The All In Award: A feasibility study of an intervention to improve children's attitudes towards peers with intellectual disabilities

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Thesis declaration form

I confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

Signature:

Name: Sophie FitzGerald

Date:

Overview

This thesis will explore children's attitudes towards their peers with intellectual disabilities and is presented in three parts.

Part one is a review of the literature, examining psychometric and sociometric methods used to assess children's attitudes towards their peers with intellectual disabilities. The literature review revealed that there are limited measures available that were designed specifically to assess children's attitudes towards intellectual disabilities. There was also limited information available on the psychometric properties of the measures used by researchers.

Part two presents the empirical paper, investigating the feasibility of the All In Award, designed to improve children's attitudes towards their peers with intellectual disabilities. The All In Award was deemed feasible, with suggestions for improvements made. Preliminary outcomes suggest that the award was successful in improving interaction and attitudes towards children with intellectual disabilities. However, only a small number of questionnaires were returned and therefore there is a need for evaluation on a larger scale.

Part three is the critical appraisal, reflecting on the process of the research, reasons for undertaking research in this area and the challenges faced along the way. Further limitations and implications of the study are also explored.

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Part One: Literature Review

A systematic review of psycho- and sociometric methods used to assess children's attitudes towards peers with intellectual disabilities

Abstract

Aims

This review examined psycho- and sociometric methods used to assess children's attitudes towards peers with intellectual disabilities, along with the quality of the measurement methods used.

Methods

A systematic search was carried out to identify studies investigating attitudes of typically developing children towards their peers with intellectual disabilities, published between 2000 and 2016. Studies that met the inclusion criteria were examined for the measurement method used and its quality.

Results

The review identified 27 articles which met the inclusion criteria. Across the studies reported, 20 different questionnaires were used. A number of studies combined measurement methods to assess the cognitive, affective and behavioural components of attitudes. Seven studies used sociometric methods alone. The articles provided very little information on the reliability and validity of the measures they used.

Conclusions

Most measures in use were designed to assess attitudes towards peers with disability in general, rather than specifically towards those with intellectual disabilities. Outdated and controversial language is used in some measures. There is limited information available on the reliability and validity of the available measures, suggesting a need for future research to carefully examine and report on the psychometric properties of measures when assessing attitudes in this field.

1. Introduction

In England, in 2015, there were an estimated 1,087,100 children and adults with intellectual disabilities (ID) (Hatton, Glover, Emerson & Brown, 2016). Children's attitudes towards their peers with ID have been found to be consistently negative (Siperstein, Parker, Norins Bardon & Widaman, 2007). A relationship has been found between children's understanding and acceptance of peers with disabilities and their behaviour towards them (Diamond, 2001). Taken together, this evidence indicates that changing attitudes to peers with ID in children is important. Attitudes develop throughout childhood (Dyson, 2005) - therefore early intervention to address attitudes is likely to be more successful (Lindsay & Edwards, 2013) and to be of impact across the lifespan.

A range of interventions have been implemented to improve attitudes towards people with ID, among both children and adults. However, it has not always been easy to measure the success of attitude change interventions. Measurement has not been given as much attention in the ID stigma field as it has in other fields (Werner, 2016). Numerous studies aiming to assess change in attitudes towards peers with ID have used scales designed to measure attitudes toward disability in general, rather than ID specifically (Werner, Corrigan, Ditchman & Sokol, 2012). It is therefore important to consider the methods available to assess children's attitudes towards peers with ID.

Attitudes are thought to be made up of cognitive, affective and behavioural components, all of which are important in forming attitudes (Eagly & Chaken, 1993). In addressing attitudes towards people with ID, the cognitive component assesses knowledge about people with ID, the affective component concerns emotional reactions towards them, and the behavioural component concerns people's behaviour or intention to behave towards those with ID. This review will seek to establish which attitudinal component is addressed in various methods used to assess children's attitudes towards their peers with ID.

Existing reviews have looked at attitudes towards people with disabilities in general (Antonak & Livneh, 2000; Palad et al., 2016; Yu, Ostrosky & Fowler, 2012) or where they have focused on attitudes towards ID, have mainly looked at adults' attitudes (Werner, Corrigan, Ditchman & Sokol, 2012). A review by Vignes et al. (2008) summarised measures used to assess children's attitudes towards peers with disabilities, but again looked at attitudes to disability in general, rather than ID specifically.

Aims and Objectives

The aim of this review was to summarise the psycho- and sociometric methods used in studies that have investigated attitudes towards peers with ID among school age, typically developing children. Methods to assess attitudes can be either direct (e.g. interviews, psychometric measures) or indirect (e.g. behavioural observations). This review looked at direct methods used to assess children's attitudes towards their peers with ID in the research literature. Sociometric methods require respondents to choose members of a particular group to answer a question, for example asking children to name a predetermined number of their peers who they would describe as 'friends'. Children can then be allocated to a number of possible categories, such as 'popular' or 'rejected' based on the number of nominations they receive. Questionnaire methods require children to make ratings in relation to standardised items, for example asking children to rate how likely they would be to interact with a peer with ID on a scale from one to five.

The following questions were addressed:

1. How were attitudes measured in the literature?

2. What was the quality of the measurement methods used?

2. Method

Search Strategy

Studies published between 2000 and 2016 were identified by electronic searches of the following databases: PsycINFO, Medline, Web of Science. The following search terms were used and combined in various ways using the Boolean terms 'OR' and 'AND':

Table 1

Terms used in database searches

Key Concept	Alternative Search Terms
Attitudes	perception, accept*, stigma, belief*, discrimination, awareness, stereotype*
Children	child*, adolescent, young, youth, minor, peers, classmates
Intellectual Disability	developmental disabilit*, learning disabilit*, handicap*, disab*, mental retard*, cognitive disability
Measure	assess*, questionnaire*, scale, interview*, observ*, survey

Search results were evaluated against the following inclusion and exclusion criteria when deciding whether articles were suitable for this review.

Inclusion Criteria

•The study reported measured typically developing children's attitudes towards peers with ID

•Results specific to ID were reported

•Children under investigation were of compulsory school age (5- 16 years)

•The article was published in English, in full, in a peer reviewed journal between January 2000 and October 2016

•The study used at least one psycho- or sociometric method to assess attitudes

Exclusion Criteria

• Studies of attitudes towards children with autism, Down Syndrome, ADHD or specific learning difficulties (e.g. dyslexia), rather than ID in general

• Children's attitudes towards peers with physical disabilities or disability in general

• Children's attitudes solely towards inclusion of peers with ID in physical education (PE) or sports as the review focused on more general attitudes

• Sibling's attitudes towards children with ID

An overview of the search results as well as reasons for exclusion of articles at each stage are provided in Fig. 1. As this was a review of measurement methods used in the literature, the studies investigated in this review were first examined for information on the psychometric properties of measures used. Following this, a search was conducted to find the original measurement method and, where possible, information on its psychometric properties. However, at times an original article reporting on the respective measure could not be located (e.g. an unpublished manuscript) and in these instances, the article using the measure was relied upon for information about the measure's psychometric properties.

Figure 1: Flowchart depicting selection of articles

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┌─────────────────────────────────────────────┐
│   Records identified by electronic databases: │
│                                               │
│        Web of Science (n= 2950)               │
│                                               │
│           PsycINFO (n= 5714)                  │
│                                               │
│           Medline (n= 7038)                   │
│                                               │
│  Titles and/or abstracts read for all         │
│  articles (N=15702)                           │
└─────────────────────────────────────────────┘
         │
         │         ┌──────────────────────────────────────┐
         ├────────▶│  Duplicates and clearly irrelevant    │
         │         │  articles removed (n= 15,290)         │
         │         │                                       │
         │         │  Articles excluded based on inclusion/│
         │         │  exclusion criteria (n= 320)          │
         ▼         └──────────────────────────────────────┘
┌─────────────────────────────────────────────┐
│  Full text read to assess whether met         │
│  inclusion criteria (n=92)                    │
└─────────────────────────────────────────────┘
         │
         │     ┌────────────────────────────────────────────────┐
         │     │           Articles excluded (n=68)             │
         │     │                                                │
         │     │ 1. Studied attitudes towards children with     │
         │     │ autism, DS, ADHD or specific learning          │
         │     │ difficulties, rather than ID in general (6)    │
         ├────▶│ 2. Studies children's attitudes towards        │
         │     │ physical disability or disability in general (8)│
         │     │ 3. Focus on children's attitudes solely        │
         │     │ towards inclusion in PE or sports (5)          │
         │     │ 4. Study measured ID children's attitudes      │
         │     │ towards peers with ID (1)                      │
         │     │ 5. Children not of school age (5- 16 years) (5)│
         │     │ 6. Not published in English, in full, in a     │
         │     │ peer reviewed journal between 2000- 2016 (43)  │
         │     │ 7. No psycho- or sociometric method used to    │
         │     │ assess attitudes (1)                           │
         ▼     └────────────────────────────────────────────────┘
┌─────────────────────────────────────────────┐
│  Articles that met inclusion criteria (n= 23) │
└─────────────────────────────────────────────┘
         │
         │         ┌──────────────────────────────────────┐
         │◀────────│  Additional papers located from       │
         │         │  reference lists (n= 4)               │
         ▼         └──────────────────────────────────────┘
┌─────────────────────────────────────────────┐
│   Articles included in the review (n=27)      │
└─────────────────────────────────────────────┘
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Quality rating of studies

This review aimed to assess the quality of the measurement used to assess children's attitudes towards peers with ID. The COnsensus-based Standards for the selection of health Measurement INstruments (COSMIN) checklist (Mokkink et al., 2010) was used as a guide in evaluating the methods used. This review therefore assessed the following qualities of measures of children's attitudes towards peers with ID, where possible:

1. Reliability- internal consistency (whether items on the scale measure the same general construct), measurement error and consistency across raters and time;

2. Validity- content validity (including face validity), construct validity (whether the test measures what it is said to be measuring) and cross cultural validity (how valid the measure is across other cultures and countries);

3. Responsiveness- the ability of an instrument to detect change over time in the construct to be measured.

Table 4 demonstrates the quality appraisal of each psychometric measure as used in the included studies based on the COSMIN checklist. The quality of each measure used is rated as good (+), unknown (?) or poor (-) for internal consistency, reliability, measurement error, content validity, structural validity, hypothesis testing, cross cultural validity, criterion validity and responsiveness (see appendix K for COSMIN checklist adapted from Park, Reilly-Spong & Gross (2013)). Some studies used adapted versions of measures, and therefore the rating is based on the information included in the included studies, rather than the original measure.

3. Results

3.1 Methods used to measure children's attitudes

The initial search identified over 15,000 articles for potential review. In total, 27 studies met the inclusion criteria and were included in this review. An overview of these 27 articles is

presented in Tables 2 and 3 as well as the methods used to assess children's attitudes and the attitude components explored. Methods to assess attitudes were categorised under two broad approaches: questionnaire methods (summarised in Table 2) and sociometric approaches (Table 3). If an article used both questionnaire and sociometric methods, it is included in Table 2. Attitude components measured in the respective study are categorised into affective (A), behavioural (B) and cognitive (C).

Two studies used qualitative methods alongside psycho- or sociometric methods to assess attitudes. In Georgiadi et al.'s (2012) study, children drew a child with ID and wrote a comment about their drawing alongside completing the Attitude toward Mental Retardation Scale (AMRS; Gash, 1993). Open ended questions were used by Brown et al. (2011) alongside the Multinational Youth Attitudes Survey to assess differences between children's perceptions of peers with ID and those with physical disabilities.

3.1.1 Questionnaire methods

Across the 27 articles reviewed, 20 questionnaires were used. An overview of these questionnaires is presented in Table 2. Five questionnaires assessed all three attitude components (Chedoke-McMaster Attitudes Toward Children with Handicaps, Rosenbaum, Armstrong & King, 1986; Multidimensional Attitudes Scale toward Persons with Disabilities, Findler, Vilchinsky & Werner, 2007; Attitudes towards Persons with an Intellectual Disability Questionnaire, Rilotta & Nettelbeck, 2007; Multinational Youth Attitudes survey, Siperstein, Parker & Bardon, 2007 & Attitudes towards Mental Retardation Scale, Gash, 1993). One questionnaire assessed solely affective components (Peer Attitudes Toward the Handicapped Scale, Bagley & Green, 1981), six assessed only behavioural components (Behavioural Intent Scale, Roberts & Lindsell, 1997; Shared Activities Questionnaire, Morgan, Walker, Biebrich & Bell, 1996; Friendship Activity Scale, Siperstein, 1980; Acceptance Scale, Voeltz, 1980; Activity Checklist, Siperstein, 1980 & Intention Scale, Slininger, Sherrill & Jankowski, 2000), and one assessed solely cognitive components of

attitudes (Multi-Response Attitude Scale, Doyle, Beaudet & Aboud, 1988). One assessed both affective and cognitive components (Adjective Checklist, Siperstein, 1980) and five assessed affective and behavioural components (Acceptance Scale for Kindergarten- Revised, Favazza & Odom, 1996; Attitude Survey toward Inclusive Education, de Boer, Timmerman, Pijl & Minnaert, 2012b; Mental Retardation Attitude Inventory- Revised, Antonak & Harth, 1994; Multidimensional Attitude Scale on Mental Retardation, Harth, 1974 & Questions created by Nota, Ferrari & Soresi, 2005). A number of studies used multiple questionnaires to assess the different attitude components.

3.1.2 Sociometric methods

Seven studies used sociometric measures alone to assess children's attitudes towards their peers with ID and are presented in Table 3 (Bakker & Bosman, 2003; Bakker et al., 2007; Maras & Brown, 2000; Kemp & Carter, 2002; Kuhne & Weiner, 2000; Pijil & Frostad, 2010; Yu, et al., 2005). Sociometric measures alongside questionnaires were used by de Boer et al. (2012a) and Manetti et al. (2001) and are presented in Table 2.

Table 2

Questionnaire Methods

Author (Year), Country	Sample	Study aim	Attitude component	Method	Measure
Bellanca & Pote (2013), England	272 aged 7-11	To investigate children's attitudes towards children with ID	B AC	Survey Participants listened to vignette of child meeting DSM-IV criteria for ID (or ADHD, depression or no diagnosis) before completing the ACL and the SAQ	Shared Activities Questionnaire (SAQ; Morgan, Walker, Biebrich & Bell, 1996) Adjective Checklist (ACL; Siperstein, 1980)
Brown, Ouellette-Kuntz, Lysaght & Burge (2011), Canada	319 aged 14-17	To compare behavioural intentions of students towards peers with ID and physical disabilities, and explore reasons for differences	B A	Survey Definition of ID given before participants completed measure: '*People with an ID find it harder to learn and understand than other people. Other terms that are sometimes used to describe this group include "people with mental retardation" or "people with developmental disabilities"*'	Behaviour scale of the Multinational Youth Attitudes Survey (Siperstein, Parker & Bardon, 2007) Open ended questions: 1. 'How would you feel if a student with a(n) (intellectual/ physical) disability asked to work on a class task with you, and this task would affect your grades?' 2. How would you feel if a student with a(n) (intellectual/ physical) disability asked you to spend time with him/ her outside school?'

Author (Year), Country	Sample	Study aim	Attitude component	Method	Measure
Castagno (2001), USA	58 aged 12-14	To assess change in attitudes towards individuals with ID during participation in an 8 week Unified Sports basketball programme	AC	Intervention study	ACL
			B	Athletes asked to think about "*kids with mental retardation*" and select words they felt best described them on the ACL/ whether they would complete each activity with them on FAS	Friendship Activity Scale (FAS; Siperstein, 1980)
de Boer, Pjil, Minnaert & Post (2014), Netherlands	271 aged 5-12	To investigate effects of an intervention providing knowledge about disability on attitudes towards peers with ID (and physical disabilities)	AB	Intervention study	Acceptance Scale for Kindergarten – revised for children aged 5-6 (ASK- R; Favazza & Odom, 1996)
				Children asked to mark an 'X' on the happy face for 'yes', the sad face for 'no', or the half happy face for 'maybe'.	Attitude Survey toward Inclusive Education for children 8-12 (ASIE; de Boer, Timmerman, Pijl & Minnaert, 2012b)
			AB	Groups of 3 students read the instructions and the scale from a standardised protocol	
de Boer, Pjil, Post & Minnaert (2012a), Netherlands	1113 aged 8-12	To obtain knowledge of attitudes towards students with SEN	AB	Survey	ASIE
			AB	Students given randomly selected case study of 1 of 3 fictional children (1 with ADHD, 1 with ID and 1 with pervasive developmental disorder not otherwise specified before completing ASIE)	Peer Nomination (sociometric)
				Students asked to nominate their best friends (up to 5)	

Author (Year), Country	Sample	Study aim	Attitude component	Method	Measure
de Laat, Freriksen & Vervloed (2013), Netherlands	344 aged 13-17	To measure attitudes towards children with ID (and sensory and physical disabilities)	ABC	Survey In written introduction a person with ID described as a '*person with Down Syndrome (DS)*'	Chedoke-McMaster Attitudes Toward Children with Handicaps (CATCH; Rosenbaum, Armstrong & King, 1986)
			ABC	Participants completed the MAS after reading a short story about meeting someone from 1 of 4 disability categories (ID, blind, deaf, paralysed) in a coffee shop	Multidimensional Attitudes Scale toward Persons with Disabilities (MAS; Findler, Vilchinsky & Werner, 2007)
Georgiadi, Kaylva, Kourkoutas & Tsakiris (2012), Greece	256 aged 9-10	To explore children's attitudes towards peers with ID	ABC	Survey	Attitude Toward Mental Retardation Scale (AMRS; Gash, 1993)
			ABC	Participants given hypothetical scenario of a child with ID joining their class and then asked to describe this child with ID using 34 adjectives and answer questions about schooling and sociability of children with ID. Participants instructed to draw child with ID and write a comment about their drawing	Draw and write technique
Hurst, Corning & Ferrante (2012), USA	231 aged 8-9	To evaluate change in attitudes towards children with disabilities following a disability-simulation programme	B	Intervention study Administrators followed instructions for administration of the survey. Students answered scale individually by choosing a response on scale	Adapted version of the Acceptance Scale (Voeltz, 1980)
Krajewski & Flaherty (2000), USA	144 aged 14-17	To investigate high school students' attitudes to ID	AB	Survey Questionnaires administered in schools	Mental Retardation Attitude Inventory- Revised (MRAI-R; Antonak & Harth, 1994)

Author (Year), Country	Sample	Study aim	Attitude component	Method	Measure
Krajewski & Hyde (2000), USA	459 'high school students'	To compare teen attitudes toward individuals with ID between 1987 and 1998	AB AB	Survey Questionnaires administered in schools	Multidimensional Attitude Scale on Mental Retardation (MASMR; Harth, 1974) MRAI-R
Laws & Kelly (2005), UK	202 aged 9-12	To investigate children's attitudes towards their peers with ID (and those with physical disabilities)	A B	Survey Children shown pictures and a description of a child with DS (or cerebral palsy for physical disability condition): '*Maria learns very slowly and needs to have instructions repeated several times. Even then she may not be able to do the work*'	Peer Attitudes Toward the Handicapped Scale (PATHS; Bagley & Green, 1981) Behavioural Intent Scale (BIS; Roberts & Lindsell, 1997)
Manetti, Schneider & Siperstein (2001), Italy	190 aged 9-11	To measure social acceptance of children with ID among children attending a school with a unit for pupils with severe and profound ID	B AC B	Survey Vignettes with photograph and description of hypothetical child (with or without DS) read to respondents in small groups Children given list of classmates and asked who they would most and least likely choose as a partners to play with. Unlimited nominations permitted	Activity Checklist (Siperstein, 1980) ACL Sociometric Choice

Author (Year), Country	Sample	Study aim	Attitude component	Method	Measure
Nota, Ferrari & Soresi (2005), Italy	160 aged 6-11	To assess children's willingness to help or be friends with a child with ID (or physical disability)	AB	Survey Children shown picture of child with DS and given a short description of their difficulties. Told the child would be joining their class in the next few months	Questions developed by authors
Nowicki (2006), Canada	100 aged 4-10	To explore whether children's attitudes towards peers with disabilities related to age, gender or type of disability	C B A	Survey Original target children (of different ethnic groups from Multi-Response Attitude Scale) replaced with 4 target children with no disability, physical disability, ID, or ID and physical disability. Target children depicted in drawings with a description- for ID: *'This girl/ boy finds learning new things difficult. S/he cannot do some of the things that someone your age can do, such as…'*	Multi-Response Attitude Scale (Doyle, Beaudet & Aboud, 1988) BIS Pictographic Scale (Graffi & Minnes, 1988)
Rilotta & Nettelbeck (2007), Australia	259 aged 11-14	To assess whether integration combined with disability awareness training resulted in improved attitudes towards ID	ABC	Intervention study Questionnaires administered to whole class	Attitudes towards Persons with an ID Questionnaire (Rilotta & Nettelbeck, 2007)
Shalev, Asmus, Carter & Moss (2016), USA	44 aged 14-18	To measure attitudes towards children with severe ID	ABC	Survey Administered to students in small groups or individually. Students told that '*severe disabilities*' referred to autism and mental retardation and that mental retardation is now called ID	Modified Multinational Youth Attitudes survey

Author (Year), Country	Sample	Study aim	Attitude component	Method	Measure
Siperstein, Parker & Norins Bardon (2007), USA	5837 aged 12-14	To investigate students' attitudes towards the inclusion of peers with ID	ABC	Survey Teachers administered surveys to students as a class. Instructions read aloud	Multinational Youth Attitudes Survey
Siperstein, Parker, Norins & Widamin (2011), China	4059 aged 12-15	To examine Chinese children's attitudes towards ID	ABC	Survey Teachers followed survey instructions and administered surveys to whole class	Multinational Youth Attitudes Survey
Slininger, Sherrill & Jankowski (2000), USA	131 aged 9-10	To compare the effects of structured or non-structured contact on attitudes towards peers with severe ID who use wheelchairs	AC B	Intervention study Children asked: *'If you wanted to describe a student from the severely disabled classroom to your classmates, what kind of words would you use?'* Children told: *'A student from the severely disabled classroom is coming into your classes. What types of activities would you like to do with him or her?'*	ACL Intention Scale (Slininger et al., 2000)
Tang, Davis, Wu & Oliver (2000), China	489 aged 4-15	To examine children's attitudes towards a child with ID	ABC	Survey Children asked to imagine a new student with ID joining their class and answer questions	AMRS

Table 3

Sociometric Methods

Authors	Sample	Study aims	Attitude component	Method	Measure
Bakker & Bosman (2003), Netherlands	568 aged 7-15	To examine differences in peer acceptance of low achieving students	AB	Survey Asked to name 3 children they a) considered a friend, b) would invite to their birthday, and c) would work with on an assignment. Then for each child in class how much they would like to complete a work assignment with them, play with them, invite them to their birthday and sit next to them in class on a 3-point scale ('I'd like it', 'okay', 'I wouldn't like it')	Peer nomination & forced choice rank order procedure
Bakker, Denessen, Bosman, Krijger & Bouts (2007), Netherlands	1300 aged 9-12	To assess the relationship between sociometric status and self-image of children with ID	B	Survey Children named 3 children they would most/least like to a) play with, b) invite to their birthday and c) sit next to in class	Peer nomination
Kemp & Carter (2002), Australia	16 aged 7-11	To examine social status of students with moderate ID who had received an inclusive pre-school intervention and were followed up 18 months to > 5 years later	AB	Intervention study Children named 3 peers they most liked to play with and rated names of everyone in class against 3 faces representing 'really like', 'OK' and 'don't like'	Peer nomination & forced choice procedure

Authors	Sample	Study aims	Attitude component	Method	Measure
Kuhne & Weider (2000), Canada	38 aged 9-12	To examine the stability of peer status of children with ID	A A	Survey Children checked off names of 3 peers they liked most and least from a list Children given 7 class lists with behavioural descriptors at top (cooperative, disruptive, dependent, clown, aggressive, shy, leader) and ask to indicate names of 3 children who most fit that description	Sociometric measure (Coie, Dodge & Coppotelli, 1982) Social Behaviour Nomination Scale (Dodge, 1983)
Maras & Brown (2000), UK	256 aged 5-11	To assess different forms of school contact on attitudes towards disabled and non-disabled peers	ABC	Survey Children with ID represented by a photograph of a child with DS. Children indicated how much they wanted to play with, how much they liked and amount of certain physical and psychological attributes child with DS had.	Sociometric preference
Pjil & Frostad (2010), Norway	498 aged 12-13	To assess relationship between acceptance of students with disabilities by their peers and their self-concept	AB	Survey Students recorded their best friends (maximum of 5)	Peer nomination
Yu, Zhang & Yan (2005), China	390 aged 9-12	To explore relationships between peer acceptance, loneliness and family functioning in children with ID	AB	Survey Students completed positive and negative peer nominations (e.g. name 3 children you like the most/ least)	Peer nomination

3.2 Quality of Measurement methods used to assess children's attitudes

This section considers the quality of measures used in the reviewed studies to assess children's attitudes towards peers with ID based on the COSMIN checklist. Aspects that were measured in some of the studies but are not relevant to this review are not discussed here (e.g. attitudes towards conditions other than ID or measures of self-esteem). The results are presented in alphabetical order of the measurement method or tool within each of the sections focused on different measurement methods: questionnaire studies and sociometric methods. In many cases, only one or two quality aspects covered in the COSMIN checklist were reported on by the studies' authors. To avoid repetition, a failure to report on quality aspects, such as interrater or test-retest reliability is not explicitly noted- instead a lack of information about these aspects should be taken as a failure by the authors to report on them.

Table 4 demonstrates the ratings of each measure used based on the COSMIN checklist (see Appendix K). As noted previously, this table is based on the measure used by the publications included in this review and the information provided by that study, and as such may not reflect the psychometric properties of the original scale. Where the same scale has been used but adapted differently, the measure is included as separate versions (e.g. AMRS (a) and AMRS (b))

Table 4

Quality Appraisal based on COSMIN checklist

Measure	Publication	Internal Consistency	Measurement error	Reliability	Content Validity	Structural Validity	Hypothesis Testing	Responsiveness
Acceptance Scale	Hurst et al. (2012)	?	?	?	?	?	?	?
ASK- R	De Boer et al. (2014)	+	?	?	?	?	?	?
Activity Checklist	Manetti et al. (2001)	+	?	?	?	?	?	?
ACL	Bellanca & Pote (2012), Castagno (2011), Manetti et al. (2001), Slininger et al. (2000)	+	?	?	+	?	+	?

Measure	Publication	Internal Consistency	Measurement error	Reliability	Content Validity	Structural Validity	Hypothesis Testing	Responsiveness
ASIE	de Boer et al. (2014), de Boer et al. (2012a)	+	?	?	+	?	?	?
AMRS (a)	Tang et al. (2000)	+	?	?	+	?	?	?
AMRS (b)	Georgiadi et al. (2012)	+	?	?	?	?	?	?
Attitudes towards persons with an Intellectual Disability questionnaire	Rilotta & Nettelback (2007)	+	?	?	+	?	?	?
BIS (a)	Laws & Kelly (2005)	+	?	?	+	+	?	?
BIS (b)	Nowicki (2006)	+	?	?	?	?	?	?
CATCH	de Laat et al. (2013)	?	?	?	?	?	?	?
FAS	Castagno (2011)	+	?	?	+	?	?	?

Measure	Publication	Internal Consistency	Measurement error	Reliability	Content Validity	Structural Validity	Hypothesis Testing	Responsiveness
Intention Scale	Slininger et al. (2011)	?	?	?	+	?	?	?
MRAI- R	Krajewski & Flaherty (2000), Krajewski & Hyde (2000)	-	?	?	?	?	?	?
MASMR	Krajewski & Hyde (2000)	-	?	?	?	?	?	?
MAS	de Laat et al. (2013)	?	?	?	?	-	?	?
Multinational Youth Attitudes Survey (a)	Shalev et al. (2016)	-	?	?	?	?	?	?
Multinational Youth Attitudes Survey (b)	Siperstein et al. (2007)	-	?	?	?	?	?	?
Multinational Youth Attitudes Survey (c)	Siperstein et al. (2011)	-	?	?	+	?	?	?

Measure	Publication	Internal Consistency	Measurement error	Reliability	Content Validity	Structural Validity	Hypothesis Testing	Responsiveness
Multinational Youth Attitudes Survey (d: Behavioural Scale only)	Brown et al. (2011)	?	?	?	?	?	?	?
Multi-Response Attitude Scale	Nowicki (2006)	+	?	?	?	?	?	?
PATHS	Laws & Kelly (2005)	+	?	+	+	?	?	?
Pictographic Scale	Nowicki (2006)	+	?	?	?	?	?	?
Nota et al.'s questions	Nota et al. (2005)	?	?	?	?	?	?	?
SAQ	Bellanca & Pote (2012)	+	?	?	?	?	+	?

3.2.1 Quality of Questionnaire Methods

Acceptance Scale (Voeltz, 1980). The Acceptance Scale was developed for use with 9-12 year olds and consists of 21 items rated on a 3-point scale ('yes', 'maybe', 'no'). It was adapted by Hurst et al. (2012) to reflect the different disabilities simulated in their study by shortening it and using two items for each disability type, meaning children were asked only two questions specifically on their attitudes towards ID (plus eight about disability in general). The two questions relating to ID were *'I would like my class to go to camp with kids who have learning disabilities'* and *'If I had a brother or sister who was a slow learner, I would not tell anybody.'* Hurst et al (2012) used response options on a 5-point scale ('strongly agree' to 'strongly disagree'). While Voeltz's original Acceptance Scale (1980) has been reported to have good test re-test reliability (coefficient= 0.68), internal consistency (α= 0.77) and construct and predictive validity with school age children (Favazza & Odom, 1996), Hurst et al. (2012) did not examine the psychometric properties of their adapted version with their sample. The authors acknowledged that, as such, they would not expect it to reliably measure acceptance of people with disabilities more generally or to be suitable for older participants.

Acceptance Scale for Kindergarten – revised (ASK- R; Favazza & Odom, 1996). The ASK-R contains 18 items and again was adapted from the Acceptance Scale (Voeltz, 1980). The scale contains items such as *'Would you still talk to a kid even if he was handicapped?'* and *'Do you play with kids even if they look different?'* Children responded on a 3-point scale with a happy face for 'yes', sad face for 'no' and half happy face for 'maybe'. Children in de Boer et al.'s (2014) study received two intervention sessions on ID but the ASK-R only contains questions related to disability generally and no specific questions relating to children with ID. Therefore it is unlikely to be appropriate in measuring attitudes towards ID specifically unless items are adapted, which they were not in de Boer et al.'s (2014) study. Additionally, use of

words such as 'even if' are at risk of biasing responses from children as they clearly position 'handicapped' and 'looking different' as undesirable.

As noted, Favazza and Odom (1996) reported good internal consistency (α= 0.79), and a substantial correlation of 12 of the 18 items with the total score. Content validity was established with kindergarten teachers who suggested removal of some words and criterion-related validity was confirmed by determining that there were significant differences for gender and contact level in attitudes, as predicted based on previous research in the field. The Dutch version of the ASK-R was used by de Boer et al. (2014), who noted that they excluded four items from analysis as they had low correlations with other items on the scale and children had difficulty answering them during administration. No further information about the psychometric properties of this scale was provided by de Boer et al. (2014).

Activity Checklist (Siperstein, 1980). The Activity Checklist includes 15 activities children might share with friends and asks respondents to indicate whether they 'would', 'probably would', 'probably would not' or 'would not' include a hypothetical child with ID in these activities. It was used by Manetti et al. (2001) who reported good internal consistency for their sample (α = 0.87) but no further information about the scale's psychometric properties.

Adjective Checklist (ACL; Siperstein, 1980). The ACL requires providing children with a target child and asking them to rate this child on 32 adjectives (16 positive *e.g. smart, neat* and 16 negative- *e.g. dumb, weak*). Similar to the Activity Checklist, the ACL requires an 'attitude object' in order to measure attitudes.

Content validity of the ACL was established by Siperstein (1980) by asking children which words they most frequently used to describe their peers. He was reported by Bellanca and Pote (2012) to have demonstrated construct validity for the negative and positive adjectives of the ACL through factor analysis but further information is not provided on this. A strong, positive relationship between the ACL and the Shared Activities Questionnaire, which

measures willingness to interact has been found, indicating concurrent validity (Bellanca & Pote, 2012). The ACL's internal consistency in the studies included in this review ranged from questionable (α= 0.63, Bellanca & Pote, 2012), to good (α= 0.83 for the positive factor, and α= 0.76 for the negative factor, Manetti et al., 2001). Castagno (2011) and Slininger et al. (2011) did not report on the ACL's internal reliability for their samples.

Attitude Survey toward Inclusive Education (ASIE; de Boer, Timmerman, Pijl & Minnaert, 2012b). This measure is based on the CATCH and uses a 4-point Likert scale ('totally agree' to 'totally disagree'). It uses a vignette of a target child followed by 14 attitude statements about inclusion of the child (e.g. *'I would stick up for John if he were teased'* and *'I would tell John my secrets'*). The ASIE was designed for use with children aged 8-12 years old.

Content validity was established by de Boer et al. (2012b), using item response theory to establish the quality of questionnaire items; they found satisfactory stability coefficients (H= 0.50) and high reliability coefficients (ρ = 0.92) for the scale. De Boer et al. (2014) did not provide further information on the psychometric properties of the ASIE for their sample.

Attitude toward Mental Retardation Scale (AMRS; Gash, 1993). This 20-item questionnaire, originally developed by Gash (1993), was used by Tang et al. (2000) to assess children's attitudes towards 'mental handicap'. Children answered 'yes' or 'no' to statements about a hypothetical new child that would be joining their class (e.g. *'Would you care if other children made fun of the handicapped child?'* and *'Would you invite him/ her to your house to play in the evenings?')*. Gash's (1993) findings supported a four-factor structure but these factors were not found by Tang et al. (2000) in a Chinese sample. The scale was translated into Chinese, examined for face validity with three clinical psychologists and piloted with 10 children to examine whether they understood the questionnaire. The authors reported acceptable internal consistency, α= 0.70, for their sample (N=489).

A 16-item version of the same scale was used by Georgiadi et al. (2012) who used a 4-point Likert scale ranging from 'definitely yes' to 'definitely no', followed by describing a hypothetical new student with ID using 34 positive and negative adjectives. They factor analysed the scale and identified three subscales. Each subscale was examined individually for internal consistency, α= social attitudes (0.83), educational attitudes (0.72), and emotional attitudes (0.68). The internal consistency for the whole scale was acceptable, α= 78. For the adjective checklist part of the questionnaire, internal consistency was acceptable for the positive (α=0.68) and negative adjectives (α=0.77).

Attitudes towards Persons with an Intellectual Disability Questionnaire (Rilotta & Nettelbeck, 2007). This scale has 31 items, rated on a 4-point Likert scale ('strongly agree', 'tend to agree', 'tend to disagree', 'strongly disagree'), except frequency of contact which uses a 5-point scale. It includes items such as *'Students with an ID should be included in regular classes'* and *'Students with an ID in a regular school should always have an adult by their side.'* Internal consistency was good (α= 0.89). The authors established content validity with a pilot study confirming that the scale was clear and relevant. However, Werner et al. (2012) highlight that many of the items on this scale relate to school inclusion specifically, rather than attitudes towards persons with ID more generally. Additionally, many items on this scale are likely to only be understood by older children due to their wording and would need to be used with caution with younger children.

Behavioural Intent Scale (BIS; Roberts & Lindsell, 1997). The BIS was initially developed to assess attitudes to physical disabilities. It includes 10 items describing aspects of child friendship behaviour such as *'I would say hello to'* and *'I would share a secret with'* on a 4-point Likert scale ('definitely no' to 'definitely yes') and is based on the Friendship Activity Scale (Siperstein, 1980).

Face validity was established by Roberts and Lindsell (1997) with children aged 9-10 years. Factor analysis was reported to reveal one factor accounting for 51.8% of the total variance. Good internal consistency was reported by Laws and Kelly (2005) for their sample, α= 0.86. The scale was adapted by Nowicki (2006) by printing four response options on card ('YES!', 'yes', 'no' and 'NO!'). They reported excellent internal reliability of 0.91 and 0.94, dependent on age, and stated that the scale did not correlate with a social desirability measure.

Chedoke-McMaster Attitudes Toward Children with Handicaps (CATCH; Rosenbaum, Armstrong & King, 1986). The CATCH contains 36 items and was originally developed for children aged 9-13, but has been used up to age 16. It uses a 5-point Likert scale ('strongly agree' to 'strongly disagree'). The measure has been criticised for items that may promote prejudice, for example *"I would try to stay away from a handicapped child"* (Werner, 2016). Additionally, none of the items are specific to ID.

Construct and face validity were established with children aged 9-13 and the CATCH was reviewed by teachers for appropriateness with the target population. Internal consistency was α= .90 for the total scale. Acceptable test-retest reliability was established, r= 0.73 (Rosenbaum et al., 1986). The scale was translated into Dutch by de Laat et al. (2013) and used to assess attitudes to ID (and visual and hearing impairment, and paralysis) rather than disability in general. Children were asked to respond to each item on the CATCH for each disability category mentioned above (e.g. *'I would be pleased if a 'Intellectually Disabled' child invited me to his house'* instead of *'I would be pleased if a handicapped child invited me to his house')*. They removed three items from their adapted version of the CATCH following factor analysis. The authors did not provide any reliability data for their adapted version, which is problematic as this version may have poorer psychometric properties than the original.

Friendship Activity Scale (FAS; Siperstein, 1980). The FAS consists of 17 items using a 4-point Likert scale ('yes', 'probably yes', 'probably no' and 'no') and was designed for use with

children aged 9- 12. The scale was developed based on children's responses in interviews when asked what it meant to be a friend and how they made friends (Bak & Siperstein, 1987), establishing content validity. Children are asked whether they would complete ten activities (e.g. *'I would go up to him/ her and say hello'*) with a given child. Internal reliability was reported to be excellent, α= 0.90. Castagno (2011) did not provide any psychometric data for their sample.

Intention Scale (Slininger et al., 2011). The Intention Scale**,** was adapted from the FAS by reducing the number of items to ten and changing some of the activities to those the authors thought that children might engage in with peers with severe ID by Slininger et al. (2011). For example*, 'I would* eat lunch together in school*'* and *'I would play together during recess or free time'.* The four response options were 'yes', 'probably yes', 'probably no' and 'no.' This adapted scale was based on interviews with children and was piloted in their study, establishing content validity. The authors did not provide information on other psychometric properties of this adapted scale.

Mental Retardation Attitude Inventory- Revised (MRAI-R; Antonak & Harth, 1994). The MRAI-R is an updated version (reflecting changes in laws and policies) of the MASMR (Antonak & Harth, 1974) and contains four sub-scales (social distance, integration-segregation, private rights and subtle derogatory beliefs) to measure attitudes towards ID. It includes 29 items scored on a 4-point Likert scale ('strongly disagree' to 'strongly agree') and contains items such as *'If I were a landlord, I would want to pick my tenants even if this meant only renting to people who are not mentally retarded'* and *'I would rather not have a person who is mentally retarded swim in the same pool that I swim in.'* The inventory was claimed to be reliable, consistent and specific in assessing adults' attitudes by Antonak and Harth (1994). Construct validity was established by conducting a factor analysis, which supported the original four factors. However, validity and reliability are not known for the scale in

assessing children's attitudes. Indeed, some of the items are clearly aimed at adults (e.g. the landlord example item given above and '*I would allow my child to accept an invitation to a birthday party given for a child with mental retardation*'). Caution should therefore be used when administering this instrument to children.

In studies by Krajweski and Flaherty (2000) with adolescents aged 14-17 and Krajewski and Hyde (2000) with 'high school students' of unspecified age, internal consistency ranged from α= 0.63 to 0.71 (integration-segregation subscale), 0.59 (private rights subscale), 0.84 (social distance subscale), and 0.60 to 0.61 (subtle derogatory beliefs subscale). This suggests less than acceptable internal reliability for at least two of the four subscales.

Multidimensional Attitude Scale on Mental Retardation (MASMR; Harth, 1974). The MASMR was used by Krajewski and Hyde (2000) with adolescents. The MASMR and MRAI-R both contain the same subscales but the MASMR contains 50 items. Internal consistency reported by Krajewski and Hyde (2000) was α= 0.75 (integration/ segregation subscale), 0.65 (private rights), 0.84 (social distance) and 0.58 (subtle derogatory beliefs). This suggests less than acceptable internal reliability on at least one subscale. Similar to the MRAI-R, the MASMR was designed for adults and is unlikely to be appropriate for use with children or adolescents.

Multidimensional Attitudes Scale toward Persons with Disabilities (MAS; Findler, Vilchinsky & Werner, 2007). The MAS has 34 items that load on three subscales (affect, cognition and behavior towards a disabled person) and uses a 5-point Likert scale (1= 'not at all' to 5= 'very much') in which respondents rate how likely they would be to experience the affect, cognition or behavior) about a scenario. In its original form measures attitudes to disability in general, but the scenario was adapted by de Laat et al. (2013) to involve meeting someone with ID in a coffee shop.

Construct and concurrent validity of the MAS were established by reliability and factor analyses and comparison with the Attitude toward Disabled Persons Scale (Yuker, Block & Younng, 1966). However, both scales were developed for use with adults, reliability and validity analyses were conducted with this population and therefore it is unclear what the reliability and validity of the MAS is when used with children. In a factor analysis, de Laat et al. (2013) found no clear factor structure across their disability conditions and therefore did not conduct any further analysis using the MAS.

Multinational Youth Attitudes Survey (Siperstein, Parker & Bardon, 2007). This instrument consists of 37 items that load on five subscales (perceived capabilities, impact of inclusion, behavioural intentions, academic inclusion, and non-academic inclusion), and are mostly answered on a 4-point Likert scale (from 'no' to 'yes') or a dichotomous 'yes' or 'no' scale. Descriptions of 'students with mental retardation' were replaced with 'students with severe disabilities' in Shalev et al.'s (2016) study. The original version was also modified by Brown et al. (2011) who changed the terminology to ID and removed items related to Special Olympics.

Internal consistency was originally reported across the subscales by Siperstein et al. (2007), $\alpha=0.82$ (perceived capabilities), 0.66 (impact of inclusion), 0.93 (behavioural intentions), 0.78 (academic inclusion), and 0.44 (non-academic Inclusion). However, for studies included in this review internal consistency has been reported to range from $\alpha= 0.77$ to 0.82 (perceived capabilities), 0.20 to 0.33 (impact of inclusion), 0.79 to 0.95 (behavioural intentions), 0.65 to 0.75 (academic inclusion) and 0.34 (non-academic inclusion) (Shalev et al., 2016; Siperstein et al., 2007; Siperstein et al., 2011). This suggests that the factor structure of the scale may be highly problematic in some aspects. To adapt the scale for use in China, Siperstein et al. (2011) held focus groups and completed pilot testing with 256 youths, establishing content validity.

Only the behavioural intentions subscale was analysed by Brown et al. (2011). This subscale contains 12 questions with a 4-point Likert scale ranging from 'no' to 'yes' and asks children to state whether they would complete each activity with a child with ID (e.g. '*invite a student with ID to your home*' or '*talk to a student with ID in your free time or lunch*'). Psychometric properties of the subscale were not provided by Brown et al. (2011).

Multi-Response Attitude Scale (Doyle, Beaudet & Aboud, 1988). The Multi-Response Attitude Scale consists of ten positive (e.g. *clean, wonderful*) and ten negative (e.g. *unfriendly, mean)* adjectives, which children choose to describe a target child. Internal consistency was good, ranging from 0.79 to 0.85 for positive items and 0.73 to 0.93 for negative items, depending on the age of children completing the questionnaire (Nowicki, 2006). Doyle et al. (1988) reported that the scale was not correlated with a social desirability measure, indicating that participants were not giving socially desirable responses.

Peer Attitudes Toward the Handicapped Scale (PATHS; Bagley & Green, 1981). The PATHS consists of 30 items and was designed for use with children aged 8-12. Each item is associated with a behaviour common in children with physical disability, ID or behavioural difficulties, e.g. from the ID category '*Maria learns very slowly and needs to have instructions repeated several times. Even then she may not be able to do the work*'. Children then respond for each behaviour on a 5-point Likert scale whether they would like the child to 1= 'work with me in my group', 2= 'work in another group (with someone else)', 3= 'work in no group (with no other students)', 4= 'work outside of the class (in another class or room)', or 5= 'stay at home (and not come to school)'. Internal consistency was excellent (0.89) and test re-test reliability was good (test- retest coefficient of 0.75) for the total attitude score as reported by Bagley and Green (1981) in their study with children aged 9-12. Items were created based on interviews with students, parents and teachers establishing construct validity (Bagley &

Green, 1981). However, the scale on this questionnaire could be seen as encouraging the formation of prejudice and challenging people with ID's right to education.

The 'LD' category in Bagley and Green's original study reflected the US meaning of the term and so addressed specific learning difficulties but Laws and Kelly (2005) felt it could be applied to children with ID as well. They showed excellent internal consistency, α= 0.93 for the total scale and 0.87 for the ID subscale with a UK sample.

Pictographic Scale (Graffi & Minnes, 1988). The Pictographic scale was used by Nowicki (2006) and involves asking children to select a face from five simple line drawings ranging from 'happy' to 'sad' (e.g. *'How do you feel about this boy/ girl asking you to play with them?').* They reported good internal consistency, α= 0.78 to 0.85 dependent on age, and noted that the scale did not correlate with a social desirability scale.

Nota et al.'s (2005) questions. Children were asked two questions in Nota et al.'s (2005) study. Each child was asked- *'Do you think you would like to be this boy/ girl's friend?'* and *'Do you think you would like to help this boy/ girl?'* after being presented with a photo of a child (see Table 2). They responded on a 6-point scale from 'definitely not' to 'of course I would' and were asked to explain their choice. Psychometric properties of the measure were not provided.

Shared Activities Questionnaire (SAQ; Morgan, Walker, Biebrich & Bell, 1996). The SAQ contains 24 items rated on a 3-point rating scale ('yes', 'maybe', 'no') and was designed for 8-12 year olds. It assesses children's willingness to engage with a hypothetical child (e.g. *'I would select this child to play on my team'*). In Bellanca & Pote (2012)'s study, they listened to vignette of child meeting DSM-IV criteria for ID (see Table 2). The factorial validity of the SAQ was established with children rating peers with physical disabilities (Morgan, 1998) and autism (Campbell, 2008). Both studies found a three factor structure. In terms of concurrent validity, positive and significant relationships have been found between the SAQ and the ACL

(*r* (271) = 0.60, *p*< 0.001; Bellanca & Pote, 2012). Internal consistency was excellent ranging from α=0.89 to 0.96 (Bellanca & Pote, 2012).

3.2.2   Quality of Sociometric Methods

Although sociometric procedures are often grouped together, a number of different methodologies fall under this broad description (e.g. peer nomination, forced choice and rating scales). Construct validity and test-retest reliability of 13 different sociometric methods were tested by Frederickson and Furnham (1998) who found that the forced choice method was the most reliable, k= 0.43. Forced choice methods were used by Bakker and Bosman (2003) and Kemp and Carter (2002) who asked children to pick a response for every child in their class (e.g. *pick a positive, negative or neutral face to indicate whether you liked each child in your class*). Peer nomination scales were also described as reliable and valid with 9-12 year olds by Kuhne and Weiner (2000), though they did not provide further details.

Most studies asked children for both positive and negative nominations of their peers, but Pijil and Frostad (2010) only looked at positive peer nominations. Whilst it may raise ethical concerns asking children to make negative nominations, Evans (1962) highlights that it may be more significant for an individual to be specifically rejected, rather than simply not chosen. Therefore excluding negative nominations from investigation may result in a loss of important information.

The number of nominations that children are asked to make should also be carefully considered when choosing a sociometric measure to assess attitudes towards children with ID. Children with ID may appear rejected if children are asked to nominate three friends, but when given unlimited nominations they may be named (Frederickson & Furnham, 2001)

Sociometric methods are useful in establishing how included children with ID may be in a particular environment. However, when using sociometric measures, one is assessing

attitudes towards children in particular rather than children with ID generally, therefore one is also assessing attitudes towards a number of other characteristics or attributes that the individual child has (Laws & Kelly, 2005). For example, a child with ID may be classed as popular or rejected for a number of reasons not associated with them having an ID. Similarly, the rejection or acceptance of that child does not mean that all children with ID would be accepted or rejected by the respondent. Additionally, children's opinions about their peers may change dependent on what has occurred on the particular day or week of their nomination. Fair stability of nominations has been reported for 'rejected' and 'popular' nominations, but categorisations such as 'neglected' or 'controversial' are less stable over time (Frederickson & Furnham, 2001).

Strong, positive correlations were found between Coie et al.'s (1982) sociometric measure and the Social Behaviour Nomination Scale (Dodge, 1983), indicating concurrent validity (Kuhne & Weiner, 2000). Parallel test-retest reliability was established by Pijil and Frostad (2010) who asked children to write down the names of their best friends in the class as well as a classmate to work with and a classmate to spend time with during breaks to look at similarities across choices.

4. Discussion

This review critically examined methods used to assess children's attitudes towards their peers with ID. Most of the methods used in the studies included in this review were developed to assess children's attitudes towards peers with disabilities in general. Hence they should be used with caution when assessing attitudes towards those with ID, which mirrors Werner et al.'s (2012) conclusion. Some studies have used vignettes or have adapted measures to make them more specific to intellectual disabilities, whilst others asked respondents to think of a 'kid with mental retardation' (Castagno, 2001) when answering questionnaires. Several measures specifically require use of a target or hypothetical child as

basis for completion of the measure, such as the ACL, the Activity Checklist and the BIS. It may be more valid to present children with a description or vignette, rather than simply asking their opinions on someone with ID as they may well not understand the meaning of this term (Nowicki, 2006). However, developing a vignette with good content validity which elicits reliable responses is difficult as children may respond to the vignette in a certain way due to other reasons such as gender, ethnicity or the specific child depicted in the vignette rather than the fact the child is described to have ID. Additionally, it is unclear whether responses to a vignette of a certain child could be generalised to other peers with ID.

Many studies used Down syndrome as a description of ID, for example using a photo or stating that ID means 'a person with Down syndrome'. It is likely that this is because there is a physical component to Down syndrome which can be represented in a photograph, unlike most forms of ID which do not have a clear facial or physical marker, or that it is a condition that is seen as one which many are aware of. However, it is important to consider the limitations of this as the measure may only be determining attitudes to what children know (or think they know) about Down syndrome rather than the many other possible types of ID. Care should therefore be taken when attempting to generalise attitudes assessed using such a specific descriptor.

Consideration should be given to the language used in some of the measures and the ethical implications. Many use outdated terms such as 'handicap' or 'mental retardation' that may need adjusting for future research and are no longer considered appropriate terms. Moreover, some items on measures are controversial and may cause offence or prejudice, positioning children with ID as not only different but undesirable. As previously mentioned, items on the CATCH were highlighted by Werner (2016) and items such as *'If it is known that a foetus is going to be born with an ID, an abortion should take place'* on the ASIE could well be deemed offensive. Similarly, use of language such as 'even if' (e.g. on the ASK-R: *'Do you*

play with kids even if they look different?') may well lead children to believe that the respective attribute is undesirable and may bias results.

Most of the measures included in this review, with the exception of the MRAI-R, MASMR and MAS, were specifically designed for use with children. Use of scales designed for adult populations in research with children is highly questionable as the scales' reliability and validity was established with adults and may well not hold for children. Studies that used measures developed for adults did so in studies with adolescents (aged from 13-17) rather than young children, but some of the questions in the MRAI-R, for example, may be very difficult for adolescents to answer- for example, the aforementioned item '*I would allow my child to accept an invitation to a birthday party given for a child with mental retardation'*.

Most measurement methods only assessed one or two of the components of attitudes considered to be important (affective, behavioural and cognitive). Many of the studies used multiple methods to assess attitudes in order to take account of this. In a review of measures of children's attitudes towards peers with disabilities, Vignes et al. (2008) concluded that the Acceptance Scale and the CATCH were the most promising instruments. This review suggests that the CATCH, MAS, Attitudes towards Persons with an Intellectual Disability Questionnaire, Multinational Youth Attitudes survey and Attitudes towards Mental Retardation scale all appear to address each of the three attitude components to some extent but all also have significant limitations.

All the measures in this review were developed in English speaking countries and as such little is known about their cross-cultural applicability. The variety of terms used for ID internationally also affects this, as people may refer to 'learning disability', 'intellectual disability' or 'mental retardation' in different countries so measures may need to be adapted for this purpose. In many instances, children may not be familiar with any such collective term as in many schools terms such as 'special needs' or 'special learners' are preferred.

Some studies did provide brief information about the method of translation to other languages (e.g. de Boer et al., 2014;de Laat, et al., 2013; Manetti et al., 2001; Tang et al., 2000), whilst others did not explain this process (Nota et al., 2005).

In terms of psychometric properties, there was often very little information provided in the reviewed studies. Most studies reported the internal consistency for the measure they used in their sample, though some only reported this based on previous studies or the original measure, despite having large enough sample sizes to examine the measure's internal reliability for their sample. Moreover, internal consistency only measures one specific aspect of reliability, namely whether items on the questionnaire measure the same general construct. Few studies provided any other details on the reliability, validity or responsiveness of the method used to assess attitudes towards ID, which made it difficult to rate the quality of the measurement method. The lack of further reliability and validity information means it is impossible to evaluate whether the study was indeed measuring what it set out to measure. For example, many of the included studies failed to comment on test-retest reliability, causing difficulty in establishing whether the results and conclusions drawn from the study were robust. It would be beneficial for studies to provide more information on psychometric properties if these measures are to be used in further research.

This appears to be a concern across the age range in ID research rather than one limited to assessing attitudes in children of school age. The variability in reporting of reliability and validity in measures of stigma or attitudes towards ID across ages was highlighted by Werner et al. (2012). As highlighted previously, measurement has not been given as much attention in the ID stigma field as it has in other fields (Werner, 2016). This makes assessing children's attitudes towards their peers with ID problematic, as it does evaluating the effectiveness of any intervention aimed at improving attitudes towards peers with ID.

Implications for future research

Measurement of attitudes towards people with ID remains one of the challenges in the ID field. A variety of measures have been used across studies, which makes comparison of results across studies difficult. As demonstrated by this review, 20 different questionnaires were used across the 27 studies included in this review (though some were used by more than one study). This review further highlights the difficulties in choosing a suitable measure to assess children's attitudes towards peers with ID due to limited information on the reliability and validity of such measures.

Future research should consider more carefully what the study aims to measure and how this may be best achieved. Furthermore, studies should evaluate the psychometric properties of the method of measurement for the given sample in order to allow decisions to be made about whether the study has been able to reliably and validly assess children's attitudes towards their peers with ID.

5. Limitations of this review

A number of limitations of this review should be acknowledged. Hand searches of all relevant journals were not feasible and only articles published in English were included in this review, which may have resulted in some relevant articles being excluded. Additionally, where original studies or versions of measures could not be located (e.g. an unpublished manuscript), comments on reliability and validity were based on studies which utilised the measures. Due to resource constraints, it was not possible to obtain every study which used the included measures, and therefore it is possible that further information on the psychometric properties of these measures is available elsewhere. However, if this is the case it does not negate the argument that little information is provided on the psychometric properties of the measures as they appear in the included studies.

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Part Two: Empirical Paper

The All In Award: A feasibility study of an intervention to improve

children's attitudes towards peers with intellectual disabilities.

Abstract

Aims

This study aimed to support and evaluate the development of a new interactive group intervention by the Royal Mencap Society, the All In Award. The award was designed to improve young people's attitudes towards peers with intellectual disabilities by engaging them in interactive, activity based group tasks. The primary aim of this study was to evaluate the feasibility of the All In Award and to identify barriers to its implementation. In addition, preliminary outcome data were collected to inform the further development, evaluation and implementation of this complex intervention on a larger scale.

Methods

A mixed methods design was used, with pre and post measures of peer acceptance and self-efficacy and qualitative interviews conducted with children and facilitators on the feasibility, process and impact of the award after the intervention was completed.

Results

The intervention was feasible based on recruitment and retention data and was deemed to be acceptable for both children and facilitators. Preliminary outcome data suggests that there was a small increase in children's acceptance of peers with ID and their feelings of self-efficacy towards interacting with such children. Children described being more likely to interact with these children in the future in interviews.

Conclusions

The All In Award is feasible, although some changes in its delivery are recommended. Furthermore, a randomised controlled trial seems indicated in order to assess the impact of the award on children's attitudes on a larger scale.

Introduction

The physical inclusion of children with special educational needs (SEN), or intellectual disabilities (ID) more specifically, in education settings is central but not sufficient in itself to achieve their meaningful social inclusion. Children with ID are less accepted and have fewer friends across a wide range of countries (Pijil & Frostad, 2016). Children in inclusive schools (schools that integrate children with SEN within ordinary classes) do appear to show more positive attitudes towards peers with disabilities than children in non-inclusive schools or preschools (Dyson, 2005; Georgiadi, Kalyva, Kourkoutas & Tsakiris, 2012; Okagaki, Diamond, Kontos & Hestenes, 1998).

However, nearly fifty percent of children with ID feel that they do not belong and feel lonely and unsafe in school, despite being in inclusive classrooms (Tavares, 2011). Research has shown that children with and without disabilities are unlikely to interact freely in inclusive classrooms (Diamond & Tu, 2009) and that children often show low acceptance of peers with disabilities without supportive programmes (Favazza, Phillipsen & Kumar, 2000).

Lack of knowledge about disability can adversely affect young people's attitudes towards people with disabilities (Rilotta & Nettelbeck, 2007) as well as perpetuating stigma and social exclusion (Lindsay & Edwards, 2013). Additionally, lack of familiarity can lead to misconceptions about people with ID and reluctance to interact with them (Ouellette-Kuntz, Burge, Brown & Arsenault, 2010).

Children's attitudes towards their peers with disabilities have been found to be significant predictors of their intentions to interact with these children (Roberts & Smith, 1999). Similarly, increased positive attitudes towards children with disabilities have been reported to be linked to an increase in positive interactions towards them (Favazza, Phillipsen, & Kumar, 2000). Typically developing (TD) children express more negative attitudes towards peers with ID than peers with other disabilities (Georgiadi et al., 2012). As attitudes are still

developing in childhood, early intervention is likely to be more successful (Lindsay & Edwards, 2013). According to Piaget, children in the concrete operational stage (age 7-11) begin to be able to take the perspective of others (Hurst, Corning & Ferrante, 2012). This suggests that there is an important need to target prejudice and the risk of rejection of peers with ID in children, and that the concrete operational stage may be an ideal time for an intervention as children in this developmental stage may be more able to understand the impact of their actions on others yet still be relatively open to change.

Contact is seen as most effective in improving attitudes towards members of groups that are commonly subject to prejudice and stigma (Corrigan et al., 2012). Allport's (1954) contact hypothesis states that prejudice can be reduced by equal status contact between majority and minority groups in pursuit of common goals. If this contact is sanctioned by institutional support and leads to common interests between members of two different groups, then prejudice is likely to be reduced further. However, a meta-analysis by Pettigrew & Tropp (2006) revealed that Allport's (1954) conditions were not essential in reducing prejudice, though they did enhance the effects of intergroup contact. Carter, Biggs and Blustein (2016) highlight five core elements of successful attempts to foster positive relationships between children with and without ID: sustained shared experiences, common connections such as hobbies or activities, valued roles so that children with ID are not 'taught' by those without, relevant information allowing more understanding of children with ID, and balanced support from facilitative staff which encourages but does not hinder new relationships.

Direct contact has been used to reduce stigma and prejudice towards people with ID (Carter, Hughes, Copeland & Breen, 2001; Favazza & Odom, 1997; Freudenthal, Boyd & Tivis, 2010). However, many such studies have been conducted with volunteers, who are more likely to already hold relatively positive attitudes towards people with ID, and thus their findings regarding the impact of contact cannot necessarily be generalised. In order to

establish friendships and develop supportive relationships it is important that students experience a sense of belonging, assume valued roles and make meaningful contributions to joint activities (Carter, Swedeen, Moss & Pesko, 2010). Additionally, the length of intervention is important and a review by Liegers & Myers (2015) found that longer interventions were linked with improved attitudes.

This study sought to establish the feasibility of a new intervention aiming to improve children's attitudes towards their peers with ID. The intervention was aimed at children aged 8-13, in Piaget's concrete operational stage.

The Intervention

The All In Award involves children with and without ID working towards a shared aim by coming together on a weekly basis to learn a new skill and then showcasing this skill at the end of the 10-week period. Schools participating in this pilot were able to choose the activity they engaged in and chose a range of activities from dance to first aid (see Table 1 for full list of activities chosen). The award was designed to incorporate many of Allport's (1954) conditions for reducing prejudice: involving contact between members of different groups who are of equal status in the situation, in pursuit of a common goal, receiving organisational support and designed to be pleasurable.

Additionally, the award meets Carter, Biggs and Blustein's (2016) five core elements for developing positive relationships between children with and without ID in that it involves shared experiences, common connections, valued roles, access to relevant information and balanced support. It was thought important that the skill should be new for all participating children with and without ID, in order to try and prevent the children without ID 'teaching' those with ID. Overall, the All In Award aimed to increase acceptance of children with ID by their TD peers over naturally occurring contact which often fails to meet several or all of these conditions.

Evaluation of the intervention

Alongside an assessment of the feasibility of implementing the All In Award in schools, the study assessed its impact on children's attitudes towards peers with ID. In particular the study looked at peer acceptance and self-efficacy, which refers to one's judgment of how well one can perform a behaviour in a specific domain; in this case how easy children thought it would be to interact with peers with ID. In order for a behaviour to occur, an individual must have the capability, opportunity and motivation (the COM- B system). Capability is the physical and psychological capacity to perform the behaviour, and can also be changed by enacting the behaviour (Michie, van Stralen & West, 2011). Therefore one could assume that feelings of capability to interact with someone with ID (i.e. self-efficacy) would be necessary to enable interaction, and interaction would be likely to increase the person's feelings of capability. Children have been found to be more likely to want to interact with a child with disabilities when they perceive this to be easy rather than difficult (Roberts & Smith, 1999).

Study Aims

1. Support the Royal Mencap Society (RMS) in developing an intervention designed to improve attitudes towards children with ID, by ensuring it is informed by psychological theory and evidence.

2. Evaluate the feasibility of the All In Award as an intervention and understand any barriers to its implementation in school settings.

3. Collect preliminary data to inform the further development, evaluation and implementation of this complex intervention on a larger scale, in line with Medical Research Council (MRC) guidance (2014) on the development-evaluation-implementation process.

The study examined the following questions, based on MRC (2014) guidance:

Feasibility

1. How practical is the award? How many schools and children is it possible to recruit? What is the retention rate?

2. What are the barriers and facilitators to implementing the intervention as planned?

Acceptability

3. How acceptable do children and facilitators find the award? What aspects do they enjoy/ not enjoy? What works well/ not well? What is the dropout rate?

4. How acceptable are the different elements of the formal independent evaluation of the intervention? How acceptable is the administration of the measures? Do children complete the measures? How do they find completing them? How acceptable and feasible are the interviews with children and facilitators?

Preliminary Outcomes

5. What changes in peer acceptance and self-efficacy in interacting with peers with ID are observed in the preliminary pilot data?

6. What is the impact on children's attitudes? What interactions do children and facilitators report?

This research will help guide RMS in deciding whether to move to the next stage in implementing and evaluating the new award; recruiting larger numbers in order to look at the effect of the award on participating children's attitudes towards peers with ID and the process of change.

Method

Development Phase

The development phase involved supporting RMS in the creation of the format and contents of the intervention and designing a multi-component evaluation. The All In Award was designed over a number of meetings and consultations between RMS and the researchers and was modelled on the Gateway award, which was RMS' more accessible version of the Duke of Edinburgh award. However, that award was substantially revised in order to meet the criteria research has suggested is most likely to be effective in improving attitudes. The researcher and RMS lead worked closely together throughout the development of the intervention, recruitment of schools and the intervention phase. Whilst the schools were running the award, the RMS lead was the main contact and met with schools at least once (often more) through the planning phase as well as liaising with all participating schools throughout the course of the intervention.

Study Phase

Participants. Schools were invited to participate in the pilot, with some form of previous link with RMS. Twelve groups participated in the award over the course of the feasibility study which ran from May 2016 to March 2017 and was run over two school terms (see Table 1). In total, 244 children were recruited to the award over both school terms. The children were in school years 4-8, with their ages ranging from 8-14 years.

Procedure. The intervention was designed as a 10 week programme, involving children with and without ID working towards a shared aim. Activities chosen by participating schools are shown in Table 1 and each session ran from between 45 and 90 minutes. However as the award had to comprise of at least 10 hours of group activity over a school term, some schools' programmes ran for longer than 10 weeks. The award was facilitated by school staff and was conducted either during school hours or as an afterschool club, dependent on the preference

of the school (see Table 1). The suggested size of the group was 20 children (10 from mainstream and 10 from SEN schools/ with SEN needs), but school's recruited between 12 and 31 children to their groups. Facilitators running the award were usually teachers from one or both of the schools, and some schools arranged for professional support such as a first aid tutor or sports coach to either support or lead the session. Teaching assistants were usually involved in supporting the award but neither the researchers nor any representative from RMS attended the award session until the final session. Facilitators were not provided with training but were given a manual and met with the RMS lead who answered any questions before starting the intervention. The manual provided to facilitators is included in Appendix J and the documentation that the children completed after the award is included in Appendix G.

All children (both those with and without ID) were given the measures at the beginning of the first session and in the final session alongside their personal information. Facilitators gave support when needed to children with and without ID in completing their measures.

Initially it was thought that schools would recruit pupils with and without SEN from their own school. However, most schools chose to partner with a neighbouring school (i.e. a special needs school collaborated with an inclusive school). This meant that one school needed to travel to another to take part in the award, whether this meant walking a short distance or travelling by bus between schools. One school however, did opt to select children who were on the SEN register and those who were not from within their own school. Table 1 shows where participating children were drawn from.

Table 1

Groups involved in the feasibility study

	SEN School	Mainstream School	Activity	In school/ After School
Group 1	Secondary school	Primary school	First Aid	In school
Group 2	Secondary school	Secondary school	Healthy Living	After school
Group 3	Primary & Secondary school	Secondary school	Dance	In school
Group 4	Inclusive Primary school		Healthy Living	In school
Group 5	Secondary school	Secondary school	Healthy Living	After School
Group 6	Secondary school	Secondary school	Healthy Living	After school
Group 7	Secondary school	Primary school	Healthy Living	After school
Group 8	Secondary school	Primary school	Laughing Yoga	In school
Group 9	Secondary school	Secondary school	Dodgeball & Fitness	After school
Group 10	Primary & Secondary school	Primary school	Dance & Theatre	In school
Group 11	Primary & Secondary school	Secondary school	Music	In school
Group 12	Primary & Secondary school	Primary school	Forest school sessions*	In school

*Forest school sessions seek to encourage teamwork and communication to foster social opportunities, identify and create shared goals in woodlands or natural environments.

Design. The study consisted of a development phase followed by a feasibility study and collection of pilot data, in line with MRC guidance (2014). This was a mixed methods design, quantitative and qualitative methods were used in conjunction to establish the feasibility of the intervention and assess preliminary outcomes using pre and post quantitative measures.

Measures

Measures of Feasibility. Feasibility of the study focused on uptake, retention, delivery and implementation, whilst looking at challenges and problems in delivering the award. Recruitment to the intervention was measured by recording the number of schools (and children in each school) who embarked on the award and completed it. Practicalities of running the award were assessed by obtaining feedback from facilitators of the award through interview within two weeks of the last session. Acceptability of the measures was assessed by looking at completion rates of the questionnaires and by asking children and facilitators about their experience of completing these.

Qualitative Feedback. Eight semi-structured group interviews were completed with children in the final session and eight with facilitators after the final session in order to assess the feasibility of the intervention, measures and their view of the impact of the award on participating children's attitudes and willingness to interact with each other (16 interviews in total; see Appendix B for interview schedules).

All interviews were conducted by the researcher who had not met the children or facilitators previously. Unfortunately it was not possible to interview all of the school groups that took part in the project due to difficulties arranging interviews with schools in a timely manner before completion of the research project. In total both children and facilitators in eight of 12 participating school groups were interviewed. The length of interviews varied between 5 to 35 minutes, based on availability of the participants. Interviews with children were a lot shorter as they generally gave short responses to questions and did not elaborate

as much. Facilitators interviewed were mostly teachers from one of the participating schools or on two occasions, an external facilitator brought in to conduct the groups. Child interviews were conducted as a group and included children with and without ID. The interviewer was introduced as a researcher from University College London (UCL) who wanted to ask some questions about what they thought about the group. Table 2 highlights who the facilitators participating in the interviews were. The groups pertain to the same groups as those described in Table 1.

Table 2

Facilitators participating in interviews

	Facilitator
Group 1	First aid facilitators- not from school
Group 2	Teacher from mainstream school
Group 3	Teacher from SEN school
Group 4	Teacher from inclusive school
Group 5	Teacher from SEN school
Group 6	Teacher from SEN school
Group 7	Teacher from SEN school
Group 8	Yoga facilitator- not from school

Quantitative. Two measures were integrated into the award's registration pack at baseline and end of the programme. In this study, the measures were used primarily to look at how user-friendly they were and their acceptability, though some pilot data was obtained on peer acceptance and self-efficacy. Previous contact with people with ID was measured by asking children *'Do you know anyone in your family or friends who has a learning disability like Hannah or Adam?'* (the children with ID depicted in the vignettes used as stimuli for the measures) before they took part in the study (see Appendix A for measures).

An adapted version of the *Peer Acceptance Scale* (Piercy, Wilton & Townsend, 2002) was used to measure children's willingness to interact with peers with ID. The scale requires

children to respond by indicating *yes* (score of 2), *maybe* (score of 1), or *no* (score of 0), with higher scores indicating greater peer acceptance. For the purposes of this study, Quereshi's (2016) adaptation of the scale was used where some items had been reworded from the original scale and a vignette and picture were added as stimuli. Unfortunately, Piercy et al. (2002) did not provide reliability data for the scale. However, this scale was chosen due to its ability to address the research questions and its ease of understanding for children. Internal consistency for the adapted version of this scale was good, Cronbach α= between 0.76- 0.78 and test- retest reliability was 0.80 (Quereshi, 2016).

Quereshi's (2016) adapted version of the *Children's Self Efficacy Scale* (Marom, Cohen & Naon, 2007) was used to measure children's perceived ability in interacting with peers with intellectual disabilities. The estimated reliabilities for Marom, Cohen & Naon's (2007) scale were between 0.84 and 0.89. The same vignettes and pictures used for the Peer Acceptance scale were used as stimuli for this scale. Internal consistency for the adapted version of this scale was good, Crombach α= between 0.77- 0.84 and test- retest reliability was 0.87 (Quereshi, 2016).

Data Analysis

Quantitative. Data were analysed using SPSS version 24. Repeated measures t-tests were used to analyse pre and post data from the pilot and examine whether the intervention had any effect on peer acceptance and self–efficacy. However, the main focus of the measures was to look at their feasibility rather than to focus on changes in response to the intervention.

Qualitative. The qualitative interviews conducted after the award were audio recorded and transcribed for analysis. The transcripts were analysed using thematic analysis as described by Braun and Clarke (2006). This is a six-phase approach involving familiarising oneself with the data, generating initial codes from the transcripts, searching for themes,

reviewing, defining and naming the themes, and finally producing the report (see Appendix C and D for a sample annotated transcript and qualitative brainstorm themes.)

Researcher Perspective. My interest in the field of ID and attitudes towards people with ID began through my family experience. This interest developed further through working in low secure intellectual disability hospitals prior to clinical psychology training and experiencing the stigma faced by these people. I was therefore keen to work on an intervention that could improve attitudes towards people with ID. It is possible that my interest and desire to improve the lives of people with ID has influenced how I conducted and analysed the qualitative interviews. However, I attempted to remain as neutral as possible in conducting the interviews and desired to learn both the positive and negative aspects of the intervention in order to best improve it.

Ethics

This study was approved by the UCL Research Ethics Committee (Project ID Number: 8311/001; see Appendix I for approval letter). As children were under 16, parents were provided with an information sheet which was sent by participating schools (see Appendix H for information sheet). They were given the option to opt out from their child's measures being included in the study, yet consent to their child being a part of the award if they chose. However, no parents chose to do this. Questionnaire data were collected and entered in excel by the project lead at RMS, before being passed to the researcher with all identifying information removed in order to maintain confidentiality.

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Results

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1. Feasibility

    1.1 Recruitment and retention. In total 244 children participated in the award over the course of the feasibility study. Fewer TD children were recruited to the award than those

with ID. Only six dropped out over the course of the study, all of which were TD children.

Despite 238 children completing the award, only 56 completed pre and post questionnaires

were returned. Table 3 presents the recruitment and retention data collected from each

group.

Table 3

Recruitment and Dropout Data

	Total No. of children recruited	No. of children recruited (SEN)	No. of children recruited (mainstream)	Drop outs
Group 1	22	11	11	0
Group 2	20	10	10	0
Group 3	31	16	15	2
Group 4	20	10	10	0
Group 5	13	10	3	0
Group 6	20	10	10	0
Group 7	15	10	5	0
Group 8	22	11	11	0
Group 9	15	10	5	2
Group 10	26	16	10	0
Group 11	28	16	12	2
Group 12	12	6	6	0
TOTAL	244	136	108	6

1.2 Qualitative feedback on feasibility. This section explores the feasibility and acceptability of the award and outcome measures. It details the challenges that were experienced by the participating schools based on interviews with children and facilitators at the end of the award sessions. In order to make clear in the following text whether a quote was made by a facilitator or child, an abbreviation has been added to the end of the quote (F= facilitator & C= child). Quotes made by children include a label stating whether the quoted child had SEN or was TD. Table 4 shows whether each theme formulated from interviews was mentioned by a child or facilitator in each group.

Table 4

Themes mentioned by children and facilitators in each group

	Recruitment			Challenges					Future Plans			How to capture impact			
	Setting up needs time	Role of Parents	Selecting Children	Managing large group	External challenges	Lack of time	Fitting into school life	Working with another school	Acceptability of the award	Plans to continue	Involvement of RMS	Positives of questionnaire	Accessibility & Reliability	Language	Different suggestions for capturing impact
Group 1		● (blue)	● (black)	● (blue)		● (blue)		● (blue)	● (blue) ● (black)	● (blue) ● (black)				● (blue)	
Group 2			● (blue)	● (blue)	● (blue)	● (blue)			● (blue) ● (black)	● (blue) ● (black)		● (blue) ● (black)	● (blue)		● (blue)
Group 3	● (blue)		● (blue) ● (black)			● (blue)	● (blue)	● (blue)	● (blue) ● (black)	● (blue) ● (black)	● (blue)	● (blue)	● (blue) ● (black)		● (blue)
Group 4	● (blue)	● (blue)	● (blue)				● (blue)	● (blue)	● (blue) ● (black)	● (blue) ● (black)			● (blue)	● (blue)	
Group 5	● (blue)			● (blue)	● (blue)	● (blue)	● (blue)		● (blue) ● (black)	● (blue) ● (black)	● (blue)		● (blue)		
Group 6			● (blue)		● (blue)	● (blue)			● (black)	● (blue) ● (black)		● (black)	● (blue)		
Group 7	● (blue)	● (blue)		● (blue)	● (blue)		● (blue)		● (black)	● (blue) ● (black)			● (black)		
Group 8						● (black)			● (black)	● (black)					

A blue dot indicates that a facilitator in the school discussed the respective sub-theme and a black dot indicates children discussed it.

1.2.1 Recruitment. The feasibility of recruiting children to the All In Award is addressed under three subthemes.

1.2.1.1 Setting up needs time. Facilitators noted that setting up the project and recruiting children to it needed time and some felt that they did not have enough time in the beginning to do so, particularly when working with another school. Facilitators who planned on continuing the award sessions felt confident that over time they would be able to recruit more children.

'I think long term it would be nice to work with another school, I know that's something we spoke about at the start but I think that just needs a lot of planning and preparation (…) The time we met to do the project, really didn't give us enough time to actually meet with another school and implement it properly.'(F4)

1.2.1.2 Role of parents. Three facilitators said that some parents' negative attitudes towards children with ID adversely affected recruitment of TD children to the project (meaning they were left with four TD children and 10 SEN children) or felt that the word 'disability', used in describing the award sessions, might have prevented parents from letting their children attend. Facilitators suggested that a change in wording alongside efforts to promote positive attitudes among parents, might help in recruiting children to the award.

'We did have problems in the beginning where we did start off with 10 and it did drop off to 4 now, reason being I found out that some of the parents didn't feel comfortable sending their children to a "special school"(...) and having their children hang out with special needs children. So (…) maybe it might be good for them, for us to invite parents to come in and maybe, to one of our school events, just to see what we do. Just to see what our children are like.' (F7)

'I would say a range of abilities or mixed ability groups or erm because then that kind of covers a range of things, so that because I just think the word 'disability' will frighten people off.' (F4)

1.2.1.3 Selecting children. Across the award, some children volunteered for the groups, whereas others were selected by facilitators. Reasons why facilitators chose certain children to participate in the award included wanting cohesion across age groups, encouraging development of certain skills (e.g. social skills), and wanting to include strong personalities in the group. Facilitators commented that in general when asked to volunteer, children with siblings with ID are always more engaged in projects that promote inclusive activities. One child said certain children should not be included in the group as they might mock children with ID. However, no facilitators described excluding children on this basis.

'There are people that have like, their own opinions about (…) people with disabilities and do make fun of them for it, so I recommend not getting some people as erm some of the people in our class do make fun of them.' (C3- TD)

'I brought them from across years 7, 8 and 9 because I wanted as well to form that sort of cohesion, a lot of the time year groups stick to themselves so it's nice to see them working together as well as with the students here.' (F2)

'Obviously we sort of discussed the kind of children we have when we first started last year and they [facilitators from mainstream school] went away and thought about the kids that would work quite well with our children and (…) picked children that would benefit from being with our kids. And that's proven to have been successful I think (…), you get the vibe from them when you're watching them and when they're interacting that you know, they're settled, they're content with each other and they're happy to be with each other.' (F6)

1.2.2 Challenges. Facilitators identified a number of challenges regarding the practicalities of running the award. These challenges are presented under five subthemes.

1.2.2.1 Managing large group. Facilitators discussed some of the challenges of managing the group, including balancing the needs of children with SEN or ID (e.g. need for routine or 1-1 support), the age ranges within the group and how to manage large groups, e.g. by dividing the group for the session.

'Yeah, I think maybe the [special needs] school perhaps could have done with being maybe a year group younger, just because there were certain children whose learning was a little bit erm superior to the rest, so they got a little bit bored and we had to try and engage them.' (F1)

'We had a lot of, we split into two groups… for both space reasons and because that gave them the opportunity to mix groups up week on week as well. So it provided us with the opportunity that yes they could group off and pair off but equally there wasn't a kind of unmanageability.' (F2)

1.2.2.2 External challenges. Many facilitators discussed having to change well laid plans for the group due to adverse weather conditions or because the driver who was supposed to transport the group to an activity cancelled. They came to recognise that they needed a back-up plan for when the weather interfered with their plans, for example when they had planned team sports.

'I think that now it's winter, it's cold, and we're quite limited with the indoor activities, so erm hopefully next year when it gets warmer we can do a bit more interactive games. That will make a difference I think.' (F7)

1.2.2.3 Lack of time. A number of facilitators felt they did not have enough time in the sessions to do what they would like to do. Children also said that having more time would improve the sessions. This was especially pertinent for award sessions run across two schools, with one school's group needing to travel to the other. One facilitator felt that 10 weeks was not enough to complete the award and that a full year was needed.

'Because they just seem to get into something and then that was it, it would finish for the day and they are quite difficult, because they're children to settle down… and sometimes they didn't have that much time in between, so I would say time constraints really was a challenge I think for us.'(F1)

1.2.2.4 Fitting into school life. A number of challenges were raised by facilitators about fitting the award into school life. Facilitators found the facilitator role relatively demanding and had to fit it around their other responsibilities. Some children and facilitators felt that it was more appropriate for the award sessions to take place during the school day, whilst others felt it would only work as an after school club. Fitting the club into the school day was considered to be particularly difficult for older children, especially towards the end of the school year when it was difficult to fit anything into the school day that was not curriculum based.

'I think because there was loads of stuff happening, we had sports day, trips and there was things that was happening on the days that really if it was consistent would have happened and it just couldn't because it just wouldn't fit in with what was happening on our school day. I think because it was the end of the year, the end of the year is always so manic that really had an impact on being able to run it effectively I think.' (F4)

'Getting them out of maths or geography (…) really hard so then you know you might look at the after school option, oh logistical nightmare, really hard, during the school day got a chance, after school really difficult so you know if you had a plan that you wanna take this to after school you know, a lot of people do because they want it to be kind of part of a community thing that's really hard, really hard.'(F3)

1.2.2.5 Working with another school. There were differing experiences between the groups about the ease of working in partnership with another school. Many found it a positive experience, but some found it more difficult and there were certainly challenges in

running the award across two schools, not least relating to working in partnership and shared responsibility for organising and reviewing sessions.

'I think that's probably the challenge of a lot of projects really but particularly if you're looking between two schools because you are always vulnerable to the fact the other school might let you down.'(F3)

'A big challenge as well came not from the children but from the staff, you know not that they weren't very nice but we would turn up some days and half the class would be missing, so because we hadn't had an email to say half the class would be missing it really put us in a difficult position.'(F1)

1.2.3 Future Plans. This theme is divided into three subthemes, exploring whether children and facilitators want to continue with the award and what resources they would need to do so.

1.2.3.1 Acceptability of the award. Most children and facilitators said they enjoyed the award sessions, although a couple of children did not enjoy certain activities that were chosen by their school (e.g. yoga or dance which they found repetitive or boring). Children said they had fun and learned new skills but wanted more team activities. Facilitators also talked about learning a lot from the group and really enjoying it.

'It's been funny- like when we get to play the games and when we laugh a lot' (C8- TD)

'I think we could use more like, socialising activity like, team building activity (…) where we actually talk to each other and not dancing so we get to know each other more.' (C6- TD)

'Yeah it was a good opportunity for us, good learning for us as well you know teaching erm two very diverse groups really and it's gone really well. The main thing is we've really learnt a lot, as well, really learnt a lot.' (F1)

1.2.3.2 Plans to continue. Every school interviewed said that they planned to continue with the award in the future and would recommend it to other schools. Four out of the five groups who completed the award in the first term continued the project for another term. Furthermore, two of these schools decided to take on an extra group in term two, so that they were running two separate groups at the same time.

'I would love to erm and I've already had interest from the boys about carrying it on and I am trying to.' (F2)

'I think the whole school would think this would be a really good club.' (C4- SEN)

'I think it's progressed from last year, as now we're offering two clubs. (…) We've got the whole range of kids, so that's a good thing. So, we're evolving and you (RMS and researchers) with us as well. And you giving us the opportunity to do that as well, which is very nice. So that's a really good thing. So who knows what happens next year!' (F7)

'What you (RMS and research team) are trying to do (…) it's proved it can work and it does work with us using it and implementing it. Your next step I think is to move it on to other schools.' (F6)

1.2.3.3 Involvement of RMS. Facilitators felt that the involvement of RMS in the award was important for facilitation. It allowed adequate funding for the project and helped facilitators to keep focused on the project and to keep it going.

'I think it's absolutely brilliant because… it's made me focus my time on it, it's always been something I wanted for our group, but it's helped me focus the sessions… We're continuing it definitely (…) and it would be good to have you guys on board with that, us being on board with you should I say because then we're monitored in a way so it can't fall by the wayside.'(F5)

1.2.4 How to capture impact. Facilitator's thoughts regarding how to capture the impact of the All In Award and the value of the measures, are summarised under four subthemes.

1.2.4.1 Positives of questionnaire. Facilitators felt the questionnaire was clearly worded and asked challenging questions. They liked the example children at the beginning of the questionnaire.

'I like the questions because they actually do challenge you to be honest, and it's not just one question about being with the person, it's like 5 or 6 questions and it kind of ramps (…) it up.' (F3)

'I thought the example children were really good and the idea that their needs were quite specific.' (F2)

1.2.4.2 Accessibility and Reliability. Facilitators commented on the accessibility of the questionnaires and most felt they were not accessible in the current form for children with ID or even the younger mainstream children (those aged 8-9). Some suggested adapting the questionnaires, whereas others felt that doing so would take away the meaning of what was being asked. In some cases, facilitators said that they had to answer the questionnaires for children with ID, which made the responses invalid. Facilitators commented that children were often answering 'very easy' because they felt it was the right thing to do. Additionally, there were queries over the question 'Would you feel like sharing a secret with a child like Hannah or Adam?' as children said they would only share a secret with the person if they were friends and did not understand why they would share a secret with someone they did not know.

'The story of Hannah and Adam could have been in communication print that would have been very helpful, you know these are the questions that are a little bit higher level for some of our students, but to adapt that would take away all the essence of what you're asking'(F5)

One child said that the questionnaires were not taken seriously by everyone and therefore the answers may not be valid.

'What really shocked me in the questionnaire was when it said 'if someone was picking on a child like Hannah or Adam what would you do?' I thought that was just like an easy question because (…) we're taught that bullying isn't right and it doesn't matter what disabilities you've got. (…) When we first did it, people were like putting 'no' down for fun, that they wouldn't help and I didn't think that was right because (…) I'm sure that people from this side of the school would help you if you were getting picked on.' (C3- TD)

1.2.4.3 Language. One of the schools decided not to hand out the questionnaire to children as they felt that this would encourage children to focus on the differentness of their peers with SEN. Another school was unhappy with the use of the word 'disability' in the questionnaire and explained that it had triggered a lot of questions from the children.

'Part of the questionnaire erm brought up a little bit of confusion with the children, where it mentioned the children had disabilities so the children were like 'why was I picked, was I picked because you guys think I've got a disability? I don't wanna be in the group because it's for this type of child' so that kind of caused a little bit of uproar in the beginning until I explained it to them. That question could be worded a little bit more differently.' (F4)

1.2.4.4 Different suggestions for capturing impact. Some facilitators felt that the questionnaires did not necessarily capture the award sessions' impact that they had noticed in the group themselves and suggested other options, such as film or observation.

'I would've really liked to have filmed [name of child] and [name of child] and [name of child] working today (…) because it's just you know some beautiful moments where they were communicating with each other and you know trying to remember what had happened last week and taking it forward.' (F3)

'I don't know how you would work that in but maybe something where the children can reflect on what they feel they've gained over this 3 month period would be useful because I feel like they have got a lot to say about that so that might be beneficial.' (F2)

2. Preliminary Outcomes

Preliminary Pilot Data. Repeated measures t-tests were conducted to measure the differences in scores on peer acceptance and self-efficacy for children before and after the intervention.

Peer Acceptance. The mean change in scores between pre and post intervention was 0.11 (SD= 1.71). This was a small positive change (Cohen's d= 0.32), although it does not reach significance at the 5% level due to the small number of completed questionnaires received, t(55)= 0.47, p= 0.64 (two-tailed), (C.I= -.35- .57).

Self-Efficacy. The mean change in scores between pre and post intervention was 0.84 (SD= 3.10). This represents a small significant change between the two time points (Cohen's d= 0.27), t(55)= 2.03, p= 0.02 (two tailed), (C.I.= 0.01- 1.67).

Reliability and validity. Internal consistency analysis of scores on the Peer Acceptance Scale indicated that items were poorly correlated, α= 0.45 at pre and α= 0.61 post intervention. Internal consistency for the Self-efficacy scale was good, α=0.72 at pre and α= 0.78 at post.

Qualitative feedback relating to preliminary outcomes. Thematic analysis was also used to analyse transcripts of the interviews conducted with children and facilitators at the end of the All In Award in relation to preliminary outcomes. One overarching theme of breaking down barriers was identified which was divided into three subthemes: Promoting interaction, Interacting as equals? and Changing minds which was separated into further subthemes.

Table 5 presents these themes constituent subthemes and whether they were mentioned by

children or facilitators in each school.

Table 5

Themes mentioned by children and facilitators in each group

| | Breaking Down Barriers | | | | | | | | | | | | | | |
| | Promoting interaction | | | | | | Interacting as equals? | | | | | Changing minds | | | |
	Encouraging Interaction	New experience	Providing an outlet	Relationships change over time	The younger they are, the less barriers	Making friends and working together	New activity	Downward comparisons	Coaching/	Help when help was needed	Making mutual allowances	Better than expected facilitators	Increased understanding	School community	Wider Reach/
Group 1	F			F,C	F	F,C	F				F	F			
Group 2		F,C		F		F,C	F	F	C	F		F	F,C		
Group 3	F	F,C	F		F	F,C	F	F		F	F		F,C		
Group 4	F	C		F		F					F	F			
Group 5			F	F			F				F	F			
Group 6	F	F	F	F		F			C			F	F,C	F	C
Group 7	F	F				C							F	F	C
Group 8						F,C									

A blue dot indicates that a facilitator in the school discussed the subtheme and a black dot indicates that a child discussed it.

(F = facilitator/blue dot; C = child/black dot)

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2.1 Breaking down barriers. An overarching theme of breaking down barriers was identified in the interviews; this was separated into three themes and further subthemes.

2.1.1 Promoting Interaction. This theme summarises children and facilitator's views on the award session's success in promoting interaction between children with and without ID. It is separated into six subthemes.

2.1.1.1 Encouraging interaction. Facilitators discussed how they encouraged interaction between children with and without ID. Some let this occur more naturally, whereas others tried to facilitate this by putting children into groups with a mix of children with and without ID or by creating an 'introducing game'.

'So we spent the first part of the project saying "look, we're putting on a dance thing, you join in with it". Not "we want you to work in groups, we want you to work with that kid" because they're not doing anything like that, just "come and join in" and that kind of broke down those barriers and got them comfortable in the setting.' (F3)

'I put them into groups and they didn't wanna be in those groups first of all, but after working together for a little period of time they were actually happy that they weren't necessarily working with their best friend and that they were working with new people.' (F4)

'Yes, we have had other sessions, not this kind of session, where we have had students come in from the mainstream school where the interaction was very bad (…) you know the other time we picked up like from [mainstream school] we used to pick up like 10 students to come swimming with us, they weren't with us, they literally just came swimming.' (F5)

2.1.1.2 New experience. Both facilitators and children commented on how this was an experience that they would not normally get in their everyday life, and that these children with and without ID had not interacted in a similar way in the past.

'It was a real good experience because normally you see children like this and you don't really talk to them because they are always with an adult.' (C3- TD)

'I feel like it's provided something for both sets of students that (…) I couldn't teach this in a classroom, I don't know how you'd get it any other way.' (F2)

2.1.1.3 Providing an outlet. Facilitators felt that the award provided an important opportunity for TD children to have an outlet and a break from being very learning focused, and that this further enabled interaction between the children. They talked about other projects they had worked on where interaction had not been as good as it had been more focused on volunteering.

'A lot of the time they're very learning focused and they don't have that extended kind of relationship with other students, (…) they're very driven and almost pushed to that extreme (…) So for them to come here and work with our kids is a real outlet.'(F6)

'What I like about this time, it's not about them gaining any experience or gaining any volunteer time, (…), this isn't work experience, this is just enjoying yourself, having fun you know and that's what I like about it.' (F5)

2.1.1.4 Relationships change over time. At the start of the intervention, children with and without ID were not integrated, but over time they interacted more. One facilitator said the terms of the relationship changed- originally TD children were helping those with ID but after a while their relationships became more equal.

'Whereas they would come into the rooms and they wouldn't, so [SEN school] would sit on one side and [mainstream] would sit on the other side and we would try and integrate them but eventually after a couple of weeks they integrated themselves, which was quite nice and you had children saying hello to other children and sitting with other children voluntarily.' (F1)

'So it's really good having them here because they take on a bit of a more of a role of looking after the other children and then actually you just see them blend the next thing and then they're exactly the same, behaving the same in some situations as a teenager.' (F5)

2.1.1.5 The younger they are, the less barriers. The age of the children involved in the project was thought to be important, not just because of the issues previously mentioned about fitting the project into their learning, but also because facilitators felt that with younger children there were less barriers in interacting with peers that were different to them.

'I think it might work better having the year 7s from [SEN school] and year 5 [from mainstream school] because (…) the younger they are, the less barriers you have.' (F1)

'I think younger kids just do it naturally and it's just a case of getting them together because we find you know that our kids, a lot of our kids function pretty well in infant schools and nurseries because the gap's not so wide. But as they get older the gap widens (…) you have to do something to bridge the gap, so things like, like this.' (F3)

2.1.1.6 Making friends and working together. Children mixed and integrated well on the whole to work towards their common goals. Children and facilitators felt that bonds had formed within and across schools and some described making new friends as a result of the award, whilst others felt that relationships had been formed that did not quite amount to friendships. One facilitator discussed how previously the two schools (SEN and mainstream) had had little contact, but that two or three students had made genuine friends with children from the SEN school and visited them at lunchtime.

'It's sort of nice like knowing you've got friends around here and over there, so like yeah it's good.' (C1- TD)

'They have really formed quite strong bonds. [name of child from mainstream school] said probably about three or four weeks ago "Are we doing this next year?" and said "Well, I'd really like to, this lot are really wicked", and obviously that's child speak but he was keen you know.' (F2)

'I think 'friends' is probably a bit strong a word for the amount of time they've had together, because that takes ages doesn't it, to build real friendships but I think there's definitely been connections made.' (F8)

2.1.2 Interacting as equals? This theme covers aspects of whether or not children with and without ID were genuinely interacting as equals. It is divided into four subthemes.

2.1.2.1 New activity. Facilitators felt it was important for the activity chosen to be new to all the children involved in the project and that it was not something that children without ID would excel at compared to those with ID, in order to allow relationships to be on equal terms.

'That's why we did the dance, because you're coming in at the same level and everyone can move. Actually our kids are more experienced dancers than the [name of mainstream school] which is an interesting dynamic because they're really happy dancing.' (F3)

2.1.2.2 Downward comparisons/Coaching. Despite the chosen activity being new to children in the project, some TD children did make downward comparisons about children with ID when interviewed. Furthermore, facilitators made remarks about TD children 'coaching' or 'helping' those with ID in the activities which appeared to be encouraged by some facilitators.

'Yeah and sort of not take what I have for granted because there are other people worse off than me.' (C2- TD)

'I made sure that while I was monitoring them, the students from [special needs school] who were not very confident, I'd say "Right, you just try and [name of child from mainstream school] is going to tell you where to put your hands and feet" so that they were kind of training them and coaching them to get them to do the bouldering, even though they weren't sure.' (F2)

2.1.2.3 Help when help was needed. Children were seen to be supportive of each other. Although facilitators described children without ID as helping those with, they did not feel children patronised or assumed their peers with ID could not do things but instead were seen to give them space to try themselves first, and only intervened when necessary.

'What has impressed me a lot about my students from is that they have helped when help has been needed but they've not erm condescended to the kids, they don't patronise them. Like today (...) it was no big deal but he didn't assume from the off that [child with ID] would need him- he kind of gave him the opportunity and then had an ear out and then sort of stepped in.' (F2)

2.1.2.4 Making mutual allowances. Facilitators commented on how children with and without ID had their strengths and weaknesses and made mutual allowances for each other.

'What each group does is take account of what different people find hard and then start to make adjustments so that everybody can you know, be 'All in'.' (F3)

'The children have learned, they've made new friends, they've interacted they've, you know I think they've learnt social skills along the way as well which has been quite nice, on both children's part. Both children have had to make allowances for both children, if that makes sense?' (F1)

2.1.3 Changing Minds. A number of facilitators and children explained how their or others' minds were changed over the course of the intervention. This theme is split into three subthemes.

2.1.3.1 Better than facilitators expected. The intervention was thought to be better than teachers expected it to be and facilitators that were brought into the project were thought to have changed their perceptions on how interacting with people with ID would be. Facilitators described enjoying the experience and one described finding it a great stress relief.

'For me as a mainstream school teacher it's also offered me insight into kind of other you know, educational realms.' (F2)

2.1.3.2 Increased understanding. Children expressed an increased understanding of their peers with ID and as a result a greater willingness to interact with them in the future.

'Erm it would make me see people with difficulties a lot more easily going to this club and an increased understanding of what happens in the world around you.' (C6- TD)

'I thought that people with learning disabilities would be quite hard to talk to but it's quite easy when you come across it.' (C2- TD)

'(I would now) go up to them and talk to them in the playground.' (C3- TD)

2.1.3.3 Wider reach/School community. Facilitators commented on the importance of this intervention as it was targeting children who would be future members of the community and felt that it was a crucial time to target children. They felt intervention's such as these were important to break down barriers and increase acceptance and tolerance. One facilitator also commented on a positive impact on parents. Some facilitators felt that the relationship had improved between the schools as a result of the award and had made future plans to work together on other projects.

'They're going to be part of our community and not to be hidden away. And it's good for this generation to understand that there's other children that have needs, that have challenges and it can be very difficult. and hopefully to make a better community, a more coherent community, so I think it's really important definitely.' (F7)

'And the parents, erm it's a shame we didn't go out there actually, but when the parents come and collect the [name of mainstream school] boys, it's not 'oh my god I'm coming into an SEN school' or the stigma of an SEN school, they're very friendly and outgoing as well. So we're swaying the parents, the mindset of the parents is being moved as well to be more acceptable and not having a thing about their children integrating, which is a real positive because again that filters out into society.' (F6)

'I think they've benefitted hugely, erm they've worked really well with the boys, but not only that it's built a relationship between the two schools to the point that I not only do this, but I do other things with the other school as well. We've built up a really great working relationship so it's opened doors and avenues.' (F7)

Discussion

The aim of this study was to support the development of the All In Award, designed to improve attitudes towards children with ID, to evaluate the feasibility of the intervention and collect preliminary data regarding potential changes in attitudes as a result of the intervention.

Feasibility of the study was assessed using qualitative interviews with children and facilitators who had participated in the award, as well as data on recruitment, retention and completion of measures. This was necessary in order to understand whether the award should be rolled out by RMS to further schools and whether a full scale randomised control trial (RCT) should be undertaken to assess the impact of the award. Following MRC guidance, establishing feasibility helps to identify initial problems with an intervention and return to the development phase if necessary before proceeding to a full trial. Based on the results of this study, the All In Award appears feasible, with some adaptations to improve it, particularly with regard to measuring its impact.

Over the course of the feasibility study, 238 children completed the All In Award. In total only six children dropped out and no schools did, which suggests that those who joined the group enjoyed it. Some schools asked children to volunteer for the award, whereas others selected children. It did appear to be slightly more difficult to recruit TD children than it was to recruit those with ID. Reasons for this given by facilitators were that there was a difficult link between the mainstream and SEN school or, more worryingly, that some parents were not happy about their (TD) children participating in a group with children with ID for fear of them developing 'bad habits'. This highlights the need for an intervention such as this, and a need to consider how parents could be in some way be included in the intervention in future, for example, providing appropriate information at the start, inviting them to the final

celebratory session or by coming to visit the school beforehand in order to help them understand children with ID better.

An initial concern from the researchers was that facilitators might select TD children for the award based on expectations that these children would be likely to interact more positively with children with ID. However, although facilitators discussed a number of reasons for selecting children, such as to increase their social skills or to create cohesion across age groups, choosing children due to them already holding positive attitudes was not apparent. One particular child felt certain children should not be selected for the award as he had witnessed them previously mocking people with disabilities. Selection on this criterion needs careful consideration as it would be essential not to expose children with ID to any sort of emotional abuse but equally these are the children that may need targeting the most by an intervention of this kind. Future facilitators of the award therefore need to pay close attention to the mix of children selected for inclusion in the All In Award as negative contact between people with and without ID can actually increase social distance (Tachibana, 2005). Additionally, this highlights the need for intervention as there is clear prejudice towards peers with SEN being expressed at schools that needs to be addressed.

An important sign that the award was deemed feasible and useful by the schools involved was that four out of five schools that participated in the first term chose to continue with a new group in the second term. Furthermore, two schools decided to expand to running two groups. Most schools plan to continue the award in the future and felt involvement of RMS and researchers would be important in this for funding, as well as to keep them on track.

Although measures were used primarily for the purpose of assessing feasibility, preliminary data were collected to assess any change in attitudes. Measuring the impact of the award proved to be difficult in the current study. Despite 238 children completing in the award, only 56 completed pre and post questionnaires were returned. The reasons for this

included identifiers not being incorporated on the questionnaires (therefore resulting in not being able to match up questionnaires pre and post for comparison), one school choosing not to administer the questionnaire due to not wanting to increase perception of the differentness of children with ID, children with ID not being able to complete the questionnaires without substantial help and questionnaires getting lost in the post. Of note, the questionnaires used were not developed for use with children with moderate ID. In planning the intervention with RMS, it was thought the intervention would include TD children and children with mild to moderate ID from an inclusive school, rather than a mainstream and SEN school working together as most schools decided to proceed. It was a promising finding that so many schools did choose to make links with other schools in this way and feedback from the schools suggests that it was in fact feasible to run the award across two schools, despite this not being the original intention. However, it is clear that substantial revisions would need to be made in measuring the impact of the award if this intervention is to be evaluated in a full scale RCT and to assess the impact on both TD and ID children. Questionnaires would need to be much easier to read and score, or two versions of measures may be needed, for example, utilising more simple language and pictures and administering questions as an interview rather than in questionnaire format. Additionally, facilitators noted that observation of the children was useful as they had seen more interaction taking place. Although filming would be highly desirable, child protection regulations are likely to prevent this. Therefore it may be useful to consider some sort of behavioural observation or scale to better understand whether more interaction did take place between children with and without ID.

Questionnaire data has to be interpreted with caution due to the low numbers collected (N= 56) and because there was no control group. The results from this study suggest there was a small, significant increase in children's self-efficacy scores (i.e. how easy they felt it would be to interact with someone with ID) after the intervention. Feedback in interviews

reflected this, at least from some children, who described finding interacting with children with ID easier than they thought it would be. There was also a small change in peer acceptance after the intervention but this was not statistically significant. However, the analysis was under powered due to the small numbers of questionnaires completed. Interviews with children and facilitators supported a change of attitudes as a result of the award. However, an RCT would be useful to measure changes in comparison to a control group.

Analysis of qualitative interviews suggests that both children and facilitators agreed that interaction between the children with and without ID was successful. Both felt that barriers had been broken down in a way that would not occur otherwise. Facilitators differed on whether they encouraged interaction by mixing up groups, pairing children, using introduction games or just letting interactions occur naturally but all facilitators said that relationships developed over time. This highlights the importance of intervention spanning a longer period and echoes Lindsay and Edward's (2013) recommendation that interventions should run for several sessions over a longer period of time rather than as a one-off intervention. Similarly, the researcher attended the final session of a number of groups and witnessed positive interactions between the children first-hand.

There were differences across the groups in terms of whether the interaction between children with and without ID appeared to be on equal terms. A lot of facilitators felt that the interaction was equal and some children said that friends were made. Facilitators also talked about how allowances were made for all children, citing some of the children from mainstream schools who were less confident in dancing than children with ID. The award was described as allowing an enjoyable outlet for TD children who are very learning focused in their school time. However, there was also some evidence of downward comparisons and coaching from the TD children; for example, some facilitators talked about an expectation

that the TD children would 'help' the children with ID. Creating a group where the activity was new for all children involved appeared particularly important to encourage the activity to be tackled as equals, as far as possible. In going forward, it is vital to highlight the need to carefully select activities that enable children with and without ID to be on equal terms as possible, and to allow for sufficient planning time to facilitate this.

As mentioned previously, originally it was thought that children with mild to moderate ID would be more likely to participate in the award than children with moderate to severe ID. Facilitators felt that the more high functioning a child was, the more able they were to interact with others and conversely noted having to make more effort to include lower functioning children in the group. For the future of the award, it may be beneficial to consider the range of abilities within an individual group to consider whether it would be possible for interaction to be on equal terms. However, in one of the groups that did include children with moderate ID, facilitators commented that children from the mainstream school were now visiting these children at lunch through their own choice. Therefore, this would need further careful thought by RMS and input from schools who piloted the project to establish the best way of achieving equal interaction.

The age of children included in the award must also be given consideration for a variety of reasons, notably where children are in their school career (e.g. if they are due to have exams, would they be less likely to participate) as well as in terms of their level of interaction. The intervention was designed primarily for children aged 8-13, in Piaget's concrete operational stage. Some facilitators commented that they felt younger children experienced less barriers in interacting with peers that are considered different. According to Bakker et al. (2007), young children do not judge people with ID based on the ID in itself, but by behavioural problems that may accompany the ID; only at an older age do children begin to judge based on performance, possibly because they have more of an understanding of their

own cognitive functioning for comparison. Additionally, in an academic setting TD children may be under constant pressure to perform well and having a partner or group member who is less able could interfere with this and therefore lead to rejection of less able children. This points to the importance of the dynamics of the group, and how differences may occur in interaction based not only on age, but by individual differences within the group.

Limitations

There was no comparison or control group included in this study. Although the researcher was independent of the intervention, interview responses may have been affected by social desirability, especially where teachers were present. The intervention was implemented in different ways than originally planned and therefore the evaluation was not appropriate in parts, for example, the measures were only designed to assess attitudes to peers with ID. Moreover, due to the measures not being accessible to children with ID, and them being mostly silent in the qualitative interviews, the voice of children with ID was unfortunately lost. Careful consideration will need to be given to assess the impact of the award on participating children with ID in future.

Conclusions and Implications

The intervention was considered to be feasible with some key changes made. It is therefore recommended to follow MRC guidance on developing the project based on the results and then implement a full scale RCT to evaluate the All In Award. There are a number of key changes that need to be made before the intervention is suitable for delivering on a larger scale.

Future Implementation of the award. It would be beneficial to provide some training to facilitators running the award, and possibly introduce fidelity checks to ensure the core aspects of the award are adhered to each week to best encourage interaction. Furthermore, links will be made with youth groups such as the Scouts, Youth Enterprise and the Duke of

Edinburgh scheme in order to continue the work and broaden the reach of the award in bringing children with and without ID together.

Recommendations for future evaluation. It would be beneficial to have a researcher attend the initial and final sessions at each school in order to help problem solve any initial concerns, and ensure that any standardised measures are completed properly, including an identifier to allow pre and post matching of data. Questionnaires need to be adjusted as discussed previously, so that evaluation of attitudes of children of all abilities can be assessed validly and reliably. Future evaluation should aim to assess impact on the wider community and aim to assess parent's attitudes alongside children's.

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Part Three: Critical Appraisal

Introduction

This report will outline my personal reflections on the experience of conducting research into children's attitudes towards their peers with intellectual disabilities (ID). It will cover my reasons for interest in the area and the practical challenges faced in the development, implementation and evaluation of the All In Award. It will also expand upon limitations and implications of the research, covered in part two of the thesis, in the hope this will benefit future researchers.

Researcher's perspective

Completing research in this area and alongside the Royal Mencap Society (RMS) has been an interesting and rewarding experience with a number of challenges along the way. My interest in ID began from having a sibling with ID and then my continuing work in the field as an Assistant Psychologist. From these experiences I became aware of the stigma, prejudice and even fear of people with ID and developed a desire to attempt to improve the lives of people with ID as well as society's general impression of them.

Process Issues

Capturing the Impact of the All In Award

A major challenge faced in completing the intervention was measuring the impact of the award on children's attitudes. Alongside qualitative interviews planned for the final session with children and facilitators, it was intended for all children to complete two standardised measures. Although these were largely included in order to assess the feasibility of using measures in the award (i.e. whether they would be completed and how accessible they were), it was also hoped that preliminary outcome data would be collected in the initial and final sessions to compare attitudes before and after the intervention. However, a number of problems arose. In one of the schools, as noted in part two, the teacher did not believe the

measures were appropriate as she felt they would highlight differences between children with and without ID. Unfortunately, as this was decided on the day of the intervention, neither I nor the RMS lead was made aware until after the initial session had taken place. Therefore it was not possible to discuss this further or implement any other sort of back-up plan for evaluation of the award, meaning data were not collected from this group of children (although they were still interviewed). Additionally, a lot of mistakes were made when completing and retrieving the measures from schools. One school devised a plan of writing numbers on the questionnaires so that children were not identifiable, with a list matching up names and numbers but unfortunately this list was lost and therefore data could not be matched up pre and post intervention. Similarly, a number of children did not put their name on one or both of the questionnaires completed, meaning that not all measures could be matched. Another school's measures were lost in the post when sending them to RMS for inputting to the spreadsheet. This was extremely frustrating and is an important reminder of being extremely clear when working with schools of the importance of these measures and giving them a clear process of how to complete the measures. The priority for teachers is usually carrying out the intervention, and as such evaluation is not seen as an important task. Moreover, it highlights the need for someone involved in the evaluation of the project to attend the initial and final session in order to ensure measures are completed correctly where possible and where not possible, discussions can be had to try to address difficulties.

Another challenge of the measures was their accessibility. It was originally thought that the award would take place in inclusive schools with children with and without special education needs (SEN) in the same school. However, most schools chose to partner an SEN with a mainstream school. As such, the evaluation of the award did not quite meet the needs of the intervention, as it was not predicted that children with moderate to severe ID would be recruited to take part in the award. Some facilitators were witnessed completing the measures for children as the children did not understand them, eliminating the reliability of

these measures. When this was observed these questionnaires were removed from the analysis without drawing attention to it in the session as this was not felt appropriate. After this session, I reminded the facilitator that if children could not complete the measures themselves it was best not to try and complete them for them and it was clear the facilitator was attempting to be inclusive of these children and put across what they thought the respective child would say. Some children were not able to complete the measures at all, meaning their valuable input was missed. This highlights the lack of accessibility of the measures which would need to be carefully considered in moving forward with the project and measuring attitude change. It would certainly be vital to obtain feedback from children with ID, so more accessible versions of the measures should be sought for the future. Alternatively it should be considered whether interview or some sort of behavioural measure may be more appropriate as facilitators and children commented on the increased interaction between children with and without ID. Additionally, consideration will be given to what impact is hoped to occur in children with ID as a result of the award- i.e. whether the evaluation would be looking at children with ID's feelings about themselves, other children with ID or something else altogether.

Interviews were conducted by myself (who had not been involved directly in the delivery of the intervention) in the hope this would encourage more honest answers from children and facilitators about how they found the award. However, it is possible that social desirability could still have been an important factor as children would have likely known that saying they enjoyed the award would have been the 'right' answer. Power dynamics of an adult interviewing children that they have never met before should be considered and often teachers were present which may have resulted in children responding in a more socially desirable way.

Additionally, the interview schedules were not wholly accessible as some of the children with ID participating in the award were non-verbal and used communication books, meaning they were not able to answer questions in the devised format. In order to still obtain their feedback, communication books for one school in particular were used to help children give feedback on whether or not they liked the award. Children were asked what they thought of the group and answered using short sentences in their communication book by pointing, for example 'I thought the group was fun.' Careful consideration will be needed in the future to ensure that feedback from those with more complex needs is not excluded. In general it was more difficult to obtain detail-rich quotes from children than facilitators as they would often give one word answers to questions or very short sentences; this was particularly an issue for those with ID. In the future it might be better to select a sub-sample of children with and without ID and interview them individually in order to get more detailed feedback.

A number of children and facilitators reported that their attitudes had been changed as a result of the intervention and stated that they would be more likely to interact with people with ID in the future. As the intervention is carried out in more schools it would be interesting to follow up on some of the schools a few months later and see if there were any changes in how groups were run, interaction between schools and whether attitudes towards ID remained more positive. It may be useful in this case to use some sort of behavioural scale or observation.

As my literature review and empirical paper were conducted at around the same time it was interesting to see how the two were entwined. Ideally it would have been useful to have completed the literature review completely before concluding the intervention as my reviewed focused on measures of attitudes towards children with ID, designed for typically developing (TD) children. In hindsight, this may have affected the use of measures that were chosen for the award, for example by including some sort of measure of behaviour change.

However, due to time constraints, it was not feasible to complete the review before starting to conduct the intervention.

Working with schools

Whilst working with schools to conduct research, I began to understand how busy teachers were and the difficulties of fitting an intervention into school life, no matter how much they value it. A number of facilitators expressed enthusiasm and interest in a project which included children with and without ID and aimed to improve attitudes, but did not feel they had previously had the support or encouragement to conduct it. Assessing the feasibility of the All In Award required giving schools the flexibility to conduct the intervention in a way which was suitable for their needs, whilst following guidelines given by RMS and the researchers. For example, some schools chose to run the award during school time, whilst others carried it out as an after school club and some completed the 10 hours of activity by having a one hour group for 10 weeks, whilst others had 45 minute sessions for a longer period. In order to allow flexibility for the schools and make running the award possible, this meant giving up an element of control. In the future it would be beneficial to conduct fidelity checks to ensure that the most important parts of the intervention are still happening (i.e. does the award meet Allport's (1954) and Carter, Biggs & Blustein's (2016) criteria for successful interaction between children with and without ID). Ideally it would also be beneficial to have some sort of contact with schools after each session. However, this may not be feasible as it was often difficult to keep in contact with schools and emails were often met with no reply from facilitators for some time.

I did not conduct the intervention myself and could not attend every session (neither could the RMS representative), but planned to attend the final session of each school group in order to conduct interviews with the children and facilitators. However, on some occasions I turned up to the final session in order to conduct interviews and collect the measures, only

to find the facilitator had planned something completely different for the final session. This was often either because the facilitator running the award on the day was not the same as the contact from the school organising it with us or because the facilitator misunderstood how long the interview and measures would take to complete. On these occasions I was still able to conduct the interview but it was often rushed. Similarly, I was not able to attend a number of the final sessions as planned because of difficulties contacting schools or fitting in the session before the evaluation needed to be completed. This was frustrating and unfortunate in terms of losing valuable feedback from a number of facilitators and children.

Alongside the school that did not feel comfortable giving measures out, another school raised concerns about the language in the questionnaires and consent forms, namely use of the word 'disability.' They felt that the word would frighten parents off from letting their children participate and discussed the questions which came up from children when they saw the word in the measures. In a similar vein to the school who chose not to give out the measures, facilitators wanting this word excluded apparently guided by a wish to protect children with ID and keep them safe. However, both occasions seemed a missed opportunity to have a discussion with the children involved about differentness in the group and what disability means. In fact, this may have been a chance to discuss how differentness should be celebrated rather than hidden away as something that should not be spoken about. It is possible that having a research or RMS representative present at these initial sessions may have allowed more opportunity to discuss these important issues and allow for meaningful discussion. Alternatively it may be beneficial to provide facilitators with some training to ensure they feel comfortable having these conversations with children if they do come up.

The initial plan for the All In Award was that participating children would meet with facilitators at the beginning and plan what activity they would like to complete as a group. However, this did not end up happening and teachers chose activities which probably

allowed the award to meet their other goals. For example, teachers chose first aid or healthy eating, which although the children appeared to enjoy perhaps they would not have been selected by themselves. In hindsight, it may not have been plausible for children to have decided the focus within the time frame, and the activities chosen by adults did meet the needs of the project- i.e. being enjoyable and new to all children.

Working with RMS

The development and evaluation of the All In Award required working closely with RMS. This was an extremely valuable experience and allowed for their expertise, contacts and funding as well as building excellent professional relationships throughout the course of the intervention. However, working in partnership with a charity did present some challenges. Due to the funding agreements, the award was rushed through quite quickly in the beginning, where ideally more time could have been spent to develop and refine the research plan. For example, it was originally planned to have focus groups with children with and without ID, facilitators and SEN teachers in order to gain ideas about the award and outcome measures before embarking on the sessions, but time did not allow for this. This was disappointing as it resulted in a lack of valuable service user involvement in the development and evaluation of the award. Additionally, if there was more time available in the beginning to prepare and hold focus groups, some of the issues raised by facilitators (e.g. about the measures and language used) could have been discussed and, if possible, alternate plans devised. Facilitators also commented that they needed more time to set up the award - especially when they needed to organise working with another school. Some of the concerns raised by parents recruiting children to the award might have been solved by having more time to discuss these with the school and by reaching out to parents and the wider school community so that they could fully understand the award. Furthermore, the acceptability and accessibility of measures could have been established before embarking on the intervention.

Severity of participating children's ID

As previously discussed, it was originally thought that the award would include children with mild ID, but actually the award ended up including a lot of children with moderate ID. It was extremely promising that schools felt the award was suitable for these children and the results suggest that the award was in fact feasible for children with more complex needs. However, it was noted by some facilitators that the less able the children with ID were, the less likely it was that children would interact as equals and therefore 'teaching' may be more likely to occur. It may be that there is too significant a difference in the capabilities of TD children and some children with higher needs for equal interaction to transpire. Conversely, in one of the schools where there were children with more moderate- severe ID participating, the facilitators noted that children from the mainstream school were now visiting at lunchtime in order to spend time with them through their own choice. It would be interesting for the future of the project to look at differences in the level of ID and how this impacts on interaction between children with and without ID as equals.

It was extremely pleasing that no negative consequences of the award were mentioned in any of the schools where the award took place and this is something that should be carefully considered as the award is expanded and implemented in further schools to ensure that there is no bullying towards any of the children in the award. I was surprised to hear that the most prejudice expressed was from parents in one school in particular, who removed their children from the award for fear of them interacting with peers with special needs. This further highlights the need for interventions such as this as clearly there are stigmatising attitudes present among the general public. It may be useful, as one facilitator suggested, to try and involve parents in the award by allowing them to visit the school and hear about the award so that their fears can be reduced and hopefully decrease some of their prejudices as well. In addition, one facilitator felt that some of the parents' attitudes had been changed

over the course of the intervention, so it is hoped that by changing children's attitudes we may begin to see changes in the attitudes of their parents as well.

Implications and future directions

Overall it appears that it would be beneficial to have more researcher involvement over the course of the All In Award. If it is not possible for a researcher or RMS representative to attend sessions, it would be useful to include fidelity checks and possibly provide training for facilitators to ensure that the core aspects of the award are being kept to and meaningful interaction between children with and without ID can occur.

Evaluation of the award still needs careful consideration. The current evaluation did not wholly meet the aims of the research. The interviews provided rich information on the feasibility of the award and interaction between children. In the future it may be useful to include structured observation of behaviour, one to one interviews with a select number of children and more accessible measures to assess the impact of the award on children with and without ID.

Additionally, when conducting a randomised control trial (RCT) it may be useful to look at other factors that may impact on interaction between children. For example, looking at the mix of children involved, age and level of disability. It would also be useful to conduct a follow up so that it could be established whether any changes in attitudes or increased interaction were maintained over time.

Conclusions

There were a number of challenges in the development and evaluation of the award but it was a rewarding experience to be a part of. In particular, it was pleasing to be able to attend the final sessions of the award, witness interaction first hand and see the children enjoying themselves as well as gaining valuable feedback from the schools. Facilitators had already

started to make plans for continuing the project in some way and it is hoped that as the award expands to further schools and a RCT is conducted, changes in attitudes and increased interaction will be able to occur in more schools.

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Appendices

Appendix A: Quantitative Measures

Name:

All In Award

Questionnaire

Information sheet

What are we doing today?

We would like to ask you some questions **about other children** before you start the *all in* award

How will your answers be used?

We will write down what you say and use it in a report for the schools that take part and for Mencap who run this award. We will not use your name in our report.

How long will it take?

Some young people take ten minutes to complete the questionnaire. Others take an hour.

Take as long as you like.

Taking part

You do not have to answer any questions if you do not want to. If any question makes you uncomfortable and you do not want to answer it, you can skip it.
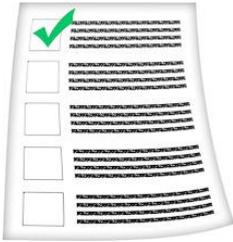
Consent form

Put a tick √ for **YES** and a cross **X** for **NO** in each box.

I have read the information sheet. ☐

I agree to take part in this interview. ☐

About you

1. How old are you?
   Please fill in your current age in years:
   …………………………

2. What is your gender?
   ☐ Female
   ☐ Male
   ☐ Another gender, please say:
   …………………………………….
   ☐ Prefer not to say

3. What activities do you **regularly** do in your spare time?
   Please tick √ all the activities that you usually do for fun!

   Go to a club, like a social club or a swimming club ☐

   Meet up with family or friends ☐

Exercise, play a sport like football or swimming

Watch TV, browse things on the Internet or play videogames

Reading, painting or drawing

Other activity?

Please say:……………………..

This is Adam. He is 9 years old and has a learning disability.

Adam loves to play football with his friends. He plays football at the weekend and enjoys being the goalkeeper.

Adam takes longer to learn new things in the classroom than many of his friends. Sometimes he gets very cross when he struggles with something.

This is Hannah. She is 11 years old and has Down's syndrome and a learning disability. Hannah loves to chat to friends and enjoys baking.

She likes making chocolate chip cookies at the weekend which she shares with her classmates at school.

Hannah takes longer to learn new things in the classroom than many of her friends.

It is sometimes difficult to understand Hannah when she talks.

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Peer Acceptance Scale (adapted)

1. Do you know anyone in your family or friends who has a learning disability like Hannah or Adam?

   ☐ yes☐ no☐ don't know

2. Would you feel like helping a child like Hannah or Adam if they were hurt at school?

   ☐yes☐ maybe ☐ no

3. Would you like to play with a child like Hannah or Adam?

   ☐yes☐ maybe ☐ no

4. Would you say ''hello'' to a child like Hannah or Adam if you met them in the park?

   ☐yes☐ maybe ☐ no

5. Would you want to work with a child like Hannah or Adam in class?

   ☐yes☐ maybe ☐ no

6. Would you feel like sharing a secret with a child like Hannah or Adam?

   ☐yes☐ maybe ☐ no

Children's Self-Efficacy scale (adapted)

1. Sitting near a child like Hannah or Adam in the classroom is _____ for you

   ☐very hard☐hard ☐ easy☐ very easy

2. Playing with a child like Hannah or Adam is _____ for you

   ☐very hard☐hard ☐ easy☐ very easy

3. Some kids are making fun of a child like Hannah or Adam in your class. Telling them to stop is _____ for you

   ☐very hard☐hard ☐ easy☐ very easy

4. Your class is going on a trip and everyone needs a partner. Asking a child like Hannah or Adam to be your partner is _____ for you

   ☐very hard☐hard ☐ easy☐ very easy

5. Some kids are having a party. Asking them to invite a child like Hannah or Adam is _____ for you

   ☐very hard☐hard ☐ easy☐ very easy

6. Your class is working on a project and everyone needs a partner. Asking a child like Hannah or Adam to be your partner is _____ for you

   ☐very hard☐hard ☐ easy☐ very easy

Anything else?

If there is anything that you would like to tell us, please write in the box below:

Thankyou!

Appendix B: Interview Schedules

__Interview Schedule for facilitators__

1. **What did you do for the award?**

2. **What did you think about the award overall?**

3. **Contents, Structure, and Delivery:**

- What parts of the programme worked well? Were there any highlights for you?

- What parts of the programme worked less well? How did you overcome difficulties? Is there anything you would change?

- Did children with and without learning disabilities interact with each other? Did they engage as equals?

- How did you find the <u>delivery</u> of the programme? e.g. pacing, variety of tasks/activities etc.

- What did you think of the wording of the questionnaires?

- How were the questionnaires administrated?

- Do you have any comments on the administration and reliability of the responses?

- Did you have any concerns about the questionnaires?

4. **Impact:**

- What do you think was the impact on the children, if any?- positive and negative

- Did you notice any changes within the group during or after the sessions?

5. **Future:**

- Do you think the sessions should be delivered to other classes/ kids within this school as well?

- Would you advise other schools to deliver the award?

- Is your school likely to run the award again in the future? If so, how soon?

Interview Schedule for children

1. **What did you do for the award?**

2. **What did you think about the award overall?**

3. **Acceptability of the award**

- Which parts of the programme did you enjoy most?

- Were there any parts you didn't enjoy? What would you change?

4. **Acceptability of the measures**

- Do you remember the questionnaires you completed before you started? (and at the end)

- What did you make of them?

- Anything positive/ anything you didn't like?

- Any surprises? Were the topics completely new?

5. **Impact:**

- Having done this award, is there anything you will do differently in the future?

- What about working as a team?

- What about working with peers who might be different to you?

6. **Future:**

- Do you think other children should have a chance to do this award as well?

- Would you recommend this award to other pupils in the school? Or friends elsewhere?

-

Appendix C: Qualitative Brainstorms

Setting up needs time

Recruitment

Role of parents

Selecting children

Managing large group

Lack of time

Challenges

Fitting into school life

Acceptability

Working with another school

External challenges

Future Plans

Involvement of RMS

Plans to continue

Positives of questionnaire

Different suggestions for capturing impact

How to capture impact

Accessibility and reliability

Feasibility Themes

Language

126

Breaking down barriers

Help when help was needed

New activity

Just another pupil?

Making mutual allowances

Downward comparisons/ coaching

New experience

Providing an outlet

Encouraging Interaction

Promoting Interaction

Relationships change over time

Better than facilitators expected

The younger they are, the less barriers

More high functioning, more interaction

Making friends and working together

Changing Minds

Increased understanding for children

Wider reach/ school community

Preliminary Outcome Themes

Appendix D: Sample Annotated Transcript

School 2- facilitator

Have you attended most or every session?

I've been here every week.

So how have you found it generally?

It's been really beneficial, especially to the children, because the boys that I teach are very able, erm, but I think it's safe to say that they come from a very, erm, narrow is not the right word but it's the only one I can think of, a very sort of narrow kind of cultural background. They're not accustomed really to dealing with erm students of this nature, erm and I tried, when I chose the boys, to specifically choose ones who I knew had erm a range of backgrounds. So [name of non special needs child] for example, has a physical disability which means that his erm motor skills are not that strong. I thought it'd be good for him to see the other side. [name of non special needs child] has erm Autism I believe, he's definitely, it's autism or Asperger's, I'm not sure which. So yeah we had this erm kind of opportunity for him to engage with you know students of a different type. A lot of them are EAL (English as an additional language), so therefore their communication, while fine, is possibly not sophisticated, erm and therefore I wanted them to have the opportunity to develop that skill, to take you know the communicative skills they have with their mates, for example, which is, you know, not always entirely clear but it doesn't have to be because they're with their friends, and take that and work on it because with these children, you have to be clear, you have to be direct because otherwise they are gonna get a bit lost. So I wanted to bring students that were diverse. I also made sure I had some strong characters in there, so [name of child] and [name of child] in particular are very mature Year 9 students, very organised, and I can say to them "You need to run this" and they will run it. So I really made sure that I brought a broad mix, but I think every single one of them got something out of the process, something different. Erm [name of non special needs child] and [name of non special needs child] - it was leadership. [Name of non special needs child] (In year 8) – It was communication because he's very erm erm indirect in some of the things he says. He kind of talks in circles sometimes. Erm, So yeah, I really wanted to bring a broad mix of students and I brought them from across years 7, 8 & 9 because I wanted as well to form that sort of that cohesion, a lot of the time year groups stick to themselves (yeah) so it's nice to see them working together as well as with the students here, as well.

That's really nice feedback. What parts of the programme do you think went well?

I think the opportunity to practice skills, so cooking and preparation of food – that was really good. Erm, Seeing my students, erm sort of managing things like knife skills, which obviously is is quite advanced I mean even for completely mainstream students of that age (mm), and monitoring the special education and needs students and their knife skills – that kind of thing was good. The bouldering, I was surprised by how good that was actually, because you really saw them step out of their comfort zone, and when I was there, I made sure that while I was monitoring them, the students from [special needs school] who were not very confident, I'd say "Right, you just try and [name of non- special needs child] is going to tell you where to put your hands and feet" so that they were kind of training them and coaching them to get them to do the bouldering, even though they weren't sure. And at times obviously they were actually kind of manoeuvring them, like "If you put your foot here" and you know put them in the right spot - that was really nice to see, I wasn't at all sold. If I'm honest, I didn't know that even my students would wanna do it at all know that when we got there, that even my students would want to do it, but they did and they coached the others through it. It was just really lovely to see that trust between the two cohorts – so that was a real

Handwritten margin annotations:
really beneficial.
not accustomed to dealing w/ children w/ID.
TD children from very narrow backgrounds
those from range of backgrounds
good to see other side.
opportunity to engage w/ students of different type
opportunity to develop communication skills
young students that were diverse.
TD run this
have to be clear + direct w/ LD children.
every single one got something different out of process
leadership
wanted cohesion across age groups
nice to see them working together w/ students here.
opportunity to practice skills
step out of comfort zone
TD 'training' coaching children w/LD.
didn't know if students would want to do it
coached.
lovely to see trust between cohorts

1

weather against us.

high point. The weather has been massively against us, we wanted to do so much more outside stuff, like little tournaments, like mini Olympics because we've had like you know fitness and kind of improvement has been the focus but we've have to kind of change the focus a little bit. We wanted to go to Hargreaves as well to do archery but we'd be taking them in the rain (yeah) which is just not ideal so we've had to do more indoor stuff – like basketball, I did a mini circuit out in the canteeny bit, so they did like 'how many times can you bounce a ball in a minute' and skip and hula-hoop. Erm, again, my students are not necessarily good at those things because they are from a grammar school background so they are academic, and some of them are sporty, but if you ask a 14-year old boy to use a hula-hoop, they are going to be out of their comfort zone. But they tried and they did it and they worked with the students here to kind of, you know, like coach them through, like even those small things – that really made a difference.

had to change focus a bit

out of comfort zone

coach.

Were there any parts that you think worked less well?

had to move programm-es as couldn't go outside

get children more involved in choice.

Erm, I have to say, I mean I did put a programme together and we've had to move it around a lot because we couldn't go outside, so that was a problem. I think maybe it would have been good for us, as leaders, to have a bit more of a back-up plan, erm and I would have really liked the opportunity to get the students more involved with the choice, I mean like they did choose things like playing basketball (okay) or going to the adventure playground. We did have a bit of a football thing outside on one of the sunny days erm but it would have been nice for them to completely run with it. Erm, It wasn't entirely feasible erm because of time, because of the weather, because of all sorts of different things, (mmhmm) and actually the time of being here as well. So there were days when, if the traffic was bad, we wouldn't get here until four, ten past four, and by that point, if we're doing say flapjacks, which we did one week, that's all you have time to do. So things like yeah the flexibility with the time, obviously I got the boys out as quickly as possible, today we were here really promptly actually, today was a really good day, but I think it would be good, if we were looking to do it again, to say we definitely need an hour, and in that hour we'd do this and then we'd do this. Erm, I've enjoyed the flexibility and I've worked with [name of special needs facilitator] on email to coordinate things every week, like 'we'll do fruit kebabs this week and we'll do rice krispy cakes this week" and she has been fantastic at managing the sort of procurement side of things, obviously that's more difficult for me because I come by bus, erm so I think it has worked really well, I just think if I were going to do it again, I would get my key leaders like [name of non-special needs child] and [name of non special needs child] and say "Right guys, throw me a programme together, and we'll tweak it and then you know run it" – that would have been my ideal scenario. Erm, but I think for a first run, erm as I think you saw in there, I can leave them, I can say "you guys need to do this" and I can leave them, I can go for 20 minutes if I need to talk to [name of facilitator at special needs school] or [name of facilitator at special needs school], I can come back and I know that they are going to be fine (yeah).

more of back up plan.

traffic bad.

time ran out

definitely need an hour.

worked really well.

enjoyed flexibility

would like to children more involved in running programme.

And they seemed to be getting on really well from what I could see.

formed strong bonds.

Oh yeah, they have really formed quite strong bonds. [name of non special needs child] said probably about three or four weeks ago "Are we doing this next year?" and said "Well I'd really like to, this lot are really wicked", and obviously that's child speak but he was keen you know, he doesn't want to not come here anymore, so I think that's a massive positive that he's so keen to give up his Tuesday evening erm to help people that he, you know, enjoys spending time with.

TD child wants to do it again

' help people.

That's lovely. Did you feel like the children with and without learning disabilities were interacting as equals?

Appendix E: Easy Read Version of study for people with intellectual disabilities

The All In Award: A study to improve children's thoughts about children with learning disabilities.

Easy Read Summary

The All In Award was developed by Mencap in collaboration with UCL to help children with and without learning disabilities interact more.

This report tells how we decided if it worked and if it helped.

What is the All In Award?

A group of children with and without learning disabilities do an activity together.

244 children completed the award in their schools.

We asked the children questions before and after the award to see what they thought about other children with learning disabilities.

We talked to children and teachers at the end to find out what they thought about the award.

What did we find?

Schools liked the award.

Children liked the award- only 6 stopped taking part.

Sometimes it was hard to fit the award into the school day. Some schools ran out of time.

Only some schools sent the questionnaires back.

The questions were hard to understand for some children and some questionnaires got lost in the post.

Schools want to do the award again.

The award helped children with and without learning disabilities interact more.

Some children made friends.

What happens next?

Mencap will run the award in more schools.

We will carry on research to see if the award helps.

If you want to know more...

You can email:
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Appendix F: Summary of study for schools and The Royal Mencap Society

The All In Award Study Summary: A feasibility study of an intervention to improve children's attitudes towards peers with learning disabilities.

Acknowledgements

Research Team

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1. Background

Research suggests children with learning disabilities are less accepted and have fewer friends than typically developing children (Pijil & Frostad, 2016). The latter tend to express more negative attitudes towards peers with learning disabilities than other disabilities (Georgiadi et al., 2012). As attitudes are still developing in childhood, early intervention is likely to be more successful (Lindsay & Edwards, 2013).

Contact with another group can improve attitudes (Corrigan et al., 2012). Allport's (1954) contact hypothesis says that prejudice can be reduced by **equal status** contact between majority and minority groups in **pursuit of common goals**. If this contact is **sanctioned by institutional support** and leads to **common interests** between members of two different groups, then prejudice is likely to be reduced further.

Carter, Biggs and Blustein (2016) suggest five core elements most likely to foster positive relationships between children with and without learning disabilities;

- sustained shared experiences,
- common connections such as hobbies or activities,
- valued roles so that children with learning disabilities are not 'taught' by those without,
- provision of relevant information allowing more understanding of children with learning disabilities,
- balanced support from facilitative staff which encourages but does not hinder new relationships.

2. The Evaluation

This study aimed to draw on evidence on the role of direct contact to develop the All In Award and discover whether the award was feasible, and resulted in more positive, accepting attitudes towards children with learning disabilities (preliminary outcomes).

Children and facilitators in 8 of the 12 participating school groups were interviewed by the researchers in the final session of the award. Additionally, children completed questionnaires (adapted by Quereshi, 2016) before and after the award:

- The Peer Acceptance Scale used to measure children's willingness to interact with peers with learning disabilities (adapted from Piercy, Wilton & Townsend, 2002).

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The award was a 10 week programme, involving children with and without learning disabilities working towards a shared aim. Activities were chosen by schools and ranged from first aid, to laughing yoga to healthy eating.

Each session was between 45 minutes to 1 ½ hours in length - each group had to have at least 10 hours of interactive activities over a school term.

The award was facilitated by school staff during school hours or as an afterschool club, dependent on the school's preference.

The suggested size of the group was 20 children (10 from mainstream and 10 from SEN schools/ with SEN needs), though groups ended up ranging from 12-31 children per group. 12 groups participated from May 2016 to March 2017.

244 children were recruited to the award over this period. The children were in school years 4 to 8, with children's ages ranging from 8-14.

- The Children's Self-Efficacy in Peer Interactions Scale (adapted from Marom, Cohen & Naon, 2007) to measure children's perceived ability in interacting with peers with learning disabilities.

3. Findings

3.1 Feasibility

In total 244 children participated in the All In Award, of whom 136 had learning disabilities and 108 did not. Only 6 children dropped out over the course of the study, and no schools did. Despite 238 children completing the award, only 56 fully completed pre and post questionnaires were returned. Feedback from children and facilitators is summarised below.

> '*I think long term it would be nice to work with another school, I know that's something we spoke about at the start but I think that just needs a lot of planning and preparation (...) the time we met to do the project, really didn't give us enough time to actually meet with another school and implement it properly.*'

> '*Obviously we sort of discussed the kind of children we have when we first started last year and they went away and thought about the kids that would work quite well with our children and (...) picked children that would benefit from being with our kids. And that's proven to have been successful I think (...), you get the vibe from them when you're watching them and when they're interacting that you know, they're settled, they're content with each other and they're happy to be with each other.*'

Recruitment. Facilitators needed more time to set up the award, especially when working with another school. Some children volunteered for the award, whereas others were selected by facilitators to create cohesion across age groups, encourage development of certain skills (e.g. social skills), or include strong personalities to help 'organise' the group. A few parents' negative attitudes towards children with learning disabilities were thought to adversely affect recruitment of typically developing children and some facilitators thought the word 'disability' may have prevented some parents from letting their children attend.

Challenges. A number of challenges were identified: managing a large group; balancing the needs of children with SEN who might have more complex needs; adverse weather changing plans; sessions being too short; and trying to fit the award into the school day. Opinions between facilitators differed on whether the award should be held in school time or after school. Completing the award was particularly difficult for older children towards the end of the school year due to

> '*Because they just seem to get into something and (...) it would finish for the day and they are quite difficult, because they're children to settle down... and sometimes they didn't have that much time in between, so I would say time constraints really was a challenge I think for us.*'

> '*I think it's absolutely brilliant because... it's made me focus my time on it, it's always been something I wanted for our group, but it's helped me focus the sessions... We're continuing it definitely (...) and it would be good to have you guys on board with that, us being on board with you should I say because then we're monitored in a way so it can't fall by the wayside.*'

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the intense demands of the curriculum. Many enjoyed working with another school, but some found it more difficult.

'I think that now it's winter, it's cold, and we're quite limited with the indoor activities, so erm hopefully next year when it gets warmer we can do a bit more interactive games. That will make a difference I think.'

Future Plans. Most children and facilitators enjoyed the sessions, although a few children did not enjoy certain activities (e.g. yoga or dance which they found boring or repetitive). Children learned new skills but wanted more team activities to interact with each other. Facilitators learned a lot from the group and really enjoyed it. Every school interviewed said that they planned to continue with the All In Award in the future and would recommend it to other schools. 4 out of the 5 groups in the first term continued the project for another term and 2 of the schools decided to run an extra group, (so they were running 2 separate groups at the same time). Facilitators felt that the involvement of RMS was important as it allowed adequate funding for the project and helped facilitators to keep focused on the project and keep it going.

How to capture impact. The questionnaires were considered to be clearly worded, to ask challenging questions and the example children were viewed positively. However, most facilitators felt they were not accessible for children with learning disabilities or the younger typically developing children (those aged 8-9). Some suggested modifications, whereas others felt that doing so would take away the meaning of what was being asked in the questionnaire. Some facilitators had to answer the questionnaires on behalf of children with learning disabilities, which made the responses invalid. Children often answered 'very easy' when asked about interactions with peers with learning disabilities because they felt it was the right thing to say. Children found the question 'Would you feel like sharing a secret with a child like Hannah or Adam?' confusing as they would only share secrets with friends. One of the schools did not

'I would've really liked to have filmed [name of child] and [name of child] and [name of child] working today (...) because it's just you know some beautiful moments where they were communicating with each other and you know trying to remember what had happened last week and taking it forward.'

hand out the questionnaire as they were concerned it would encourage children to focus on differences in their peers, rather than similarities. Some facilitators felt that the questionnaires did not capture the impact that they had noticed in the group and suggested other options, such as film or observation.

'I think the whole school would think this would be a really good club.'

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3.2 Preliminary Outcomes

Data from the questionnaires completed before and after the intervention were analysed:

There was a small improvement in peer acceptance of children with learning disabilities after the intervention, though it was not statistically significant. There was also a small improvement in children's self efficacy scores after the intervention. This means at the end of the All In Award sessions participating children typically felt a little more confident about interacting with peers with learning disabilities and more accepting of them. These results are supported by feedback in interviews. However, these results are based on only 56 completed questionnaires and therefore should be viewed with caution.

'I think we could use more like, socialising activity like, team building activity (...) where we actually talk to each other and not dancing so we get to know each other more.'

'I think the younger kids just do it naturally and it's just a case of getting them together because we find you know that our kids, a lot of our kids function pretty well in infant schools and nurseries because the gap's not so wide. But as they get older the gap widens (...) you have to do something to bridge the gap, so things like, like this.'

'They have really formed quite strong bonds. [name of child from mainstream school] said probably about three or four weeks ago "Are we doing this next year?" and said "Well, I'd really like to, this lot are really wicked", and obviously that's child speak but he was keen you know.'

Promoting Interaction. Some facilitators let interaction occur naturally, whereas others put children in groups or used games. This award was a new experience and these children had not interacted in a similar way in the past. Facilitators felt the award provided opportunity for typically developing children to have a break from being learning focused, and this further enabled interaction. Past projects were thought not to have been as successful as they had been more focused on volunteering. At the start of the intervention, children were not integrated, but over time they interacted more. One facilitator said the terms of the

Future Implementation of the All In Award. It would be beneficial to provide some training to facilitators running the award, and possibly introduce fidelity checks to ensure the core aspects of the award are adhered to each week to best encourage interaction. Furthermore, in the future links will be made with youth groups such as the Scouts, Youth Enterprise and the Duke of Edinburgh Award in order to continue the work and broaden the reach of the award in bringing children with and without learning disabilities together.

Recommendations for future evaluation. It would be beneficial to have a researcher attend the initial and final sessions at each school in order to help problem solve any initial concerns, and ensure that measures are completed properly, including an identifier to allow pre and post matching of data. Questionnaires need to be adjusted so that the attitudes of children of all abilities can be assessed validly and reliably. Future evaluation should also aim to assess the impact of the All In Award on the wider community and on parents' attitudes alongside children's.

relationship changed- originally typically developing children helped those with learning disabilities but after a while relationships became more equal. Facilitators felt younger children had less barriers in interacting with peers that were different. Children and facilitators felt that bonds had been formed within and across schools and some described making new friends as a result of the award, whilst others felt that relationships did not quite amount to friendships. One facilitator discussed how previously the two schools (SEN and mainstream) had had little contact, but that some students had made genuine friends and now visited them at lunchtime. Facilitators felt it was easier for more high functioning children with learning disabilities to interact than it was for children with more complex needs.

Interacting as equals? Facilitators felt it was important for the activity chosen to be new to all the children so that it was not something that typically developing children would excel at

"What has impressed me a lot about my students from is that they have helped when help has been needed but they've not condescended to the kids, they don't patronise them. Like today (...) it was no big deal but he didn't assume from the off that [child with learning disabilities] would need him- he kind of gave him the opportunity and then had an ear out and then sort of stepped in."

compared to those with learning disabilities, to allow relationships to be on equal terms. However, some typically developing children did talk about being 'better off' than children with learning disabilities when interviewed. Furthermore, facilitators made remarks about typically developing children 'coaching' or 'helping' those with learning disabilities in the activities which appeared to be encouraged. Despite this, children with learning disabilities were not talked down to or disrespected and typically developing children were seen to gave them space to try first, only intervening when necessary. Facilitators commented on how children with and without learning disabilities had their strengths and weaknesses and were observed to make mutual allowances for each other.

'What each group does is take account of what different people find hard and then start to make adjustments so that everybody can you know, be 'All in'.'

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Changing Minds. Facilitators changed their perceptions on how positive interactions between themselves and children with and without learning disabilities could be. Facilitators enjoyed the experience and one described finding it a great stress relief. Children gained an increased understanding of their peers with learning disabilities and as a result a greater willingness to interact with them. Facilitators commented on the importance of this intervention as it was targeting children who would be future members of the community and felt that it was a crucial time to target children. Some facilitators felt that the relationship between schools that jointly ran the award had improved as a result and had made future plans to work together on other projects.

4. Conclusions

Based on the results of this study, the All In Award appears feasible, with some adaptations to improve it, particularly with regard to measuring the impact through evaluation. Therefore it will be rolled out by RMS to further schools and funding will be sought for a randomised controlled trial (RCT) to assess the impact of the award on a larger scale.

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Appendix G: All In Award Documentation

all in

The **all in** award is a school activity club for people aged 8-13. The first rule of the **all in** award is: nobody is left out. No matter what physical or mental ability, everyone is welcomed, value d and included.

Group members work and play together, achieving common goals, taking part in exciting activities. Building a team to learn new skills for the future.

Over the next school term you will take part in sessions each week as part of a team. At the end you will have learnt new skills, met new people and you will receive an award!

Build your team, choose a theme for your award, learn new skills and showcase what you have learnt at the end by planning an event for your family and friends...

Ideas for activities

Select a hobby, such as forming a choir, learning arts and crafts, gardening, drumming, photography, film making or starting a drama group. Or you could choose to learn a new Fitness skill, examples include: swimming, dance classes, pilates, boccia, table tennis, orienteering or football coaching. Or gain new Lifeskills such as doing a first aid course, learn about safe and independent travel, take part in healthy cooking sessions or learn Makaton or sign language.

At the end of the all in award you get to plan an event to showcase your skills, it could be...

- cooking a healthy meal and inviting family and friends to enjoy,
- doing a drama performance for the school,
- showing off your first aid skills in an assembly
- hosting a multi sports activity day for other pupils.

Whatever you choose to do this is your chance to celebrate and share what you have learnt this term.

Week 1: What I did

Week 2: What I did

Week 5: What I did

Week 6: What I did

Week 3: What I did

Week 4: What I did

Week 7: What I did

Week 8: What I did

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9

Week 9: What I did

_____
_____
_____

10

Week 10: What I did

_____
_____
_____

11

Week 11: What I did

_____
_____
_____

12

Week 12: What I did

_____
_____
_____

Congratulations!

You've achieved your **all in** award.

What have you learnt while being part of the **all in** team?

_____
_____
_____

What did you do for you end of project showcasing event?

_____
_____
_____

Teachers comments:

_____
_____
_____

Signed: _____

Appendix H: Information sheet and consent form

Information and optional opt-out sheet for Parents

Title of Project: **Evaluation of the impact of the All In Award on participating children**

This study has been approved by the UCL Research Ethics Committee (Project ID Number): 8311/001

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Work   Clinical, Educational and Health Psychology, University College London, 1-19 Torrington
Address Place, WCIE 7HB

Contact   ████████████████████████████
Details

We would like to invite your child to participate in the evaluation that is part of the new All In Award. The evaluation is part of research run by University College of London, and as such we have to seek parents'/carers' formal consent.

Details of the Study:

We are hoping that all children who opt to join the All In Award will also take part in this evaluation into the club activities' impact on participating children, carried out by psychologists at University College London. The award will be an opportunity for your child to learn new skills, meet and make friends and develop their skills to work in team and receive an award on completion of the programme of activities.

One of the central aims of the All In award is to bring children with and without special needs together and get them working as a team to learn to fully appreciate each child's uniqueness and contribution to shared goals. In order to assess whether these aims are achieved over the course of the club's duration.

We would like each child to complete two questionnaires as well as talking about activities they enjoy. They will do this in the first and last session of the club alongside registering for the award. Your child will be asked to complete a brief questionnaire on their thoughts and feelings about interacting with children with special needs. We will ask all children this as we want to promote accepting attitudes among all participating children, whether or not they may be identified as having special needs themselves. Your child's answers will remain anonymous, and all of the questions will relate to fictitious children and no one the children know, to ensure that they feel free to express their views openly and honestly. In the final club session, they will receive their award certificate and we will also talk to them as a group about how they found the club. This session will be audio recorded, transcribed (written up) and the tape will then be wiped clear.

There will be no risk of harm to children, and they will have time to ask questions. Children's responses to the questionnaires are entirely anonymous and will not be traced back to them, nor shared with the school or the club leaders. The researcher is a psychologist with experience of working with children and young people and a current criminal records check. A teacher from your child's school will be present and will be facilitating the after school club.

We would be very happy to answer any queries you may have, to help you decide whether or not your child should take part in this evaluation. It is up to you to decide whether your child is to take part; choosing not to take part will not disadvantage your child or you in any way. If you do decide for your child to take part they can change their mind and withdraw at any time.

Please complete the tear-off slip and return to the school

……

"I do/do not (please delete as appropriate) consent to my child taking part in this evaluation."

Child's name…………………………………………………………………………………………..

Parent/Carer name…………………………………………………………………………………..

Signature………………………………………………………………………………………………

Date………………………………………………………………………………………………….

Appendix I: Ethics Approval Letter

UCL RESEARCH ETHICS COMMITTEE
ACADEMIC SERVICES

16 March 2016

Dr Katrina Scior
Research Department of Clinical, Educational and Health Psychology
UCL

Dear Dr Scior

<u>**Notification of Ethical Approval**</u>
<u>**Project ID: 8311/001: Evaluation of the impact of the Link Award on participating children**</u>

Further to your satisfactory responses to the committee's comments, I am pleased to confirm in my capacity as Chair of the UCL Research Ethics Committee (REC) that your study has been approved by the REC for the duration of the project i.e. until 30th October 2017.

Approval is subject to the following conditions:

1. You must seek Chair's approval for proposed amendments to the research for which this approval has been given. Ethical approval is specific to this project and must not be treated as applicable to research of a similar nature. Each research project is reviewed separately and if there are significant changes to the research protocol you should seek confirmation of continued ethical approval by completing the 'Amendment Approval Request Form': http://ethics.grad.ucl.ac.uk/responsibilities.php

2. It is your responsibility to report to the Committee any unanticipated problems or adverse events involving risks to participants or others. The Ethics Committee should be notified of all serious adverse events via the Ethics Committee Administrator (ethics@ucl.ac.uk) immediately the incident occurs. Where the adverse incident is unexpected and serious, the Chair or Vice-Chair will decide whether the study should be terminated pending the opinion of an independent expert. The adverse event will be considered at the next Committee meeting and a decision will be made on the need to change the information leaflet and/or study protocol.

    For non-serious adverse events the Chair or Vice-Chair of the Ethics Committee should again be notified via the Ethics Committee Administrator (ethics@ucl.ac.uk) within ten days of an adverse incident occurring and provide a full written report that should include any amendments to the participant information sheet and study protocol. The Chair or Vice-Chair will confirm that the incident is non-serious and report to the Committee at the next meeting. The final view of the Committee will be communicated to you.

On completion of the research you must submit a brief report of your findings/concluding comments to the Committee, which includes in particular issues relating to the ethical implications of the research.

Academic Services, 1-19 Torrington Place (9th Floor),
University College London
Tel: +44 (0)20 3108 8216
Email: ethics@ucl.ac.uk
http://ethics.grad.ucl.ac.uk/

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Yours sincerely
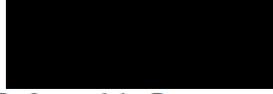
Professor John Foreman
Chair of the UCL Research Ethics Committee

Cc: Sophie Fitzgerald, Trainee Clinical Psychologist

Appendix J: Facilitator Pack

all in

Doing **BIG** things as a small team

Resource Pack

Contents

Introduction

The **all in** award is a school activity club for people aged 8-13. The first rule of the **all in** award is: nobody is left out, everyone is welcomed, valued and included.

Group members work and play together, achieving common goals, taking part in exciting activities. Building a team to learn new skills for the future.

Over a school term students take part in sessions each week as part of a team. At the end students will have learnt new skills, met new people and receive an award.

The **all in** award can be run as an after school activity session or in school time for instance as a PSHE lesson.

At the end of the school term students have the opportunity to showcase what they have learnt at the end by planning an event for other students, family and friends.

10 students with LD and 10 students without LD start a ten to twelve week club either in school time or as an after school club. The sessions start with teambuilding exercises and session planning for the school term choosing a **Hobbies, Fitness** or **Life Skills** topic or focus to complete the **all in** award on.

It should be a new topic for the participants that people can learn together and showcase in a 'challenge' at the end of the term to parents, carers, teachers or friends.

E.g the team choose to do a **Life Skills** award of healthy cooking. Participants could research and learn about health and nutrition, learning new recipes, where to source healthy food from, blogging about cafes and restaurants, learn to cook new recipes, learn about food from different cultures and learn health and safety while cooking. The final challenge could be participants inviting parents, carers and friends in to the school for a meal at the end to showcase what they have learnt and share food they have cooked. Or sharing their skills in a school assembly with their peers.

The project will deliver inclusive activities with children aged 8-13 whereby children with and without a learning disability will work together, and support each other, to achieve common goals and aspirations. The inclusive activities will be delivered as an award designed to support teamwork, communication and skills development.

FAQ's

Can more/ less than 20 children take part?

Ideally we would like 10 students with learning disabilities and 10 without learning disabilities to take part but if school groups are larger than this, and you have more students who would like to take part get in touch and we can send out more project resources for students to get involved.

Why this age group of children?

We want to work with this age group to develop opportunities for inclusive activities in schools to change attitudes towards people with learning disabilities. The hope is that this intervention will act as a taster and children will go on to take part in the Gateway Award and Duke of Edinburgh awards in the future.

Can students do the all in Award more than once?

Students can take part in the award as many times as they want. The main three themes of Hobbies, Fitness and Life Skill can be taken part in over three school terms.

How many sessions do students need to complete?

Students should complete 10-12 hours of activity as a minimum three times in the school year to achieve an all in award but if your school is set up to deliver more hours for the award that is fine.

How long do sessions need to be?

Each session should be at least an hour so that participants take part in 10-12 hours of activity over the school term to achieve their all in award. Sessions can be longer than one hour and showcasing events and celebration events can count towards the all in award.

Photography and recording session

Where possible take photographs of sessions so students can see what they have achieved over the term of activity. Students can keep photographs with their record of achievement booklets or create a display to encourage other students to get involved in the future.

Who should I contact with queries regarding the all in award?

Please contact ███ with any questions or support with running the all in award.

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Session Content

This section shows a brief outline of what each weeks session may cover for the all in award. The session content is by no means exhaustive and can be led by your group and facilitators of the award as to what you would like to cover. The session plan is based on 12 weeks of activity although depending on the school term you may adapt this to meet a 10 week period. Please note the three sessions marked with an * that are mandatory to all schools running the award in order for students to complete their all in award.

Week 1: Kick off evaluation session and getting to know one another *

This session will be the first time the team are together so it's important to focus on getting to know one another and bringing the group together to understand what the all in Award is and what they will be doing over the school term.

Record of Achievement and Certificates

Use this session to hand out record of achievement books to students taking part in the all in award and explain that the book can be used to record what people have done each week and that they will receive a sticker for each session they complete.

Explain that at the end of the award students will receive a certificate and a badge for completing the all in award

Evaluation Questionnaire

Students will need to complete the evaluation form that is required at the start and the end of the award. The questionnaire will be made available to you electronically and at the end of this pack.

This can be a group facilitated activity where a teacher can run through each section of the questionnaire and students are supported to complete the questions.

At the end of the session ask students to fill out what they did in the session and give each student who completes the session a sticker to record that they have completed session number 1

Week 2: Team building and session planning

Ice breakers and team building

There are some ideas for icebreaker and teambuilding activities in this pack or use your own ideas for activities your team is able to support, use this session to explore ideas for the Hobby, Fitness activity or Life skill your group may like to develop for their all in award.

At the end of the session ask students to fill out what they did in the session and give each student who completes the session a sticker to record that they have completed session number 2

Weeks 3-8: Getting skilled up

Weeks 3- 8 of the all in award are for students to take part in activities where they learn and develop their chosen skill, fitness activity or hobby. At the end of the session ask students to fill out what they did in the session in their record of achievement booklets. Give each student who completes the session a sticker to record that they have completed a session

Week 9 & 10: Showcase event planning session

At the end of the all in award students get to plan an event to showcase skills they have learnt as part of being in the All in team.

The final challenge for the team should be a showcasing event where the group have chance to plan and arrange to show the skills they have learnt through the course of the term to achieve their all in award. The group works together to complete the project that expands on the life skills and abilities of the participants and helps them to achieve something together. If possible it should be a new, stimulating experience for the team where students can stretch themselves to achieve something together. Whatever students choose to do, this is your chance to celebrate and share what you have learnt this term. Use this session to plan what the showcasing event may be here are some examples of what the event could be:

Examples:

Hosting a sports activity event at school to invite students to take part in taster sessions for different activities
Planning and running a bake sale to raise money for a local cause or charity
Planning for and doing an assembly in school to showcase their new first aid schools, sharing new skills with their peers
Creating a video to show parents and carers the activities students have been doing Blogging or creating a newsletter about the all in award and the experience people have had doing the award
Planning for, shopping for ingredients and preparing a healthy meal for parents and carers

Planning a travel route, budgeting for and travelling as a group on public transport to get to a destination
Organising and carrying out a litter picking event and tidying up a green space in the local community
Performing a music or drama performance for people in the community

At the end of the session ask students to fill out what they did in the session (number 10) and give each student who completes the session a sticker to record that they have completed the session.

Week 11: Showcasing Event*

Students take part in their showcase event sharing what they have learnt on the all in award as a team.

At the end of the session ask students to fill out what they did in the session and give each student who completes the session a sticker to record that they have completed session number 11

Week 12: Final Evaluation session and Celebration! *

Students should be supported to complete the final evaluation questionnaire so we can measure the impact the project has had. We will be able to share the findings with you once the research has been completed.

Celebrate completing the all in award! Students will each receive a certificate and badge for completing their all in award.

At the end of the session ask students to fill out what they did in the session and give each student who completes the session a sticker to record that they have completed session number 12

Icebreaker ideas

Once your new all in team is formed children will be meeting one another for the first time and so there should be a large focus in the first session on team building and getting to know one another. Here are some group games and activities you can use to motivate and engage your group.

Group juggle

Aims and benefits:

- It gets everyone focused on a fun task where they have to work together
- It develops team-work and communication
- It gets everyone out of their seats

What you need:

- A few small balls
- Space for everyone to stand in a circle

How it works:

1. The groups stands in a circle.

2. One person starts by throwing a ball to someone else in the circle (not someone next to them). That person then throws it on to someone else and the game keeps going like this until everyone has received the ball once. Get the thrower to call out the person's name when they throw the ball to them.

3. Make sure everyone remembers what order the ball was thrown in, because you then need to repeat it!

4. As soon as the ball comes back to the first person in the sequence, a second ball is thrown into the circle.

5. There are now two balls going round the circle – you are juggling!

6. You can challenge the group by adding more balls or by speeding up the pace.

Spaghetti and Marshmallow towers

Aims and benefits:

- It's good for teamwork

- It's a good way of starting a session in an interactive way

- It's fun!

What you need:

- Newspaper (to build the towers on)

- A pack of raw spaghetti

- Some packs of marshmallows

- A camera – to record the masterpieces!

- A prize for the tallest tower

How it works:

1. Divide the group into small teams (5 people) and give them a handful of spaghetti and some marshmallows.

2. The challenge is to build the tallest free-standing tower out of the spaghetti and marshmallows, working as a team.

3. Give people a limited amount of time to do the challenge, and come back together for a showdown.

4. Each team needs to see if their tower can stand for 5 seconds – get the rest of the group to count down to build up the excitement!

5. The overall winner is the group with the tallest freestanding tower.

6. Remember: this game can get messy so have some tissues and lots of newspaper handy.

Act Out

Aims and benefits:

- It helps the groups to act out different emotions and actions

- It's fun!

What you need:

- A large space

- A list of actions or emotions

- A hat, jar or tin

How it works:

1. Participants pull a piece of paper with an action or an emotion on it out of a hat/jar/tin and then act out the action or emotion.

2. The rest of the group tries to guess what the participant is acting out.

3. Below there are a few examples, but you could make up your own.

Emotions	Actions
Being excited	Parking a car
Being kind	Having a bath
Being lost	Riding a bike
Being Frustrated	Scoring a goal
Being disappointed	Brushing your teeth
Being embarrassed	Hanging out washing
Being angry	Surfing
Being silly	Jumping on a trampoline
Being tired	Putting on makeup
Being bored	Eating spaghetti
Being shy	Digging a hole
Being hungry	Washing dishes
Being in love	Reading a book
Being scared	Catching a ball
Being proud	Hammering in a nail
Being upset	Playing basketball
Being happy	Singing

Musical introductions

Aims and benefits:

- It helps group members to get to know each other

What you need:

- Stereo and CDs/music to play

- Space for people to move around

How it works:

1. Play some music.

2. Ask the group to move around the room and shake hands as they pass each other.

3. Stop the music. When the music stops, each person needs to pair up with the person they are currently shaking hands with.

4. While the music is off, each pair needs to ask each other a question. You could suggest some questions (for example, what is your favourite food or what sports do you like) or participants can come up with their own questions.

5. Repeat the process, this time asking a different question.

6. At the end, have some feedback about what people learnt about each other.

Bingo!

Aims and benefits:

- To complete a bingo card with different facts about individuals in the group.

- For group members to learn new things about each other

- It helps group members get to know each other

What you need:

- People bingo sheet

- Pens

How it works:

1. Create bingo sheets: prepare a grid on a sheet of paper.

2. Think of interesting life facts to fill each box of the bingo grid. For example, someone who can ride a bicycle, someone who ate breakfast this morning, someone who has a pet, or someone who is wearing a blue top. In each box place the fact and a picture next to it. Leave a space for people to write a name inside each box.

3. Hand out a bingo card and a pen to each person.

4. Explain that they need to move around the room and speak to different people. As the 20 participants speak to each other, explain that they must ask each other questions to find out if any of the statements on the bingo card apply to them. For example, "do you have a pet?" If someone answers yes, the interviewer can write the person's name in the relevant box.

5. If the group is large enough, encourage people to put a different name in each box, and not use the same person twice.

6. Once the bingo card is filled, the participant shouts "bingo!" to indicate that they have finished and have won the game.

Cross the river if...

Aims and benefits:

- For group members to learn new things about each other

- It gets everyone moving and involved in each go

- It helps group members get to know each other

What you need:

- A leader or group member to lead

- Depending on the group, ideas written on a piece of paper

- A prize (if you like)

How it works:

- The whole group stands on one side of the room and the leader or member stands in the middle of the room.

- The group leader calls out instructions that start with "Cross the river if....". For example, "cross the river if you have brown hair".

- Everyone who has brown hair has to cross the room to the other side without being caught by the leader.

- Anyone who is caught has to join the leader in the middle and help catch other people.

- Eventually there will be one or two winners left.

Ideas for when to cross the river:

Hair colour
Is feeling happy today
Eye colour
Brushed their teeth this morning
Supports Arsenal/Liverpool football etc
Has seen the new Star Wars film
Came to school on the Minibus
Likes chocolate
Is wearing something blue/red etc
Likes Michael Jackson's music

Activity Planning Session

Once students have an established team, hold an activity planning session where they can get to know one another and decide what skill they would like to develop over the school term as a group. Here are some ideas for activities to do in this session to help the team decide what hobby, Life skill or fitness activity they will develop for their all in award.

Choose an activity	Print the relevant ideas for activities information off onto sheets and create a voting system for students to decide together what they would like to do.
Personal shields	Create a shield template that is divided into four different sections put the following headings in each section of the shield: my hobbies, my fitness activities, my skills, (use symbols or pictures to explain the words); participants can then draw or write how they feel and what they like or don't like in each section of their shield. Using this activity may help you to establish where areas of interest or development are, and could start discussions between students about what sort of activities they may like to do together.
Three areas	Use images to create flashcards explaining the three sections. Hobbies, Fitness and Life Skills hang pictures representing each section in different parts of the room and ask the individual or group to move to the one that most appeals to them.
Lucky dip buckets	Place pictures or names of activities into a bucket, participants then take turns picking out an activity and discussing whether they would like to do it; create a bucket for each section of the award; hobbies, fitness and life skills
Dot voting	Write the activity names and images on cards, and give individuals sticky dots; lay out the cards on a table and then ask participants to put one dot on the three ideas they like best.
Activity photos	Ask participants to bring in any photos of activities they have done before; use other photos you may have and discuss what they enjoyed doing and what they might like to try in the future.

Use the record of achievement books for participants to track the number of hours they have spent on the section. Ask each participant to complete the section on a weekly basis writing down what they did in each section. Once this is complete participants receive a sticker for each session they complete.

Ideas for activities

As a team students choose a hobby, fitness or life skills topic to complete this school term. The group work as a team and try to pick a something that is new to everyone.

Students select a hobby, such as forming a choir, learning arts and crafts, gardening, drumming, photography, film making or starting a drama group.

Or you could choose to learn a new Fitness skill, examples include: swimming, dance classes, pilates, boccia, table tennis, orienteering or football coaching.

Or gain new life skills such as doing a first aid course, learn about safe and independent travel, take part in healthy cooking sessions or learn Makaton or sign language.

Here are some ideas for activities that your school may be able to support below.

Hobbies

	Drawing	Model making	Singing
Acting	Embroidery and needlecraft	Mosaic	Pottery
Computer and internet studies	Fashion design and dress making	Music	Painting
Cooking	Film-making	Nature studies	Photography
Dance	Gardening	Sculpture	Poetry
DJing	Jewellery making	Spoken word	Woodwork

Life skills

Healthy eating
First aid
Health & Wellbeing
Independence
Money Management
Confidence
Communication
Safety

Fitness

Aerobics	Curling	Fencing	Running and jogging
Archery	Cheerleading	Goalball	Rounders
Athletics	Croquet	Golf	Table tennis
Boccia	Cross country running	Gymnastics	Tennis
Bowling	Cycling	Hockey	Trampolining
Badminton	Dance	Netball	Walking
Basketball	Dodgeball	Orienteering	Yoga
Cricket	Football	Pilates	Zumba

All in Award Session Facilitator Evaluation

After completing all in award session please ask facilitators to take a few minutes to complete the questions below about how children are interacting with one another in the sessions.

School Name:	
Session Date:	
Who interacted with whom during the group today and in what roles? (e.g. who was interacting as leader, follower, peripheral, core?) Think about the different group members and how they are fitting into the group as a whole.	
Did any problems arise in the club today?	
Is there anything you would have liked to have been done differently today?	
Any other comments from today's club?	

Appendix K: Cosmin checklist

Quality Criteria for measurement properties adapted from Park, Reilly-Spong & Gross (2013)		
Property	**Rating (+= positive, ?= indeterminate, -= negative)**	**Quality Criteria (**MIC minimal important change, SDC smallest detectable change, LOA limits of agreement, ICC intraclass correlation coefficient, DIF differential item functioning, AUC area under the curve Good or adequate fit: comparative fit index (CFI) C0.90, root mean square error of approximation (RMSEA) B0.08, standardized root mean square residual (SRMR)\0.10 [83–85]; Inadequate fit: CFI B0.85, RMSEA C0.10, SRMR C0.10; Indeterminate fit: the values of fit indexes ranged in between the adequate criteria and inadequate criteria)
Internal Consistency	+	Cronbach's alpha(s) >0.70
	?	Cronbach's alpha not determined
	-	Cronbach's alpha(s)<0.70
Measurement Error	+	MIC>SDC OR MIC outside the LOA
	?	MIC not defined
	-	MIC < SDC OR MIC equals or inside LOA
Reliability	+	ICC/weighted Kappa <0.70 OR Pearson's < C0.80
	?	Neither ICC/weighted Kappa, nor Pearson's r determined
	-	ICC/weighted Kappa\0.70 OR Pearson's r\0.80
Content Validity	+	The target population considers all items in the questionnaire to be relevant AND considers the questionnaire to be complete
	?	No target population involvement OR no assessment of completeness or comprehensiveness
	-	The target population considers items in the questionnaire to be irrelevant OR considers the questionnaire to be incomplete
Structural Validity	+	Factors should explain at least 50 % of the variance OR good or adequate fit by goodness-of-fit criteria for a CFA or EFA
	?	Explained variance not mentioned OR equivocal fit by goodness-of-fit criteria for a CFA or EFA
	-	Factors explain<50 % of the variance OR poor fit by goodness-of-fit criteria for a CFA or EFA
Hypothesis Testing	+	Correlation with an instrument measuring the same construct >0.50 OR at least 75 % of the results are in accordance with the hypotheses AND correlation with related constructs is higher than with unrelated constructs OR no evidence of DIF
	?	Solely correlations determined with unrelated constructs OR >50 %

		But<75 % of the results are in accordance with the hypotheses OR possible DIF
	-	Correlation with an instrument measuring the same construct <0.50 OR<50 % of the results are in accordance with the hypothesesa OR correlation with related constructs is lower than with unrelated constructs OR notable evidence of DIF
Responsiveness	+	Correlation of changes with an instrument measuring change in the same construct C0.50 OR at least 75 % of the results are in accordance with the hypotheses OR AUC C0.70 AND correlation of changes with related constructs is higher than with unrelated constructs
	?	Solely correlations determined with unrelated constructs
	-	Correlation of changes with an instrument measuring change in the same construct<0.50 OR<75 % of the results are in accordance with the hypotheses OR AUC<0.70 OR correlation of changes with related constructs is lower than with unrelated constructs