering the individual behavioural characteristics of the child as perceived by peers into the regression equation as a single block of variables. This model relates to the reinforcement theories of social attraction.

The second, third and fourth models tested included factors relating to the classroom and the teachers' inclusiveness of a diversity of children. These factors have been under-researched but are of particular relevance where children with disabilities have been included in regular classrooms. Such factors may have a less direct bearing on social status than the much-researched behavioural factors. Nonetheless, they may add further explanatory value to the prediction of social status, and have implications for

interventions to improve acceptance of a diversity of children in regular classrooms. In particular, teachers' inclusive practices may have an impact on the acceptance of children with disabilities, since purposeful inclusive strategies have largely replaced the contact hypothesis (Gresham, 1986) as a basis for inclusive education.

The fifth model tested in the present study relates to cognitive consistency theories and to social identity theory. The disability status factor was included in order to determine whether group identity (disabled/non-disabled) or perceptions of similarity/difference would make a significant contribution to the explanation of social status in a regular classroom. The fifth model was seen as directly competing with the first model, in terms of its theoretical basis. In other words, could the reinforcement theories provide a more adequate explanation of social status than the cognitive consistency theories or indeed social identity theory, for all children in the present study?

The second aim of the present study was to investigate whether the behavioural characteristics of children as significant predictors of acceptance and rejection differed for children with and without disabilities, or whether they were the same. This question has not been definitively answered because previous research has investigated behavioural correlates separately in studies of each group, rather than comparatively using samples from the same classroom. The fact that the present sample included both children with disabilities and children without disabilities made this aim possible.

# Method

*Participants*

The present research involved sociometric evaluations, necessitating the establishment of reference groups consisting of school classes. Selection of participants was therefore based initially on selection of classes that met the following criteria:

a)   Classes included a child/children who were in receipt of "Category A" funding from the Tasmanian Department of Education (see Appendix A) due to a diagnosed disability;

b)   Classes included a child/children receiving Category A funding who attended the school full-time;

c)   Classes consisted of Grades 2-6 (excluding Grade 1/2 composite classes);

d)   Classes had been taught by the same teacher all year;

e)   Written parental consent had been obtained for the child (ren) with a disability.

A total of 38 classes participated in the study. The participants were 706 children aged between 7 and 12 years (grades 2-6). The children were enrolled at 30 different government schools across the state of Tasmania. The sample included 664 children without disabilities and 42 children with disabilities. However, only 18 of the children with disabilities were active participants in the study and successfully filled out peer evaluations on their classmates (see Table 1). Although information about the remaining 24 children with disabilities was obtained from their peers and included in the data (see Table 2), these children were passive participants in the study and did not fill

out the requisite peer evaluation forms for their classmates. This was the case either because they attempted the evaluation tasks but their responses were deemed invalid, or because they were unable to understand the requirements of the task.

The teachers of target classes also participated in the study. A total of 42 teachers ranging in age from approximately 21 to 65 years completed questionnaires. Of these teachers 37 were females and 5 were males. A total of 40 teacher assistants (all female) also completed questionnaires. They ranged in age from approximately 35 to 60 years.

Table 1

*Gender, Grade and Disability Data for Children with Disabilities Who were Active*
*Participants (N = 18)*

| Subject | Gender | Grade | Type of disability |
|---------|--------|-------|-------------------|
| 1 | Male | 6 | Physical |
| 2 | Male | 6 | Intellectual |
| 3 | Female | 4 | Hearing |
| 4 | Male | 5 | Intellectual |
| 5 | Male | 5 | Intellectual |
| 6 | Female | 4 | Intellectual |
| 7 | Male | 6 | Physical |
| 8 | Female | 6 | Intellectual |
| 9 | Male | 3 | Physical |
| 10 | Male | 3 | Intellectual |
| 11 | Female | 6 | Physical |
| 12 | Male | 6 | Intellectual |
| 13 | Male | 6 | Intellectual |
| 14 | Male | 3 | Intellectual |
| 15 | Male | 3 | Intellectual |
| 16 | Female | 5 | Intellectual |
| 17 | Male | 5 | Physical |
| 18 | Female | 4 | Intellectual |

Table 2

*Gender, Grade and Disability Data for Children with Disabilities Who were Passive*
*Participants (N = 24).*

| Subject | Gender | Grade | Type of disability |
|---------|--------|-------|-------------------|
| 1 | Male | 3 | Autism |
| 2 | Female | 5 | Intellectual |
| 3 | Male | 3 | Physical |
| 4 | Male | 4 | Autism |
| 5 | Male | 4 | Physical |
| 6 | Male | 4 | Intellectual |
| 7 | Male | 3 | Intellectual |
| 8 | Female | 3 | Intellectual |
| 9 | Male | 6 | Multiple |
| 10 | Male | 3 | Intellectual |
| 11 | Female | 3 | Intellectual |
| 12 | Male | 5 | Intellectual |
| 13 | Female | 5 | Intellectual |
| 14 | Female | 6 | Multiple |
| 15 | Female | 4 | Intellectual |
| 16 | Male | 2 | Autism |
| 17 | Female | 3 | Intellectual |
| 18 | Male | 6 | Physical |
| 19 | Male | 5 | Physical |
| 20 | Female | 4 | Intellectual |
| 21 | Male | 4 | Physical |
| 22 | Male | 5 | Intellectual |
| 23 | Female | 2 | Intellectual |
| 24 | Female | 3 | Intellectual |

*Materials*

*a) How I Feel Toward Others (HIFTO)*

The HIFTO (Agard et al. 1978a) is a peer evaluation instrument that requires each participating child to indicate the degree of social attraction he or she feels toward every other student (see Appendix B). This scale was first developed for Project PRIME (Programmed Re-entry into Mainstreamed Education), a large scale American study examining the relationship between learners and their environments in order to determine the viability of mainstreaming as an educational alternative (Kaufman et al., 1985).

The HIFTO was specifically designed for use with children in the lower grades of primary school and for those with intellectual disabilities. Next to the name of each member of a class or specified group is a row of three faces as well as a question mark. For each classmate, children are instructed to circle one of the four symbols as follows: a question mark (? = do not know him or her well), a smiling face (☺ = like him or her as a friend), a neutral face (☺ = know him or her well but do not especially care about them), and a frowning face (☹ = do not like him or her as a friend, as long as they are the way they are now).

In its development, the HIFTO's reliability was assessed by interjudge consistency measures from two randomly assigned sets of evaluators. In terms of sociometric status, smiles yielded a coefficient of .75 and frowns yielded a coefficient of .74. Neutrals and questions yielded a coefficient ranging from .33 to .56. Coefficients were higher for Attitude Toward Peers scores ranging from .70 to .91 (Agard et al. 1978a). Validity was assessed by examining content representativeness, structural

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soundness and nomological network strength of the instrument. Sociometric status scores were found to have a strong network of relationships with academic and social behaviour measures, and differentiated adequately between groups of children in the predicted directions. Agard et al. (1978a) concluded that the HIFTO possesses substantial validity evidence.

The HIFTO provides information regarding individual children's sociometric status in relation to a specific group, as well as information about attitudes towards peers by specific children. Three separate measures of sociometric status are derived from HIFTO by aggregating the number of smiles, frowns and neutrals accorded to each member of the class by his/her participating classmates. Aggregated smiles yield a measure of peer acceptance, frowns yield a measure of peer rejection and neutrals yield a measure of peer tolerance. The authors of the instrument regard the HIFTO neutral measure as a "mild frown" (Agard et al., 1978a)

A measure of individual children's attitudes toward peers is obtained by summing the number of smiles, frowns and neutrals assigned to others in the group. To obtain a group-based measure, these individual measures can be summed to give an estimate of positive and negative regard within the group such as a class.

The order in which the names are presented in the HIFTO may affect responses, for example the name of a child being placed consistently next to that of an extremely popular or unpopular child may consistently inflate or deflate other students' evaluation of him or her. Therefore six different randomized lists were used for each class to allow for sufficient differentiation of the order.

In the present study children's responses on the HIFTO were used to calculate individual levels of peer acceptance, tolerance and rejection for participating children in the class. An identical procedure was used for children with and without disabilities. Standardised scores for smiles were obtained by summing the total number of smiles received by each child, and then dividing this figure by the number of evaluators minus one. This method was repeated for HIFTO frowns and neutrals.

An indication of classroom cohesiveness was also derived from the HIFTO instrument. Classroom cohesiveness, as it relates to the classroom climate, is defined by Kaufman et al. (1985) as " . . . happiness or satisfaction among members, cooperation and minimal competition, a lack of friction or disruptiveness and a social structure in which friendship choices are distributed fairly evenly across all members of the group rather than confined to a few members" (p. 209). An index of classroom cohesiveness was derived by subtracting the standardised frowns, given by the participants in a class, from the standardised smiles, and adding 10 (to overcome the problem of possible negative scores).

*b) Guess Who (GW)*

The *Guess Who* instrument (Agard et al. 1978b) yields peer assessments of children's behaviour. Like the *HIFTO* scale, it was developed for Project PRIME and designed for use with children who have disabilities. It consists of 31 items across four separate scales: Brightness, Dullness, Disruptive Behaviour and Quiet/Good Behaviour. Children are instructed to write down the name of only one classmate who best fits the description in each item (see Appendix C). Examples of questions are: "Who breaks the

rules?" and "Who is friendly to everyone?" Children are not permitted to write their own name and are also instructed that they can nominate the same classmate more than once.

With respect to the subscales, Brightness "defines the extent to which a student is perceived by peers as being outstanding in given subject areas and as always knowing the answers; that is, it concerns nominations received for being the smartest or the best student" (Agard et al., 1978b, p. 23). Dullness "defines the extent to which a student is perceived by peers as being the poorest learner in given subject areas and as never knowing the correct answers; that is, it concerns nominations received for being the slowest student" (Agard et al., p. 23). Disruptive Behaviour "defines the extent to which a student is perceived by peers as causing disturbances, breaking rules and bullying classmates; that is, it concerns nominations received for being the most troublesome and misbehaving student" (Agard et al., p. 23). Quiet/Good Behaviour "defines the extent to which a student is perceived by peers as being the least talkative, friendliest and most even-tempered student; that is, it concerns nominations received for being the most unobtrusive, well-behaved student" (Agard et al., p. 23).

For the present project, some minor changes were made to the content of the original GW so that it was more adaptable to an Australian sample. The American expressions included in items 3, 5, 6, 8, 16, 18, 21 and 28, were accompanied by a culturally equivalent term (in parentheses), preserving as far as possible the integrity of the original item (see Appendix C for original GW form).

Information from the GW was converted into binary truncated scores: children received a score of either 0 or 1 (not nominated or nominated respectively) on any one scale item, regardless of the number of times the individual had been nominated by class

members. Agard et al. (1978b) recommend the use of binary truncated scores as a more effective means of correcting for class-size differences while producing less skewed score distributions. Responses on the GW were used to determine peer perceptions of the individual characteristics of the children with and without disabilities in each classroom.

*c) Teacher Classroom Climate Questionnaire (TCCQ)*

The Teacher Classroom Climate Questionnaire (Kaufman, Agard & Semmel, 1985) is designed to obtain information about teacher's perceptions of their classroom climate (see Appendix D). According to Kaufman et al. (1985) climate refers to " . . . the group dynamics operating in the classroom" (p. 193) and this includes the interaction between teacher and students as well as between the students themselves. The TCCQ consists of 67 items that are rated on a 5-point frequency of occurrence scale and divided into one of five subscales: Cooperation/Diversification, Friction, Rigidity/Control, Individualisation of Instruction, and Difficulty. Teachers are asked to complete the questionnaire individually and in their own time, yielding separate measures by summing the ratings for each subscale.

The Cooperation/Diversification subscale is a measure of a facilitating climate (for example, "Students are encouraged to explore new activities independently.") Items are concerned with the level of cooperation among students and the offered range of learning opportunities. The Friction subscale is a measure of disruptiveness and friction among students (for example, "Certain children in my class get their own way"). The Rigidity/Control subscale aims to measure teacher directiveness (for example, "I ask that the children not talk when they are supposed to be working"). The Individualisation of

Instruction subscale concerns the teacher's level of individual programming to address specific student needs (for example, "I make classroom work assignments based on each individual child's needs"). Finally, the Difficulty subscale is a measure of work difficulty for the students (for example, "Most of the children can do the work without help").

In the development of the scale, scaling analysis revealed that all the subscales on the TCCQ are internally consistent and meaningful. The Cooperation/Diversification subscale yielded a coefficient of .83, the Friction subscale yielded a coefficient of .81, the Rigidity/Control subscale yielded a coeffcient of .65, the Individualisation subscale yielded a coefficient of .79, and the Difficulty subscale yielded a coefficient of .77.

For the present study, responses from each of the TCCQ subscales were summed and an average was calculated based on dividing the total score by the number of items in each subscale. This gave an average rating per item for each subscale. Where there were two teachers for one classroom, responses from each of the TCCQ subscales for both teachers were summed and an average was calculated based on dividing the total score by two. An average rating per item for each subscale was based on dividing this score by the number of items in each subscale.

*d) Teacher Inclusive Strategies Questionnaire (TIQ)*

The Teacher Inclusive Strategies Questionnaire was developed specifically for the present study by the author (see Appendix E). It is in the form of a semi-structured interview, consisting of 11 questions about the practical strategies or ideas used by teachers and teacher assistants in promoting social acceptance of children in their classroom or those to whom they provide assistance. The questionnaire was designed in

collaboration with staff from the Department of Education, Equity Standards Branch, and reflects some of the principles outlined in the Department of Education's Graduate Certificate in Education (Inclusive Practice) Units of Competence (2003). Questions reflected the elements of the Unit of Competence 1: "Establish and Foster Supportive and Inclusive Learning Environments." These elements were: "Act equitably towards all students," "Intentionally develop positive relationships with all students," "Promote a collaborative and cooperative learning culture," "Provide a curriculum that caters for the needs and circumstances of all students," and "Establish and maintain a supportive physical environment."

Teachers and teacher assistants in the present study were interviewed individually and asked to comment on each question using examples from their own practice. Responses were recorded in writing by the author. A total for the range of strategies suggested across all questions was collated for each individual, with a score of one for each different strategy, regardless of the number of times it was suggested across all the questions.

Where there was more than one teacher or teacher assistant in each classroom the totals were summed and an average was calculated. The final score for the TIQ consisted of an average of the total score for the teacher(s) who participated and the total score for the teacher assistant(s) who participated.

*Design*

This study used a correlational design and multiple regression analysis. Hierarchical multiple regression analysis was used to test five models involving the

predictive value of a range of factors on three dependent variables: peer acceptance, tolerance and rejection. The factors which represented different models were children's behavioural characteristics as perceived by peers, classroom cohesiveness, the extent of teachers' inclusion strategies, classroom climate and disability status. Stepwise multiple regression analyses were used to test the predictive value of individual characteristics/behavioural variables on peer acceptance and peer rejection separately for children with and without disabilities.

*Procedure*

In order to determine the number of possible classes involved in the study, a list of schools where such children were currently enrolled was obtained from the Department of Education, Equity Standards Branch. The names of children were omitted from the list of schools to maintain confidentiality. Subsequently, the principals of the target schools were sent a letter inviting their school community to participate. The letter provided information about the nature of the study and the requirements involved (see Appendix F). Several weeks later, telephone contact was made with all principals and those who expressed an interest in participating in the study received follow-up phone calls or visits.

Initially, if children met the requirements and principals indicated their consent for their school community to participate, principals were asked to discuss the project personally with the parents/guardians of the child with the disability using the information letters and consent forms provided (see Appendix F). Once these parents/guardians had provided written consent, the information letters and consent

forms were distributed to teachers, teacher assistants and parents/guardians of all children in the target classes (i.e., those containing children receiving Category A funding who fulfilled the criteria described above). Also, because sociometric instruments rely on a certain level of participation for their validity, the classes involved in the study were only those where 60% or more of the total class had parental consent to participate.

Written consent forms for all participants were collected prior to the completion of questionnaires. Data were collected from the children in a single session, which lasted approximately 30-45 minutes. Small groups of about 6-8 children were withdrawn during school hours to a quiet area in the school. Children were not withdrawn during enjoyable or special activities, nor were they withdrawn during recess or lunch. At the beginning of the session, time was spent explaining to the children the nature of the study and the requirements of the task. In particular, the importance of ensuring responses were kept confidential was explained. After completion of both questionnaires, a brief discussion occurred with the children about the implications of someone sharing their responses with others and they were given explicit instructions not to do so.

The HIFTO was the first questionnaire completed. After the instructions were given (see Appendix B), children were encouraged to move to a private space in the room, complete the task quietly and to raise their hand if they required any help. Those children who understood the task but had difficulty reading the names received individual help from the researcher. In some cases, teacher assistants were available to help the child with a disability.

Once all children had completed the HIFTO, the instructions for the GW were given (see Appendix C). Upon completion, each questionnaire was quickly checked to ensure that items had not been missed and only one name had been written next to each item. Once again, those children who understood the task but had difficulty with the writing were given individual assistance by the examiner or the teacher assistant. At the end of the session, children were again reminded of the importance of not discussing their responses with others afterwards.

Teachers were asked to complete the TCCQ (see Appendix D) in their own time. This took 10-15 minutes to complete. Teachers and teacher assistants completed the TIQ with the examiner recording their responses (see Appendix E). This took 45-60 minutes to complete.

# Results

*Data Selection and Transformation*

Data for all children with a disability in the sample were included in analyses regardless of whether they were active or passive participants. Time and resource constraints precluded processing and inclusion of sociometric and other data from all the non-disabled children who had parental permission to participate in the study ($N = 664$). Therefore, of the non-disabled children, HIFTO and GW data from a randomised sample of between eight and 14 children per class was used if the number of participants in a class was 15 or more. Where the total number of participants in a class was between ten and 15, data from the whole group was used. The sample included a random selection of equal numbers of boys and girls. The total sample included 408 children without disabilities. The responses of 18 of the children with disabilities (the active participants) were used as well as those of non-disabled children in establishing peer measures for the analyses. In total there were peer and teacher based measures for $N = 450$ children.

*Aims of the Analysis*

With respect to the first aim, hierarchical regression analyses were carried out in order to test five predictive models for the social status of all children in the present sample. This was achieved by examining the relative contributions of a range of factors to social status, as measured by HIFTO smiles, frowns and neutrals accorded to children by peers in the same class. In relation to the second aim, separate stepwise regression analyses were carried out for children with and without disabilities using individual

behavioural characteristics (as perceived by peers) to predict acceptance and rejection as measured by HIFTO smiles, frowns.

*Hierarchical Regression Analyses*

All variables were forced into the regression equation in order to test the discrete contribution each factor made in predicting the likelihood of acceptance.

Table 3

*Summary of Hierarchical Regression Analysis for Behavioural Variables Predicting Peer Acceptance Based on HIFTO Smiles Accorded by Children With and Without Disabilities (N = 450).*

| Variable | B | SE B | β |
|---|---|---|---|
| *Model 1* | | | |
| Quiet/Good Behaviour | 0.02 | 0.01 | .11* |
| Disruptive Behaviour | -0.01 | 0.004 | -.15** |
| Brightness | 0.02 | 0.005 | .15** |
| Dullness | -0.02 | 0.005 | -.18*** |
| | | | |
| *Model 2* | | | |
| Quiet/Good Behaviour | 0.02 | 0.01 | .12* |
| Disruptive Behaviour | -0.01 | 0.004 | -.15** |
| Brightness | 0.02 | 0.005 | .15** |
| Dullness | -0.02 | 0.005 | -.18*** |
| Inclusive Strategies | 0.00 | 0.002 | .05 |
| | | | |
| *Model 3* | | | |
| Quiet/Good Behaviour | 0.01 | 0.01 | .10* |
| Disruptive Behaviour | -0.01 | 0.004 | -.17*** |
| Brightness | 0.01 | 0.005 | .16** |
| Dullness | -0.02 | 0.005 | -.18*** |
| Inclusive Strategies | 0.00 | 0.002 | .02 |
| Class Cohesiveness | 0.02 | 0.003 | .28*** |
| | | | |
| *Model 4* | | | |
| Quiet/Good Behaviour | 0.02 | 0.01 | .11* |
| Disruptive Behaviour | -0.01 | 0.004 | -.18** |
| Brightness | 0.02 | 0.005 | .15** |
| Dullness | -0.02 | 0.005 | -.18*** |

| | | | |
|---|---|---|---|
| Inclusive Strategies | 0.001 | 0.002 | .03 |
| Class Cohesiveness | 0.024 | 0.003 | .30*** |
| Class Cooperation/Diversification | -0.001 | 0.002 | -.02 |
| Class Friction | 0.01 | 0.003 | .14* |
| Teacher Rigidity/Control | -0.005 | 0.003 | -.07 |
| Individualisation of Instruction | 0.003 | 0.003 | .06 |
| Difficulty of Classroom Work | -0.005 | 0.004 | -.07 |
| | | | |
| *Model 5* | | | |
| Quiet/Good Behaviour | 0.016 | 0.006 | .11* |
| Disruptive Behaviour | -0.011 | 0.003 | -.13** |
| Brightness | 0.02 | 0.005 | .18*** |
| Dullness | -0.031 | 0.005 | -.28*** |
| Inclusive Strategies | 0.001 | 0.002 | .02 |
| Class Cohesiveness | 0.024 | 0.003 | .30*** |
| Class Cooperation/Diversification | -0.001 | 0.002 | -.03 |
| Class Friction | 0.006 | 0.003 | .13* |
| Teacher Rigidity/Control | -0.004 | 0.003 | -.07 |
| Individualisation of Instruction | 0.003 | 0.003 | .05 |
| Difficulty of Classroom Work | -0.005 | 0.004 | -.06 |
| Disability Status (D/ND) | 0.19 | 0.033 | .24*** |

*Note:* $R^2$ = .160 for Model 1 ($p < .001$); $\Delta R^2$ =.002 for Model 2 ($p > .05$); $\Delta R^2$ = .075 for Model 3 ($p < .001$). $\Delta R^2$ = .011 for Model 4 ($p > .05$) $\Delta R^2$ = .049 for Model 5 ($p < .001$)

*Model 1* Individual child characteristics entered from *Guess Who Questionnaire.*
*Model 2* Number of strategies used by teachers to promote acceptance of individual children from *Teacher Intervention Questionnaire* entered.
*Model 3* Classroom social cohesiveness index entered (based on number of *HIFTO* smiles and frowns given to class).
*Model 4* Classroom climate measures from *Teacher Climate Control Questionnaire* entered.
*Model 5* Disability status of child entered (disabled/non-disabled based on Category A funding).
* $p < .05$ ** $p < .01$ *** $p < .001$.

In Model 1, peer based measures from the *Guess Who* questionnaire were entered in a single block, representing the aggregated peer perceptions of both positive and negative behavioural characteristics for each child in the class. Table 3 shows that Model 1 accounted for 16% of the variance in measures of peer acceptance ($R^2$ = .160), which was a highly significant contribution. From the beta values in Table 3, it is

apparent that there are weak but significant relationships between all the behavioural characteristics measured and children's peer acceptance. Positive behaviours or characteristics (Brightness and Quiet/Good Behaviour) show a co-varying relationship with peer acceptance while Disruptive Behaviour and Dullness indicate an inverse relationship. In other words, if peers perceive a child as bright or well behaved that child is more likely to be accepted, but if peers perceive a child as dull or disruptive that child is less likely to be accepted.

In Model 2, the additional variance explained by the number and variety of teachers' strategies to promote inclusion of a range of children in the classroom was investigated. This was carried out in order to determine the degree of difference in acceptance attributable to teachers' strategies rather than to peer perceptions of children's characteristics. As can be seen in Table 3 ($R^2 = .002$), adding this single measure to the regression equation resulted in less than 1% of additional explained variance, over and above that accounted for by Model 1. According to this result, the inclusive strategies that teachers used did not make a substantial contribution to explaining the variance in peer acceptance.

In Model 3, the index for Class Cohesiveness was entered, based on HIFTO Smiles and Frowns accorded to the class as a whole by its members. This model tested the degree to which the balance of positive and negative feeling in the class as a whole was predictive of peer acceptance of individual children in the class. As Table 3 indicates, the increase in $R^2$ is a significant 8% ($R^2 = .075$), adding quite substantially to the explained variance, over and above the variance already explained by Models 1 and 2. Moreover, the beta values in the table for Model 3 indicate a modest but significant

positive relationship between class cohesiveness and individual children's peer acceptance. In other words, the higher the cohesiveness index (indicating greater general positive feeling and as opposed to general negative feeling) within the class as a whole, the more likely it is that individual children will be accepted, including those with a disability.

In Model 4, measures from the TCCQ were entered as a block into the regression equation. These measures are indicative of teachers' class management strategies affecting the "climate" of the classroom and were entered to determine any additional explanatory variance accounted for in measures of individual children's peer acceptance. As can be seen from Table 3, these measures did not make a significant contribution to the explained variance in peer acceptance, over and above the preceding models that were tested, adding only 1% to the variance already explained by the other models ($R^2 =$ .011). Moreover, most of the beta values displayed for this set of variables in Model 4 indicate near zero and non-significant correlations with peer acceptance. Class Friction shows a significant relationship, indicating that the greater the degree of classroom friction, the lower the level of peer acceptance of individual children in the classroom. Nonetheless, this inverse relationship between these measures is quite weak.

Finally in Model 5 the contribution of a categorical variable was tested to determine whether the status of children as disabled or non-disabled, defined by the receipt or otherwise of Category A funding, made a significant contribution to the prediction of peer acceptance. As Table 3 indicates, a small but significant 5% of the variance in peer acceptance ($R^2 =$ .049), over and above that explained by the preceding models was explained by the presence of a disability. Nonetheless, this percentage of

the explained variance was less than that accounted for by the other two models that found significant relationships: Model 1, Individual child characteristics as perceived by peers, and Model 3, Class cohesiveness. From the beta values in Table 3, there is a significant positive relationship between disability status and peer acceptance. From the way that disability status was coded in the present study (2 = disability, 1 = no disability), this indicates that the presence of a disability is associated with a greater degree of acceptance than is non-disabled status.

In relation to peer acceptance, the total variance accounted for across Models 1-5 was 30%, which is a substantial proportion. The factors making the greatest and most significant contribution to peer acceptance were peer perceptions of the behavioural characteristics of the child and peer cohesiveness in the classroom.

A similar hierarchical regression analysis was carried out in order to test the models described above in the prediction of peer tolerance, measured by HIFTO neutrals accorded by children to peers in their school class, both with and without disabilities.

Table 4

*Summary of Hierarchical Regression Analysis for Behavioural Variables Predicting Peer Tolerance Based on HIFTO Neutrals Accorded by Children With and Without Disabilities (N = 450).*

| Variable | B | SE B | β |
|---|---|---|---|
| *Model 1* | | | |
| Quiet/Good Behaviour | -0.004 | 0.004 | -.05 |
| Disruptive Behaviour | -0.001 | 0.002 | -.02 |
| Brightness | -0.002 | 0.003 | -.03 |
| Dullness | -0.005 | 0.004 | -.07 |
| | | | |
| *Model 2* | | | |
| Quiet/Good Behaviour | -0.004 | 0.004 | -.04 |
| Disruptive Behaviour | -0.001 | 0.002 | -.02 |
| Brightness | -0.002 | 0.003 | -.03 |
| Dullness | -0.004 | 0.004 | -.06 |
| Inclusive Strategies | 0.002 | 0.001 | .06 |
| | | | |
| *Model 3* | | | |
| Quiet/Good Behaviour | -0.004 | 0.005 | -.04 |
| Disruptive Behaviour | -0.001 | 0.002 | -.02 |
| Brightness | -0.002 | 0.003 | -.03 |
| Dullness | -0.004 | 0.004 | -.06 |
| Inclusive Strategies | 0.002 | 0.001 | .06 |
| Class Cohesiveness | -0.000 | 0.002 | -.00 |
| | | | |
| *Model 4* | | | |
| Quiet/Good Behaviour | -0.005 | 0.004 | -.05 |
| Disruptive Behaviour | -0.001 | 0.002 | -.01 |
| Brightness | -0.001 | 0.003 | -.02 |
| Dullness | -0.004 | 0.004 | -.06 |
| Inclusive Strategies | 0.002 | 0.001 | .06 |
| Class Cohesiveness | -0.001 | 0.002 | -.03 |
| Class Cooperation/Diversification | 0.003 | 0.001 | .14* |
| Class Friction | -0.003 | 0.002 | -.10 |
| Teacher Rigidity/Control | 0.002 | 0.002 | .06 |
| Individualisation of Instruction | -0.006 | 0.002 | -.21*** |
| Difficulty of Classroom Work | 0.003 | 0.003 | .06 |

*Model 5*

| | | | |
|---|---|---|---|
| Quiet/Good Behaviour | -0.004 | 0.004 | -.05 |
| Disruptive Behaviour | -0.002 | 0.002 | -.03 |
| Brightness | -0.002 | 0.003 | -.03 |
| Dullness | -0.001 | 0.004 | -.02 |
| Inclusive Strategies | 0.002 | 0.001 | .06 |
| Class Cohesiveness | -0.001 | 0.002 | -.03 |
| Class Cooperation/Diversification | 0.003 | 0.001 | .14* |
| Class Friction | -0.002 | 0.002 | -.09 |
| Teacher Rigidity/Control | 0.002 | 0.002 | .06 |
| Individualisation of Instruction | -0.006 | 0.002 | -.21** |
| Difficulty of Classroom Work | 0.003 | 0.003 | .05 |
| Disability Status (D/ND) | -0.050 | 0.023 | -.10* |

*Note.* $R^2$ = .008 for Model 1 ($p$ > .05); $\Delta R^2$ = .004 for Model 2 ($p$ > .05); $\Delta R^2$ = .000 for Model 3 ($p$ > .05). $\Delta R^2$ = .027 for Model 4 ($p$ < .05) $\Delta R^2$ = .009 for Model 5 ($p$ <.05)

*Model 1* Individual child characteristics entered from *Guess Who Questionnaire.*

*Model 2* Number of strategies used by teachers to promote acceptance of individual children from *Teacher Intervention Questionnaire* entered.

*Model 3* Classroom social cohesiveness index entered (based on number of *HIFTO* smiles and frowns given to class).

*Model 4* Classroom climate measures from *Teacher Climate Control Questionnaire* entered.

*Model 5* Disability status of child entered (disabled/non-disabled based on Category A funding).

* $p$ < .05 ** $p$ < .01 *** $p$ < .001.

In Model 1, peer based measures from the *Guess Who* questionnaire were entered in a single block, representing the aggregated perceptions by peers of both positive and negative behavioural characteristics for each child in the class. In contrast to the significant findings for peer acceptance, perceptions of behavioural characteristics accounted for less than 1% of the variance ($R^2$ = .008) in measures of peer tolerance, and failed to make a significant contribution to the prediction of peer tolerance (p > .05 - see Table 4). The beta values in Table 4 indicate near zero and non-significant correlations for all characteristics with peer tolerance.

In Model 2, the additional variance explained by the number and variety of teachers' inclusive strategies was also less than 1% ($R^2 = .004$), and did not account for any more of the variance over and above that accounted for by Model 1.

In Model 3 the class cohesiveness index was entered. As with Models 1 and 2, it also accounted for less than 1% of additional variance in measures of peer tolerance. Therefore, in contrast to the results for peer acceptance, class cohesiveness adds no further explanatory value to the variance in measures of peer tolerance.

In Model 4, classroom climate measures were entered into the regression equation in a single block. From Table 4, it can be seen that the classroom climate variables en masse accounted for 3% of the variance in peer tolerance ($R^2 = .027$), which was significant at the .05 level. Nonetheless, there may be differential contributions by certain variables, with only two showing significant correlations with the dependent variable. Beta values show a weak but significant co-varying relationship between Class Cooperation/Diversification and peer tolerance, suggesting that higher levels of classroom cooperation are commensurate with greater peer tolerance. There is also a highly significant and inverse relationship between Individualisation of Instruction and peer tolerance. This indicates that the greater the degree of individualisation of instruction the lower the level of peer tolerance.

Finally, in Model 5, the contribution of the categorical variable disabled/non-disabled status was tested. As Table 4 indicates, this accounted for just less than 1% of the variance in peer tolerance ($R^2 = .009$). However, as can be seen from the Beta values, there was a significant inverse relationship between disability status and peer tolerance. From the coding of disability in the present study (2 = disability, 1 = no

disability), this indicates that the presence of a disability is less associated with peer tolerance.

Overall, all five factors accounted for only 5% of the total variance in peer tolerance, a much less substantial result than with peer acceptance. The factor providing the highest and most significant contribution to peer tolerance was classroom climate. More specifically, if Class Cooperation/Diversification was high, peer tolerance was more likely to be high also, and if Individualisation of Instruction was high, peer tolerance was more likely to be low.

Hierarchical regression analysis was carried out in the prediction of peer rejection, as measured by HIFTO frowns accorded by children to peers in their school class, both with and without disabilities. Similar models were tested in order to delineate any differential patterns involving the predictors of this dependent variable.

Table 5

*Summary of Hierarchical Regression Analysis for Behavioural Variables Predicting Peer Rejection Based on HIFTO Frowns Accorded by Children With and Without Disabilities (N = 450).*

| Variable | B | SE B | β |
|---|---|---|---|
| **Model 1** | | | |
| Quiet/Good Behaviour | -0.01 | 0.01 | -.07 |
| Disruptive Behaviour | 0.02 | 0.003 | .24*** |
| Brightness | -0.014 | 0.004 | -.15** |
| Dullness | 0.023 | 0.005 | .24*** |
| | | | |
| **Model 2** | | | |
| Quiet/Good Behaviour | -0.01 | 0.01 | -.07 |
| Disruptive Behaviour | 0.02 | 0.003 | .24*** |
| Brightness | -0.014 | 0.005 | -.15** |
| Dullness | 0.023 | 0.005 | .24*** |
| Inclusive Strategies | 0.00 | 0.002 | .00 |
| | | | |
| **Model 3** | | | |
| Quiet/Good Behaviour | -0.01 | 0.01 | -.06 |
| Disruptive Behaviour | 0.02 | 0.003 | .26*** |
| Brightness | -0.015 | 0.004 | -.16** |
| Dullness | 0.024 | 0.004 | .24*** |
| Inclusive Strategies | 0.001 | 0.002 | .02 |
| Class Cohesiveness | -0.02 | 0.003 | -.24*** |
| | | | |
| **Model 4** | | | |
| Quiet/Good Behaviour | -0.01 | 0.01 | -.06 |
| Disruptive Behaviour | 0.02 | 0.003 | .27*** |
| Brightness | -0.014 | 0.004 | -.15** |
| Dullness | 0.024 | 0.004 | .24*** |
| Inclusive Strategies | 0.000 | 0.002 | .00 |
| Class Cohesiveness | -0.02 | 0.003 | -.27*** |
| Class Cooperation/Diversification | 0.000 | 0.002 | .01 |
| Class Friction | -0.003 | 0.002 | -.08 |
| Teacher Rigidity/Control | 0.002 | 0.002 | .03 |
| Individualisation of Instruction | -0.001 | 0.002 | -.02 |
| Difficulty of Classroom Work | 0.000 | 0.003 | -.00 |

*Model 5*

| | | | |
|---|---|---|---|
| Quiet/Good Behaviour | -0.01 | 0.01 | -.06 |
| Disruptive Behaviour | 0.02 | 0.003 | .23*** |
| Brightness | -0.02 | 0.004 | -.16*** |
| Dullness | 0.031 | 0.005 | .32*** |
| Inclusive Strategies | 0.001 | 0.002 | .02 |
| Class Cohesiveness | -0.02 | 0.003 | -.27*** |
| Class Cooperation/Diversification | 0.000 | 0.001 | .01 |
| Class Friction | -0.003 | 0.002 | -.07 |
| Teacher Rigidity/Control | 0.001 | 0.002 | .03 |
| Individualisation of Instruction | -0.001 | 0.002 | -.01 |
| Difficulty of Classroom Work | -0.001 | 0.003 | -.01 |
| Disability Status (D/ND) | -0.13 | 0.03 | -.18*** |

*Note.* $R^2$ = .237 for Model 1 ($p < .001$); $\Delta R^2$ = .000 for Model 2 ($p > .05$); $\Delta R^2$ . = .059 for Model 3 ($p < .001$). $\Delta R^2$ = .006 for Model 4 ($p > .05$); $\Delta R^2$ = .028 for Model 5 ($p < .001$)

*Model 1* Individual child characteristics entered from *Guess Who Questionnaire.*
*Model 2* Number of strategies used by teachers to promote acceptance of individual children from *Teacher Intervention Questionnaire* entered.
*Model 3* Classroom social cohesiveness index entered (based on number of *HIFTO* smiles and frowns given to class).
*Model 4* Classroom climate measures from *Teacher Climate Control Questionnaire* entered.
*Model 5* Disability status of child entered (disabled/non-disabled based on Category A funding).
* $p < .05$ ** $p < .01$ *** $p < .001$.

In Model 1, peer based measures from the *Guess Who* questionnaire were entered

in a single block, representing the aggregated perceptions of both positive and negative

behavioural characteristics for each child in the class. Table 5 shows that Model 1

accounted for 24% of the variance in peer rejection ($R^2$ = .237), a substantial and highly

significant contribution. The Beta values in Table 5 indicate that all measures except for

Quiet /Good Behaviour correlated significantly with peer rejection. The positive

behaviour of Brightness showed an expected inverse relationship with peer rejection. In

other words, the greater the degree of brightness a child possesses, as perceived by

peers, the less likely it is that they will be rejected. The negative behaviours of

Disruptive Behaviour and Dullness showed a co-varying relationship with peer rejection,

indicating that the higher the levels of these characteristics as perceived by peers, the

more likely it is that the child will be rejected. Interestingly the reverse of

Disruptiveness, Quiet /Good Behaviour, failed to show a significant relationship with the

dependent variable. Therefore, with the exception of the result for Quiet/Good

Behaviour, the contribution of behavioural characteristics to peer rejection was similar

to the contribution they made to peer acceptance. So, in other words, if peers perceive a

child as dull or disruptive that child is more likely to be rejected, but if peers perceive a

child as bright that child is less likely to be rejected.

In Model 2, the effect of the classroom teacher's inclusive strategies was tested.

As in the previous analyses, this variable accounted for less than 1% and thus adds no

explanatory value to the variance in peer rejection, over and above that accounted for by

Model 1 (see Table 5).

In Model 3, class cohesiveness was entered into the regression equation as a

single measure. A similar proportion of the variance was accounted for by this variable

as that found for peer acceptance, with 6% of the variance in peer rejection ($R^2 = .059$).

This adds further significant explanatory value to the equation, over and above the

variance already explained by Models 1 and 2. Beta values in Table 5 indicate that there

is a significant and inverse relationship between cohesiveness in the classroom and peer

rejection. In other words, the higher the level of cohesiveness in the classroom, the

lower the level of peer rejection of individual members, including those with disabilities.

This result is consistent with the contribution that class cohesiveness made to peer acceptance.

In Model 4, classroom climate was entered into the equation. Table 5 indicates that this accounted for less than 1% of the variance in measures of peer rejection ($R^2 = .006$) and does not add any further explanatory value over and above Models 1 and 3 in particular. Beta values in Table 5 indicate non-significant relationships between all classroom climate measures and peer rejection.

Finally, in Model 5 disability status was entered into the equation. As can be seen in Table 5, the presence of a disability accounted for an additional 3% of the variance ($R^2 = .028$), a small but significant proportion of the variance in peer rejection. Nonetheless, this percentage was less than that accounted for by Model 1 and Model 3 both of which also found significant relationships. The Beta values in Table 5 indicate that there was an inverse and significant relationship between disability status and peer rejection. From the coding of disability status in the present study, this result indicates that the presence of a disability is less associated with peer rejection. It would appear that children without a disability might be more at risk of rejection than their peers who have disabilities.

In relation to peer rejection, the total variance accounted for by all factors together was 33.6%, which represents a substantial proportion, marginally higher than the total variance accounted for by all the factors in relation to peer acceptance. Once again, as with the findings for peer acceptance, the factors providing the highest and most significant contribution to peer rejection were peer perceptions of the behavioural characteristics of the child and peer cohesiveness in the classroom.

*Stepwise Multiple Regression Analysis*

In relation to the second aim of the present study, stepwise regression analysis was carried out in order to examine the discrete contribution each *Guess Who* individual behavioural characteristic made to social status as measured by *HIFTO* smiles and frowns accorded by children to peers in their school class. There were two positive behavioural variables, Brightness and Quiet/Good Behaviour, and two negative behavioural variables, Dullness and Disruptive Behaviour. In order to establish the commonality or otherwise of contributing factors, separate analyses were completed: one for children with disabilities and one for children without disabilities.

Analyses for Children with Disabilities

Stepwise regression analysis was completed to predict peer acceptance as measured by *HIFTO* smiles for the children with disabilities. A similar regression analysis was attempted to predict peer rejection, as measured by *HIFTO* frowns for children with disabilities. However, the *Guess Who* variables did not reach the level needed for the completion of a regression equation for peer tolerance.

Table 6

*Summary of Stepwise Regression Analysis for Behavioural Variables Predicting Peer Acceptance Based on HIFTO Smiles Accorded by Children With Disabilities (n =42)*

| Variable | $B$ | $SE\ B$ | $\beta$ |
|---|---|---|---|
| *Step 1* | | | |
| Brightness | 0.08 | 0.033 | .35* |

*Note.* $R^2$ = .122 for Step 1 ($p < .05$)
*$p < .05$, **$p < .01$, ***$p < .001$

As Table 6 indicates, the only behavioural characteristic entering into the equation in relation to acceptance for children with disabilities was Brightness, which accounted for a substantial 12.2% of the variance. As can be seen from the Beta value, there is a significant and moderately strong relationship between brightness and peer acceptance. In other words, if a child with a disability is perceived by their peers as bright, they are more likely to be accepted.

Analyses for Children without Disabilities

Stepwise regression analyses were also completed to predict peer acceptance as measured by *HIFTO* smiles for the children without disabilities and to predict peer rejection as measured by *HIFTO* frowns for the children without disabilities.

Table 7

*Summary of Stepwise Regression Analysis for Behavioural Variables Predicting Peer Acceptance Based on HIFTO Smiles Accorded by Children Without Disabilities (n = 408)*

| Variable | $B$ | $SE\ B$ | $\beta$ |
|---|---|---|---|
| **Step 1** | | | |
| Dullness | -0.046 | 0.005 | -.40*** |
| **Step 2** | | | |
| Dullness | -0.044 | 0.005 | -.38*** |
| Quiet/Good Behaviour | 0.03 | 0.006 | .20*** |
| **Step 3** | | | |
| Dullness | -0.04 | 0.005 | -.33*** |
| Quiet/Good Behaviour | 0.022 | 0.006 | .16** |
| Brightness | 0.015 | 0.005 | .15** |
| **Step 4** | | | |
| Dullness | -0.034 | 0.006 | -.29*** |
| Quiet/Good Behaviour | 0.02 | 0.007 | .13** |
| Brightness | 0.016 | 0.005 | .15** |
| Disruptive Behaviour | -0.01 | 0.004 | -.10* |

*Note.* $R^2$ = .156 for Step1 ($p < .001$); $\Delta R^2$ =.041 for Step 2 ($p < .001$); $\Delta R^2$ =.017 for Step 3 ($p < .01$) $\Delta R^2$ =.008 for Step 4 ($p < .05$).
*$p < .05$, **$p < .01$, ***$p < .001$

In Step 1, there was a significant and moderately high correlation between the behavioural characteristic of Dullness and peer acceptance. Table 7 shows that Dullness accounted for 16% of the variance in peer acceptance ($R^2$ = .156), a significant and moderately high contribution. As expected, there was an inverse relationship between Dullness and peer acceptance. In other words, the greater the degree of dullness a child without a disability possesses, as perceived by peers, the less likely it is that they will be accepted.

In Step 2, the variable of Quiet/Good Behaviour entered into the regression equation. As Table 7 indicates, the increase in $R^2$ is only 4%, explaining a small but significant proportion of the variance in peer acceptance, over and above that explained by Step 1. As can be seen from the Beta value, there is a significant relationship between Quiet/Good Behaviour and peer acceptance. In other words, a child without a disability is more likely to be accepted by their peers if they possess the characteristic of quiet/good behaviour.

In Step 3, the characteristic of Brightness is shown to correlate significantly with peer acceptance. This result was also observed for behavioural variables predicting acceptance accorded by children with disabilities (see Table 7), although not nearly as strong. As Table 7 indicates, the increase in $R^2$ is only 1.7%, explaining an even smaller but nonetheless significant proportion of the variance in peer acceptance, over and above that explained by Step 1 and 2.

Finally, in Step 4, Disruptive Behaviour adds only a further 1% explanatory value ($R^2 = .008$). As the Beta value indicates, there is a weak but significant inverse relationship between Disruptive Behaviour and acceptance. In other words, a child without a disability who is perceived by their peers to engage in disruptive behaviour is less likely to be accepted.

Overall, a total of 22.5% of the variance is accounted for by the behavioural characteristics in relation to the acceptance of children without disabilities. This represents a substantial contribution to the prediction of peer acceptance. Beta values in Table 7 across all four steps show a co-varying relationship between the positive behavioural variables and peer acceptance. In other words, as measures of Brightness

and Quiet/Good Behaviour increase, peer acceptance increases. Of the four

characteristics, Dullness was the most significant and strongest predictor accounting for

a substantial 16% of the variance.

Table 8

*Summary of Stepwise Regression Analysis for Behavioural Variables Predicting Peer Rejection Based on HIFTO Frowns Accorded by Children Without Disabilities (n = 408)*

| Variable | $B$ | $SE\ B$ | $\beta$ |
|---|---|---|---|
| ***Step 1*** | | | |
| Dullness | 0.04 | 0.004 | .38*** |
| | | | |
| ***Step 2*** | | | |
| Dullness | 0.03 | 0.004 | .29*** |
| Disruptive Behaviour | 0.02 | 0.003 | .27*** |
| | | | |
| ***Step 3*** | | | |
| Dullness | 0.022 | 0.004 | .22*** |
| Disruptive Behaviour | 0.02 | 0.003 | .26*** |
| Brightness | -0.16 | 0.004 | -.17*** |

*Note.* $R^2 = .145$ for Step1 $(p < .001)$; $\Delta R^2 = .064$ for Step 2 $(p < .001)$; $\Delta R^2 = .025$ for Step 3 $(p < .001)$. $*p < .05$, $**p < .01$, $***p < .001$

As Table 8 indicates, in Step 1, the variable Dullness accounted for 14.5% of the

variance in peer rejection $(R^2 = .145)$, which was highly significant. In Step 2,

Disruptive Behaviour added an additional 6% explanatory value to the variance $(R^2 = .064)$. This result was also significant. As can be seen in Table 8, Step 3 indicates that

Brightness was added to the equation, and this variable only added another 2.5% of the

variance in peer rejection $(R^2 = .025)$, but the result was significant. At Step 3, the final

step of the analysis, a total of 23.5% of the variance in peer rejection for children

without disabilities was accounted for by the behavioural variables in total as measured by the GW.

Beta values in Table 8 across all three steps show a co-varying relationship between the negative behavioural variables and peer rejection. In other words, as measures of Dullness and Disruptive Behaviour increase, peer rejection increases. In contrast, there is an inverse relationship at Step 3 between the positive behavioural variable, Brightness and peer rejection. In other words, as measures of Brightness increase, peer rejection decreases. All beta values show significant and moderate relationships between the discrete behavioural variables and peer rejection.

## Discussion

The present study investigated the relative contribution of a range of factors predicting social status for children with and without disabilities enrolled in regular schools. The first aim was to examine the following factors as predictors of social status: the individual behavioural characteristics of the child as perceived by peers, classroom cohesiveness, teacher management strategies and style, classroom climate, and disability status. Each factor was represented by a separate model of prediction and was forced into the regression equation. Previous research identifies peer perceptions (of behavioural characteristics) as powerful predictors of social status, thus these variables entered the equation first. The study related this factor to the reinforcement theories of social attraction. The amount of variance accounted for by this factor reflected the relative strength of the theory in the explanation of social status. The fifth and last model to be tested involved entering the variable of disability status into the equation. This variable was related to theories of cognitive consistency and social identity. A comparison of the variance accounted for by this model with that of the competing model allowed for testing of the adequacy of two competing explanatory theories.

*Model Testing and the Prediction of Social Status*

In relation to the first aim of the study, hierarchical regression analysis revealed that the most important predictor of both peer acceptance and rejection was peer perceptions of the behavioural characteristics of the child. This factor accounted for 16% of the variance in acceptance and a more substantial 24% of the variance in

rejection. Results indicated that children who are perceived by their peers as bright or displaying quiet/good behaviour are more likely to be accepted. In contrast, the children who are perceived by their peers as dull or displaying disruptive behaviour are more likely to be rejected. Thus, results indicate an association between acceptance and positive behavioural characteristics as perceived by peers, and between rejection and negative behavioural characteristics as perceived by peers.

These results highlight the significant role played by peer perceptions in relation to social status, and are consistent with a number of studies examining both children with disabilities and children without disabilities (Jenkinson, 1983; Coie & Kupersmidt, 1983; Putallaz, 1983; Siperstein and Bak, 1985; Dodge et al. 1990). For example, Gottlieb et al. (1978) examined children with disabilities and reported an association between perceived academic incompetence and level of peer acceptance and an association between perceived misbehaviour and peer rejection. Dodge (1983) completed research indicating that (non-disabled) boys who displayed both inappropriate social interaction and anti-social behaviour were more likely to be rejected. Siperstein and Bak (1985) found that negative attitudes prevailed towards non-disabled children who displayed aggressive tendencies and the most positive attitudes were associated with non-disabled children who displayed social competence. Also, O'Keefe et al. (1991) found that retarded children who were rejected by their peers displayed aggressive and disruptive behaviours, whereas retarded children who were accepted by their peers displayed sociable behaviours.

In contrast to the findings for perceived behavioural characteristics, the variable of disability status accounted for a significant but only small proportion of the variance

in both acceptance and rejection. Between three and five percent of additional variance was accounted for when disability status entered the regression equation, compared to between 16 and 24% accounted for by peer perceptions of behavioural characteristics.

The small amount of variance accounted for by disability status in the present findings is entirely consistent with findings by Iano et al. (1974). These authors found that some retarded children were well accepted by their peers, whilst other non-retarded children were rejected by their peers. Iano et al. concluded that neither disability nor the absence of disability is sufficient in itself to predict the likelihood of acceptance or rejection.

The present study established a link between empirical research and longstanding theories of social identity and attraction. The finding that peer perceptions of children's behavioural characteristics are the most important predictors of acceptance validates the applicability of the reinforcement theories of Homans (1950) and Thibaut and Kelley (1959). These theories propose that attraction is based on the perceived likelihood of either personal gain or personal harm. In other words, if a child perceives personal gains from the relationship, they are more likely to be attracted to that person. However, if a child perceives personal costs from the relationship, they are less likely to be attracted to that person.

Thibaut and Kelley (1959) note that an individual's behaviour can contribute to perceived costs. Hence, from the present findings it is apparent that the likelihood of acceptance for children is determined in large part by the perceptions peers have of children's behaviours. Moreover, in evaluating the behaviours as positive or negative,

they may, according to the theory, evaluate whether they are likely to profit or make personal gains from the relationship.

In comparison to the contribution made by peer perceptions of behavioural characteristics, the much smaller contribution made by the factor of disability status indicates that group-based factors and perceived similarity between group members are relatively less important in explaining social status. Therefore, considerably less credence can be offered by the cognitive consistency theories of Heider (1958) and the social identity theory of Tajfel and Turner (1979), which would suggest that group identity and perceptions of similarity and difference determine social status.

As well as testing models that related to major theories, Models 2,3 and 4 related to the contributions of teacher and classroom factors to social status. Of these models, only one revealed a significant contribution to the explained variance in social status. Model 2 relating to peer cohesiveness in the classroom accounted for eight per cent of the variance in acceptance, and six per cent of the variance in rejection. When classrooms are more cohesive (i.e. the balance of liking versus disliking in the class as a whole is more positive), peer acceptance of individual children is likely to be higher and peer rejection lower. These findings are consistent with research by Kaufman et al. (1985) who found that socioemotional climate, consisting of peer cohesiveness and the teachers' management style, was an important predictor of social status for all children – those with disabilities and those without disabilities. The authors reported that a low level of dislike among non-disabled peers was associated with the highest social status for children with disabilities.

In contrast to the results for peer cohesiveness (Model 2), Model 3 involving

classroom climate measures did not make a significant contribution to the variance in

either peer acceptance or rejection. These measures included Class

Cooperation/Diversification, Teacher Rigidity/Control, Individualisation of Instruction

and Difficulty of Classroom Work. These results are not consistent with findings by

Kaufman et al. (1985) for classroom climate in relation to teachers' management style

using the same measure as the present study. According to Kaufman et al., in teacher-

centred classrooms teachers have a tight control over children and tend to initiate, direct

and elicit their responses. In contrast, in teacher-managed classrooms, the teacher has

less control and works to facilitate children's management of their own learning. The

authors found that teacher-centred climates where teachers were more directive and

spent more time in one large group enhanced the social acceptance of mainstreamed

children, compared with teacher-managed climates where more time was spent in small

self-directed groups.

However, one result did support Kaufman et al. (1985): a significant inverse

relationship was found between one classroom climate measure, Class Friction, and the

level of peer acceptance of individual children. In other words, greater peer

cohesiveness results in less classroom friction, which in turn increases the likelihood of

peer acceptance. This relationship was weak however, and is perhaps more simply a

reflection of the result for classroom cohesiveness.

Kaufman et al.'s (1985) findings are more consistent with the present results for

peer tolerance. The only significant factor predicting peer tolerance was in fact

classroom climate. This factor accounted for a small but significant proportion of the

variance (3%). Two of the classroom climate measures showed a significant relationship with peer tolerance. A significant inverse relationship was found between peer tolerance and the Individualisation of Instruction, which indicates that the greater the amount of individualised instruction from the teacher, the lower the level of tolerance. This result would seem consistent with Kaufman et al.'s finding of an association between teacher-managed climates and less acceptance as described above.

In addition, a significant and co-varying relationship was found between classroom Cooperation/Diversification and tolerance. In other words, peers are more likely to be tolerant of others if cooperation in the classroom is high. Kaufman et al. (1985) conclude that teacher-centred classrooms using large-group instruction (i. e. less individualised instruction) may result in more tolerance because the cognitive deficiencies of the children with disabilities are minimised. In addition to this, greater teacher control over interactions may increase the frequency of positive interactions and minimise the possibility of displays of antisocial or disruptive behaviour. So, in other words perhaps in teacher-centred classrooms where cooperation is high and individualised instruction is low, peers are more tolerant of others because cognitive deficiencies are minimised and positive interactions are enhanced.

A question remains, however as to whether tolerance, as measured by *HIFTO* neutrals, simply represents 'mild rejection' or is representative of a separate category altogether. It may be possible that it is a measure of something other than simply the absence of either acceptance or rejection, such as peer indifference, or, as Agard et al. (1978a) have proposed, a mild frown. It may even be possible that peer tolerance reflects what Coie and Dodge (1983) have termed "neglected" status. It may be that this

is an area of research that requires further investigation because of the conceptual difficulty relating to what a neutral response actually means. Neutral responses may be very important in identifying those children who are perhaps on the fringe of rejection and with programming support, may improve their social status and in doing so avoid outright rejected status.

In Model 4, the practical inclusive strategies used by teachers and teacher assistants did not significantly predict peer acceptance, tolerance or rejection. In other words, there was not a significant relationship between the extensiveness of the range of inclusive strategies that teachers utilised and the level of peer acceptance/rejection. However, some methodological problems are associated with this measure. Questionnaire responses were quantified by counting the number of strategies elicited by several questions in a semi-structured interview, regardless of the times they were suggested. The measure revealed that most teachers appear to use a range of strategies to promote peer acceptance, and this information was quantified in a fairly broad manner. Hence, it was not possible to establish any associations between different types of strategies used and the likelihood of acceptance.

Thus, it may not be the actual number or variety of strategies, but the effectiveness of particular strategies, which would assist in the explanation of social status in the classroom. Examination of these strategies would contribute further qualitative value, albeit important, to an understanding of the influence of teacher management as a factor predictive of peer acceptance. In future studies a qualitative analysis could be completed first to examine and classify the types of strategies used, the nature of their implementation by teachers as well as the attitudes and perceptions of

teachers in relation to accepted and rejected children. Path analysis could then be used to examine whether particular inclusive strategies might have a moderating effect on peer perceptions and in turn, peer acceptance, as was indicated by Morrison et al. (1983).

*Behavioural Predictors of Social Status for Children With and Without Disabilities*

The second aim of this study was to examine whether peer perceptions of child characteristics as predictors differed for children with and without disabilities. In order to explore these relationships, separate stepwise regression analyses were carried out for the two groups, using the measures from the *Guess Who* as predictors, regressed against measures from the *HIFTO* representing peer acceptance, tolerance and rejection.

The present results indicated that behavioural characteristics as a predictor were indeed different for children with disabilities compared to children without disabilities. Differences were noted in relation to overall levels of variance accounted for by the behavioural characteristics, and also the types of behaviours that had the largest impact. For example, for the children with disabilities, the characteristic of Brightness was the lone predictor of acceptance and accounted for 12.2% of the overall variance. In contrast, for the children without disabilities, all four behavioural characteristics contributed to a prediction of acceptance and altogether accounted for a substantial 22.5% of the variance, almost double the variance for the children with disabilities.

The most salient predictor of acceptance for children without disabilities was Dullness, followed by Quiet/Good Behaviour. In other words, in contrast to the results for children with disabilities, children without disabilities who are perceived by peers as

dull are less likely to be accepted and also more likely to be rejected. And as well, these children are more likely to be accepted if peers perceive them as quiet or well behaved.

For the group of children with disabilities in the present sample, there was no apparent link between the behavioural characteristics and rejection because the variables failed to reach tolerances needed for the completion of a regression equation in relation to rejection. However, this was not the case for children without disabilities with results indicating a link between rejection and Dullness, followed by Disruptive Behaviour and Brightness. Therefore, the factors predicting both acceptance and rejection are indeed different across the two groups of children.

These results give some definitive information that has been missing from the literature investigating behavioural characteristics in separate studies involving children with and without disabilities. Although comparisons have been drawn between the findings for these two separate literatures, no studies to date have examined the behavioural predictors of the two groups who have been schooled in the same classroom (i. e., for included children with disabilities and their peers). These findings therefore represent some conclusive evidence that the behavioural characteristics predictive of peer status are indeed different for the two groups, and this may have implications for practical classroom interventions, as outlined in this study's introduction.

One possible explanation of the present results, consistent with conclusions drawn by Evans et al. (1992), is that the standards and values of peers may play a significant role in the assignment of social status and that these two groups of children are perceived differently and judgements are altered accordingly. For example, Evans examined the acceptance of children most of whom had severe multiple disabilities and,

similar to Iano et al. (1974), argued that social acceptance of children is not uniquely associated with their status as an individual with a disability and in fact, children with severe disabilities appear to be categorised differently by their non-disabled peers. Evans et al. propose that perhaps this is because children perceive that it is socially inappropriate to interact negatively with peers who have severe disabilities and therefore alter their judgements accordingly.

Furthermore, it could be argued that perhaps when children are perceived as having no disability, peers impose higher standards in terms of expectations they have of the child's behaviour and therefore take into account more behavioural characteristics in assigning social status. This argument may explain to some extent why current results appear to indicate no significant link between rejection and behavioural characteristics for the children with disabilities. This idea is consistent with conclusions drawn by Jenkinson (1987) who states that children with disabilities are perhaps more likely to be accepted not necessarily because they are regarded as friends or companions, but seemingly because peers perceive their need for positive support.

*Implications and Directions for Future Research*

The present study was an exploratory study to test the applicability of different models to the prediction of social status. However, the present method of analysis, whilst examining the discrete contributions of each factor to the dependent variables, was limited because it did not allow for the examination of moderating influences, for example teacher perceptions influencing peer perceptions, as in Morrison et al.'s (1983) study. In future studies, teachers' perceptions of individual characteristics both for

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children with and without disabilities in the same classroom could be obtained, making

it possible to test Morrison et al.'s findings of a causal influence of teacher perceptions

on peer perceptions for both groups of children, rather than solely for children with

disabilities. A future study, but one which requires a rather large time commitment from

teachers, might consider measuring teachers' perceptions of the profiles of an accepted

child, a tolerated child and a rejected child, as determined by sociometric measures

completed by peers. These measures could then be compared to observations of the

behavioural characteristics displayed by these children in both the classroom and

playground.

If indeed there is a causal link between the teacher and peer perceptions, teachers

have a significant role to play in promoting acceptance for those children who are not

bright or who display disruptive behaviour. The question of whether teachers'

perceptions and modelled behaviour in a classroom can influence or mediate peer

perceptions therefore remains an important area for future research.

Future research also needs to move one step further and consider in more detail

the nature of interactions between rejected children and their peers. It may not simply

be a reflection of quantity (i.e., these children display more antisocial behaviours than

accepted children), but also the quality. For example, the nature of their interactions and

how they attempt to enter a peer group initially may be distinctly different from the

behaviours of children who are accepted by their peers. As Dodge et al. (1982)

recommend, intervention programs ought to be about:

" . . . improving the timing and quality of social approaches and

reducing the frequency of aggression . . ." (p. 407).

To facilitate a more comprehensive study of this area, observations of children's behaviour ought to be obtained in addition to the use of sociometric techniques. Previous studies have indicated consistency between observations and sociometric measures in relation to the profiles of accepted, neglected and rejected children. It would be interesting to observe the behaviours of neglected children as well as rejected children since it may be more likely that with intervention the status of the former could be improved. The status of rejected children, which is more stable over time, may be more difficult to address and may require a different form of intervention. As Coie (1990) notes, rejection is a social process so instead of simply observing the individual child, perhaps the interactions within the peer group need to be taken into account. It is possible, according to Coie, that group dynamics serve to maintain peer rejection also.

Also, research has been limited in the area of cross-age comparisons. It would be beneficial to establish whether there are age differences in the likelihood of acceptance and whether developmental changes exist in correlates of social status. It may be that certain behaviours are perceived as appropriate by one age group but perceived as antisocial by another (Asher & Renshaw, 1981).

The results of this study have implications for the identification of and programming support for children who are not well accepted or are rejected by their peers. Children who may be most at risk of rejection appear to be those children who have learning deficits or cognitive deficits, and those who exhibit antisocial and/or aggressive behaviour towards peers. These children are less likely to be accepted and more likely to be rejected.

Based on the present findings, perhaps one form of intervention may be that teachers focus on compensating for possible peer perceptions of dullness by highlighting highly-valued positive behaviours rather than negative less-valued behaviours displayed by the child. So, for example if a child has an intellectual disability but also displays prosocial behaviour, the teacher could focus on developing peers' awareness of the latter. This might be best achieved through the use of a teacher-centred style of management or a whole-group focus. This is because Kaufman et al. (1985) note that this management style minimises the impact of cognitive deficiencies, and peers have a more direct experience of the teacher's modelled behaviour towards the rejected child.

The results also indicated that peer cohesiveness is a salient predictor of peer acceptance, therefore teachers may assist children at risk by regularly conducting activities that focus on tolerance of others, respect and peer support, and encouraging all students to achieve a supportive classroom environment. By explaining to children that they do not necessarily have to like all their peers, but they do have to treat them with respect and display tolerance and by modeling this type of behaviour also, teachers may be able to prevent the development of rejected status for some children, and enhance the accepted status of others. This programming would serve two purposes. First it would increase the likelihood that there will be a greater percentage of liking amongst peers for one another (i.e., increasing the level of peer cohesiveness in the classroom). Second, if activities are practical rather than purely academic, differences between students' achievement levels and academic competence will be lessened (ie, decreasing the likelihood that children will be perceived as dull).

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The finding that non-disabled peers are more likely to be rejected not only if they are dull, but also if they display disruptive behaviour also has significant implications for schools, particularly as non-disabled children represent the majority of the population in a classroom at any one time. As Dodge (1983) highlights from research findings, prosocial behaviour does not guarantee acceptance unless it is also coupled with an absence of aggressive or antisocial behaviour. Therefore, not only do schools need to consider programs for rejected children that teach prosocial skills, but also programs that manage disruptive behaviour in such a way that it can be either minimised or even eliminated in classrooms and playgrounds.

A number of studies thus far have considered specific social skills that need to be taught based on observed social deficits in rejected children (Oden & Asher, 1977; Ladd, 1981) so it would be essential that any program takes into account recent research findings in this area. Now that more is known about the behavioural correlates of social status, the level of analysis of behaviour needs to assume a specific contextual focus in order to learn more about particular deficits (Coie, 1990).

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# Appendices

<u>Appendix A</u>

Category A register – Department of Education website

<u>Appendix B</u>

1. *How I Feel Toward Others (HIFTO)*

2. Instructions for the *HIFTO*

<u>Appendix C</u>

1. *Guess Who* (adapted Australian Form)

2. *Guess Who* (Original Form)

3. Instructions for the *Guess Who*

<u>Appendix D</u>

*Teacher Classroom Climate Questionnaire* (TCCQ)

<u>Appendix E</u>

Teacher Inclusive Strategies Questionnaire (TIQ)

<u>Appendix F</u>

1. Letter to school principals

2. Information letter to schools

3. Consent form

# APPENDIX A
## Category A Register
(Information from the Department of Education website:
www.education.tas.gov.au)

What is the Category A Register and how does it work?
The Category A Register identifies those students for whom the functional and educational impact of their disability is the most severe. These students generally require substantial, often highly specialised, support throughout their school years in order to access appropriate education and achieve appropriate educational outcomes. Students on the Category A Register are supported from central rather than district special education resources. Eligibility to access central special education resources is determined by a statewide Category A Moderation Process which determines each individual student's eligibility to be placed on the Category A Register. Specific areas of disability identified on the Category A Register include:

> Intellectual Disability
> Autism Spectrum Disorder
> Physical Disability (including Health Impairments)
> Psychiatric Disability
> Vision Impairment
> Deaf and Hearing Impairment
> Multiple Disabilities.

Relevant, detailed information about each of these register areas, including eligibility criteria, and the documentation required to support a student's nomination is available.

How are students nominated for the Category A Register?
Students thought to be eligible for the Category A Register are nominated by their school, in conjunction with the relevant support service. Nominations are endorsed by the relevant District Support Service Manager, or the relevant State Coordinator in the case of students with a vision or hearing impairment or those students who have been supported in kindergarten by Early Special Education Services, and are then forwarded to the Moderation Committee.

Moderation committees, for each of the identified disability areas, are chaired by the Manager, Disability Standards and include a range of professionals from around the State, who have specific experience and expertise relevant to the area of disability being considered. Decisions regarding each student's eligibility are made on the basis of written documentation provided to the committee. Clear guidelines are published, detailing the information that is required by the committee in order to make fair, informed decisions about each student's eligibility. Published eligibility criteria are applied to ensure the integrity of the moderation process. Moderation committees reserve the right to ask for additional information about nominated students to help them make the most appropriate decision about a student's eligibility. The source and content of any additional information will be recorded in the Minutes.

To help make informed decisions, a representative of the Moderation committee may visit a student being nominated for the Register to observe his/her functional behaviour in the classroom. Each Moderation committee provides feedback to the relevant District Support Service Manager or State Coordinator about each student's eligibility for the Register. This information can be provided to schools and parents/carers. If a student is considered ineligible for the Register, the nomination (with additional information) may be resubmitted at a future round of moderation, if the school and/or parent/carer wish.

# APPENDIX B
## *How I Feel Toward Others Scale (HIFTO)*

Please circle the face which is most like how you feel about each of your classmates.

| ? You do not know. |
| :--- |
| ☺   You like him or her and she or he is your friend. |
| ☻ You know him or her well but you do not especially care about them. |
| ☹   You do not like him or her. |

| | ? | ☺ | ☻ | ☹ |
| :--- | :--- | :--- | :--- | :--- |
| _____ | ? | ☺ | ☻ | ☹ |
| _____ | ? | ☺ | ☻ | ☹ |
| _____ | ? | ☺ | ☻ | ☹ |
| _____ | ? | ☺ | ☻ | ☹ |
| _____ | ? | ☺ | ☻ | ☹ |
| _____ | ? | ☺ | ☻ | ☹ |
| _____ | ? | ☺ | ☻ | ☹ |
| _____ | ? | ☺ | ☻ | ☹ |
| _____ | ? | ☺ | ☻ | ☹ |
| _____ | ? | ☺ | ☻ | ☹ |
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| _____ | ? | ☺ | ☻ | ☹ |
| _____ | ? | ☺ | ☻ | ☹ |
| _____ | ? | ☺ | ☻ | ☹ |
| _____ | ? | ☺ | ☻ | ☹ |
| _____ | ? | ☺ | ☻ | ☹ |
| _____ | ? | ☺ | ☻ | ☹ |
| _____ | ? | ☺ | ☻ | ☹ |
| _____ | ? | ☺ | ☻ | ☹ |
| _____ | ? | ☺ | ☻ | ☹ |
| _____ | ? | ☺ | ☻ | ☹ |

# APPENDIX B
## Instructions for Completion of the *HIFTO*

*Hi everybody, my name is Meegan Robinson. You might remember your Mum or Dad signing this consent form (show example of a form) to say that they were happy for you to participate in some research (wait for response from students)?*

*Well, I am from the University of Tasmania and I need your help to do my research. I am interested in finding out about friendships in your class (who you like or don't like to play with) and in how much you know about the people in your class. Today I would like you to fill out two questionnaires. This will take about 45 minutes to 1 hour to do. Does anyone know what a questionnaire is (wait for response from students)?*

*Yes, that's right. A questionnaire is a bit like a test, but instead it's asking for your opinion about something and there are no right or wrong answers. Before we do the first questionnaire, let's see what your opinions are of these animals (hand out the example sheet below). You will see on this sheet the names of a few different animals. Next to each animal's name are a question mark and three faces (point to these). The first animal is the Dog. You have to circle one of these depending on how you feel about dogs. So, if you don't know them very well you will circle the question mark. If you like dogs, you will circle the happy face. If you know about dogs but you don't especially care about them, you will circle the face with the straight mouth. Finally, if you don't like dogs, you will circle the sad face. Now with your pencil, circle the one that is most like how you feel about dogs. Remember to choose only one and to circle it clearly.*

| | |
|---|---|
| ? | You do not know them. |
| ☺ | You like them and they are your friend. |
| ☺ | You know them well but you do not especially care about them. |
| ☹ | You do not like them. |

| | | | | |
|---|---|---|---|---|
| Dog | ? | ☺ | ☺ | ☹ |
| Tiger | ? | ☺ | ☺ | ☹ |
| Cow | ? | ☺ | ☺ | ☹ |
| Capybara | ? | ☺ | ☺ | ☹ |
| Monkey | ? | ☺ | ☺ | ☹ |

*Let's try the next one, the Tiger. Circle the one that is most like how you feel about tigers.*
*Good. Now, the next one is the Cow. Circle the one that is most like how you feel about cows. Great work! The next animal is the Cabybara. Does anyone know what a capybara is (wait for response from students)? Yes, it sounds like the word kookaburra, but it isn't a bird. The capybara is the largest living rodent (show picture) that lives in South America. It is three or four feet long, is sand-coloured and tailless. On your sheet, circle the one that is most like how you feel about capybaras. Remember that if you don't know much about them, a good choice would be the question mark. The last animal is the Monkey. Record how you feel about this animal by circling just one response.*

*OK. Has everyone finished? Let's see what people's opinions were. How many people chose the happy face for the Dog? That means they like dogs (students put their hands up)? (Continue by asking for*

*number of responses to the other three choices and then complete the same discussion for an alternative animal).*

*So, some people circled a happy face for the dog and others circled a sad face. You see there are no right or wrong answers because people's opinions are different. You have to choose what's right for you, depending on how you feel.*

*Now we are going to do the first questionnaire (distribute HIFTO forms). When you get your questionnaire do not write on it yet. Just see if you can find your name written on the page.*

*(Once HIFTO forms and clipboards are distributed) You will notice that on this sheet there are the same question marks and three types of faces, but this time instead of the names of animals, what is written there? Yes, it's the names of all the people in your class. The order of the names on your sheet might be different from the person sitting next to you. That's OK, they are supposed to be like this.*

*So this time you are going to select a question mark or face for each person in your class depending on how you feel about them. (Reiterate the instructions for what the symbols mean). Did everyone find their name on the list? (If a child cannot find their name, provide assistance. If the name has been omitted, write the name in big letters on a piece of paper and instruct students to write this at the bottom of their page, along with the symbols). I want you to cross off your name and the symbols next to it. I do not want you to do one for yourself. Remember I am interested in how you feel about your classmates.*

*Before we start, this questionnaire is different from the animals we did together, because I want you to complete this very quietly and do this one on your own, keeping your answers private from others. Can anyone think of why this is so important?*

*Yes, that's correct. It is important not to share or let others see your opinions. If someone finds out that you have chosen a sad face for them because you don't like them they might feel sad too. It's OK not to like somebody, but it's not OK to share that with them. You would hurt their feelings and it might be hard for them to make friends. If anyone isn't sure what to do or has trouble reading the names, put your hand up and I will come around and help you.*

*OK if you have your sheet and you know what to do, move to a space of your own and begin work. When you have finished, turn your page over to keep it private and wait quietly until everyone has finished. (Provide assistance to those who require help with reading or completing the task).*

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*GUESS WHO* (GW)
(Adapted Australian Form)

## Questions

1. Who has the longest hair in this class? .......................

2. Who is the tallest in this class? .......................

3. Who is always bothering (annoying) other children?

   .......................

4. Who breaks the rules? .......................

5. Who is often picked to be captain for (leader in) games?

   .......................

6. Who is best in maths (arithmetic)? .......................

7. Who doesn't talk much to other children? .......................

8. Who is the smartest (cleverest) in the class? .......................

9. Who makes fun of other children? .......................

10. Who is the worst in maths? .......................

11. Who always wants their own way? .......................

12. Who is the worst in reading? .......................

13. Who doesn't have any friends? .......................

14. Who stays by themselves in the playground? .......................

15. Who is friendly to everyone? .......................

16. Who does the teacher have to correct (tell off) all the time?

   .......................

17. Who never knows the answers in class? .......................

18. Who always plays fair (is fair) in games? .......................

19. Who is the best behaved? .......................

20. Who always knows the answers to the teacher's questions?

...........................

21. Who never gets mad at (angry with) other children?

...........................

22. Who makes too much noise in class? ..........................

23. Who learns new things very slowly? ..........................

24. Who never talks in class discussions? ..........................

25. Who likes to boss others around? ..........................

26. Who always gets their schoolwork done in time? ..........................

27. Who is the best at reading? ..........................

28. Who bothers (annoys) the teacher all the time? ..........................

29. Who gets into lots of fights? ..........................

30. Who never gets their schoolwork done in time? ..........................

31. Who does not work well with others on group projects?

...........................

*GUESS WHO* (GW)
(Original Form)

## Questions

1. Who has the longest hair in this class? ......................

2. Who is the tallest in this class? ......................

3. Who is always bothering other children? ......................

4. Who breaks the rules? ......................

5. Who is often picked to be captain for games? ......................

6. Who is the best in math?......................

7. Who doesn't talk much to other children? ......................

8. Who is the smartest in the class? ......................

9. Who makes fun of other children? ......................

10. Who is the worst in math? ......................

11. Who always wants their own way? ......................

12. Who is the worst in reading? ......................

13. Who doesn't have any friends? ......................

14. Who stays by themselves in the playground? ......................

15. Who is friendly to everyone? ......................

16. Who is scolded by the teacher all the time? ......................

17. Who never knows the answers in class? ......................

18. Who always plays fair in games? ......................

19. Who is the best behaved? ......................

20. Who always knows the answers to the teacher's questions?

......................

21. Who never gets mad at other children? ......................

22. Who makes too much noise in class? ......................

23. Who learns new things very slowly? .......................

24. Who never talks in class discussions? ........................

25. Who likes to boss others around? .........................

26. Who always gets their schoolwork done on time? .......................

27. Who is the best at reading? ........................

28. Who bothers the teacher all the time? ........................

29. Who gets into lots of fights? ........................

30. Who never gets their schoolwork done on time? ........................

31. Who does not work well with others? ........................

# APPENDIX C
## Instructions for Completion of the *Guess Who*

*Ok. This next questionnaire is quite different from the previous one. This time I am interested in finding out how much you know about your classmates. Before we do the questionnaire though, let's do some practice questions. Remember this is not a test and there are no right or wrong answers. Listen carefully to this question and think of a classmate who is most like that person in the question. It can be a boy or a girl but you can only have one name for each question.*

*The first question is: "Who has the longest hair in the class?"*
*(Ask for ideas from the group, highlighting the fact that people had different answers and that this is OK.). If you think that you have the longest hair, you cannot choose yourself. Think about the second best person to fit this description.*

*The second question is: "Who is the tallest in the class?"*
*(Ask for ideas from the group, highlighting the fact that people had different answers and that this is OK.). If you think that you are the tallest, you cannot choose yourself. Think about the second best person to fit this description.*

*(Once questionnaire sheets are distributed).*
*Here is the next questionnaire. You will see this has lots of questions on this side and on the back. When you get your sheet, don't start. Just wait until everyone is ready. Remember that you can only write one name next to each question. If you can think of two people, choose the best one to fit the description. Remember you must not write your own name.*

*Also, are there any people with the same names in this class?*
*If so, then you must write the initial of their last name, so that I know whom you mean. For example there are two _____'s in your class, so if you write the word _____ be sure to write the initial of their last name.*

*As with the other questionnaire, you need to complete this very quietly. It is important not to share or let others see your answers. For example, if someone finds out that you have written their name next to "Who never gets their schoolwork done on time?" they might feel sad and you could hurt their feelings. If anyone isn't sure what to do or has trouble reading the names, put your hand up and I will come around and help you.*

*OK, move quietly to the space you were working in before. When you have finished, turn your page over to keep it private and wait quietly until everyone has finished.*

**(Once questionnaires have been completed and checked by the examiner).**
*Can everybody move back to sit near me please? Thank you very much for completing the two questionnaires today and for helping me with my research. Remember that questionnaires are not like tests there are no right or wrong answers. Before you go, I just want to remind you how important it is not to share your answers with other people, even the others in your class who did not do the questionnaire today. Can anyone remember why?*
*(Listen and discuss student suggestions).*
*Yes, you might upset someone if you tell him or her that you chose a sad face for them (you don't like them) or if you tell them that you wrote their name down next to something like "Who is the worst in Maths?" or "Who doesn't have any friends?" Think about how you would feel if someone told you that they had written your name down next to one of these questions. Also, if you tell someone else what you wrote about a person, they might go off and tell that person. Then that person won't like you much. So when you go back to class, keep your answers private, even from your friends. Does anyone have any comments or questions?*

*Bye everybody.*

# APPENDIX D
## *TEACHER CLASSROOM CLIMATE QUESTIONNAIRE* (TCCQ)

Please circle the number under the column which best represents how accurate this statement is for your classroom:

**N – Never**
**R – Rarely**
**S – Sometimes**
**U – Usually**
**A – Always**

|  |  | N | R | S | U | A |
|---|---|---|---|---|---|---|
| 1. | In my class the children like to work together on assignments (tasks) and projects. | 1 | 2 | 3 | 4 | 5 |
| 2. | The children in my class help me make plans for the day. | 1 | 2 | 3 | 4 | 5 |
| 3. | In my class I use many library books and reference materials in addition to textbooks. | 1 | 2 | 3 | 4 | 5 |
| 4. | Students are encouraged to explore new activities independently. | 1 | 2 | 3 | 4 | 5 |
| 5. | The children in my classroom have permission to move their seats together into groups in order to work together. | 1 | 2 | 3 | 4 | 5 |
| 6. | Children try to help each other with their work. | 1 | 2 | 3 | 4 | 5 |
| 7. | Students are required to test their hypotheses with experiments. | 1 | 2 | 3 | 4 | 5 |
| 8. | The class actively participates in discussions. | 1 | 2 | 3 | 4 | 5 |
| 9. | The class learning materials include lots of materials I have developed. | 1 | 2 | 3 | 4 | 5 |
| 10. | My class program includes use of the neighbourhood resources. | 1 | 2 | 3 | 4 | 5 |
| 11. | The class learning materials include materials developed or supplied by the children. | 1 | 2 | 3 | 4 | 5 |
| 12. | We have a lot of fun in my class. | 1 | 2 | 3 | 4 | 5 |
| 13. | I occasionally allow the children in my class to manage themselves. | 1 | 2 | 3 | 4 | 5 |
| 14. | Children use "books" written by their classmates as part of their reading and reference materials. | 1 | 2 | 3 | 4 | 5 |
| 15. | Most members of the class aren't interested in what the class does. | 1 | 2 | 3 | 4 | 5 |
| 16. | The children look at and discuss each others' work. | 1 | 2 | 3 | 4 | 5 |
| 17. | Children are permitted to use most materials in the class without asking permission. | 1 | 2 | 3 | 4 | 5 |
| 18. | Most students cooperate rather than compete with one another. | 1 | 2 | 3 | 4 | 5 |

Teacher Climate Control Questionnaire continued

|  | | N | R | S | U | A |
|---|---|---|---|---|---|---|
| 19. | Decisions affecting the class tend to be made democratically. | 1 | 2 | 3 | 4 | 5 |
| 20. | Some children in my room don't like the other children in the room. | 1 | 2 | 3 | 4 | 5 |
| 21. | Certain students impose their wishes on the whole class. | 1 | 2 | 3 | 4 | 5 |
| 22. | There is constant bickering and fighting among the children in my class. | 1 | 2 | 3 | 4 | 5 |
| 23. | There are some children who are not happy in my class. | 1 | 2 | 3 | 4 | 5 |
| 24. | The work of the class is frequently interrupted when some students have nothing to do. | 1 | 2 | 3 | 4 | 5 |
| 25. | There are periods of confusion when the class changes from one activity to another. | 1 | 2 | 3 | 4 | 5 |
| 26. | Most of the children in my room do not cooperate well with each other. | 1 | 2 | 3 | 4 | 5 |
| 27. | There are a few children with whom I seem to have more casual communications. | 1 | 2 | 3 | 4 | 5 |
| 28. | Some class members feel rushed to finish their work. | 1 | 2 | 3 | 4 | 5 |
| 29. | Certain students work only with close friends. | 1 | 2 | 3 | 4 | 5 |
| 30. | In my class I have a few favourite children who are granted special privileges. | 1 | 2 | 3 | 4 | 5 |
| 31. | Certain children in my class get their own way. | 1 | 2 | 3 | 4 | 5 |
| 32. | The children enjoy the class activities. | 1 | 2 | 3 | 4 | 5 |
| 33. | I ask that the children not talk when they are supposed to be working. | 1 | 2 | 3 | 4 | 5 |
| 34. | Children are not supposed to move about the room without asking permission. | 1 | 2 | 3 | 4 | 5 |
| 35. | I make sure children use materials only as instructed. | 1 | 2 | 3 | 4 | 5 |
| 36. | I base my instructions on curriculum guidelines or textbooks for the grade level I teach. | 1 | 2 | 3 | 4 | 5 |
| 37. | The children in my class ask permission before doing things like sharpening their pencils. | 1 | 2 | 3 | 4 | 5 |
| 38. | I plan and schedule all the children's activities throughout the day. | 1 | 2 | 3 | 4 | 5 |
| 39. | The instructional groups formed (at the beginning of the year) are seldom changed. | 1 | 2 | 3 | 4 | 5 |
| 40. | Only the good students are given extra projects. | 1 | 2 | 3 | 4 | 5 |
| 41. | I make classroom work assignments based on each individual child's needs. | 1 | 2 | 3 | 4 | 5 |
| 42. | I often spend extra time with children who have individual learning problems. | 1 | 2 | 3 | 4 | 5 |

Teacher Climate Control Questionnaire continued

| | N | R | S | U | A |
|---|---|---|---|---|---|
| 43. I spend lots of time each day working on academic subjects with individual children. | 1 | 2 | 3 | 4 | 5 |
| 44. All children are expected to do the same assignments. | 1 | 2 | 3 | 4 | 5 |
| 45. Many different projects and activities go on in my class simultaneously. | 1 | 2 | 3 | 4 | 5 |
| 46. I require all the children to take the same tests over the material presented to the whole class. | 1 | 2 | 3 | 4 | 5 |
| 47. I keep records on each child's day-to-day educational activities for use in evaluating his or her development. | 1 | 2 | 3 | 4 | 5 |
| 48. Children work directly with manipulative materials. | 1 | 2 | 3 | 4 | 5 |
| 49. The class activities are well organised and efficient. | 1 | 2 | 3 | 4 | 5 |
| 50. When children finish their class (work), they know what to do next. | 1 | 2 | 3 | 4 | 5 |
| 51. The class has plenty of time to cover the assigned amount of work. | 1 | 2 | 3 | 4 | 5 |
| 52. The children in my class have some free time during the day. | 1 | 2 | 3 | 4 | 5 |
| 53. Within the classroom, there is a wide enough diversity of books to meet each child's needs and interests. | 1 | 2 | 3 | 4 | 5 |
| 54. Most students in the class find the work hard to do. | 1 | 2 | 3 | 4 | 5 |
| 55. The class has difficulty keeping up with the assigned curriculum. | 1 | 2 | 3 | 4 | 5 |
| 56. Many children in the class do not understand what (work) they should be doing. | 1 | 2 | 3 | 4 | 5 |
| 57. When the children start (a new task), they are often confused. | 1 | 2 | 3 | 4 | 5 |
| 58. Most of the children can do their work without help. | 1 | 2 | 3 | 4 | 5 |
| 59. All the students know how to do the work assigned in my class. | 1 | 2 | 3 | 4 | 5 |
| 60. Most children are deeply involved in what they are doing throughout the day. | 1 | 2 | 3 | 4 | 5 |

**APPENDIX E**
**Teacher Intervention Strategies Questionnaire**
(Semi-Structured Interview)

We are interested in what practical strategies or ideas you have in promoting the social acceptance of children in your classroom. Please consider the following questions, keeping in mind particular children you teach, particular incidents you have been involved in, or particular situations in your classroom, the playground or elsewhere.

We would appreciate it if you could be as candid as possible. Your responses will remain strictly confidential.

1a. You may have a child or children in your class who are different from most children, in terms of their developmental stage, a disability, their race or ethnicity, their behaviour, or their family circumstances. Please describe any techniques or strategies you use or have used in managing this sort of diversity. How successful was it? What else would you have done?

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1b. Please describe any strategies you use or have used when children in the class draw attention to differences in a negative way? How successful was it? What else would you have done?

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2.  Think of a situation when one or more of your students were involved in an incident of bullying, harassment or discrimination. What specific strategies did you use to manage or resolve the issues? Did this work? If not, what else might you have done?

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3.  Have you ever faced a situation where one of your students was excluded from a particular activity by other students? What were the circumstances? What action did you take? Was it successful? What else could you have done?

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4.  In your classroom, what specific strategies do you use or have used to encourage students to get along with each other? Do they work? What else would you like to do?

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5. During cooperative learning activities, have you faced a situation where several students complained about having to work with one particular student in their group? How did you manage this situation? Were you successful at resolving this problem?

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6. In your classroom do you do any explicit teaching of prosocial skills, such as problem solving, friendship skills or anger management? How do you do this? How effective is it? What else would you like to do to improve prosocial skills?

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7a. Do you have children in your classroom who require a different or modified curriculum? How do you manage this? Does it work? What else would you like to do, or what could be done?

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7b. What specific strategies would you or do you employ when other students become aware of or comment on this different curriculum? Do they work? What else would you like to do?

8. How adequate is the physical environment of your classroom for the diversity of children in it at present? Have you changed it in any way to accommodate student needs? What else might be needed?

9. What do you believe is the single most important strategy that you use or have used to promote social acceptance of children in your classroom?

Thank you for your participation.

Meegan Robinson

# APPENDIX F
## Letter to School Principals

Meegan Robinson
29 Queen Street
Sandy Bay Tas 7005
Ph. 0417 113 798

28.06.02

Dear

I am writing to ask if your school would be interested in participating in some research that I am conducting in primary schools across the state this year. I am required to undertake research as part of my Masters in Psychology degree. As I have worked in schools for the past 8 years as a Guidance Officer, I chose to complete my research in school settings because I wanted to make a valuable contribution to the field in which I work. What follows is a brief outline of the research.

**Title:**
Factors affecting peer acceptance of children with disabilities in regular schools.
**Description:**
The purpose of this research is to gather information about the contribution a number of factors make to peer acceptance and friendship patterns in classrooms which include a child or children with a disability (i.e. those children on the Category A Register). Specifically, I will be asking for information from children about how they feel towards each other and with whom they prefer to play or have as their friend. I will be asking for information from the teachers of these classes about: their attitude towards inclusion; their classroom environment; individual characteristics of the child/children with a disability; and practical strategies they use to promote social acceptance. Information will be obtained through the use of questionnaires and semi-structured interviews. I will be focusing on children in **Grades 2-6** inclusive. In order for this research to be successful, I would like as many children as possible in a class to participate. In accordance with ethical requirements, only those children whose parents have provided written consent for their participation will be included. Similarly, I will include only those teachers who have provided written consent. In addition to this, I understand that participation in this research is voluntary and parents and teachers will be informed that they may withdraw their consent at any time during the process.

There will be important practical considerations arising from the findings, which will assist both yourself and future teachers in developing appropriate educational interventions to enhance the acceptance and adjustment of all children in the classroom including those with disabilities.

This research has been approved by the Department of Education and is supported by Ms Kate Shipway in the Equity Standards Branch. I trust that you will consider participation in this research. I will contact you in the next week to ask whether you are interested. If so, I would like to organise a follow-up appointment with you to further discuss your involvement. In the interim, please feel free to contact me on the above number or by email: meegan.robinson@education.tas.gov.au.

Yours sincerely

Meegan Robinson

## APPENDIX F
## Information Sheet


## Title of Project:
Factors affecting peer acceptance of children with disabilities in regular schools
Miss Meegan Robinson and Dr Rosanne Burton Smith


Dear Parent/Guardian,

This letter is to tell you about some research being conducted at your child's school. We are interested in finding out how children feel about each other and with whom they prefer to play or have as their friend. We wish to gather information on the levels of peer acceptance and friendship patterns in your child's classroom, which may include a child or children with a disability. There will be important practical considerations arising from the findings, which will assist you and your child's teacher in developing appropriate educational interventions to enhance the acceptance and adjustment of all children in the classroom, including those with disabilities. We will be targeting regular primary schools that have children with disabilities in mainstream classes.

This research will involve children filling out two questionnaires: the *How I Feel Towards Others Scale* which measures how well children are accepted by their peers, and the *Guess Who Scale* which measures how children view the behaviour and achievement of fellow-students. This should take between 40-60 minutes and will be carried out in small groups of 10 students at a time. Meegan Robinson, a student researcher, will be administering the questionnaires as part of her Masters project in Psychology. She is currently working as a Guidance Officer in schools and has had a considerable amount of experience working with children. Dr Rosanne Burton Smith, who has had extensive experience in research about children, is supervising this project. In addition to this, we would like some information from the teacher about their classroom environment, their attitude towards teaching children with disabilities, the strategies they employ to enhance peer acceptance, and about the individual characteristics of the child (ren) with disabilities they teach. We would also like some information from teacher aides who work with the child (children) with a disability and about the strategies they use. Your child's questionnaires will be filled out anonymously. We are not interested in individual children's results, but rather the results of groups of children. We will carefully explain the questionnaires and how to fill them out and provide an opportunity for questions. Children will be made aware that their participation is voluntary.

We would like as many children as possible in your child's class group to participate in order for this research to be successful. We will, however, need your written permission for your child to participate. If you have any questions about this project, please telephone us on the numbers given below. Additionally, you may contact A/Prof Margaret Otlowski (Chair of the Southern Tasmanian Social Sciences Human Research Ethics Committee) on 6226 7569 or Ms Amanda McAully, Executive Officer on 6226 2763. A report on the group results will be made available to the school by the end of this year, which you will be able to access. You will be notified that the report is available through the school newsletter.

This project has the approval of the University of Tasmania Ethics Committee, the Department of Education, the School of Psychology, and is supported by the Principal and staff of your child's school.

Thank you for your support of our project.


Dr Rosanne Burton Smith          Miss Meegan Robinson
(Phone: 6226 2241)               (Phone: 0417 113 798)

## UNIVERSITY OF TASMANIA
## CONSENT TO PARTICIPATE IN RESEARCH
Parent Form

**Title of Project:**
Factors affecting peer acceptance of children with disabilities in regular schools
Miss Meegan Robinson and Dr Rosanne Burton Smith

I have read and understood the information letter and understand the procedures involved with this project. I understand the nature and possible effects of the study and have had an opportunity to ask questions and have them answered to my satisfaction. I understand that all research data will be treated as confidential and my child's participation in this project is voluntary and that I may withdraw my consent at any time.

I agree that _____ (name of child), who is under my guardianship, may take part in this project.

Name of Parent(s) or Guardian:

_____

Signature of Parent(s) or Guardian: _____ Date:

_____