

Social Inclusion and Feelings of Belonging:

Self-Esteem in the Deaf Community.

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BA in Psychology

Submission of Thesis and Dissertation

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Abstract

The current research implements a mixed methods approach in investigating the relationship social inclusion and feelings of belongingness have with the self-esteem of members of the D/deaf community. Participants were required to fill out the Rosenberg Self Esteem Scale, Social Assurance and Social Connectedness Scales, as well as a novel questionnaire schedule targeting Social Inclusion at two separate levels; Intrinsic – pertaining to interaction and belonging within the D/deaf community, and extrinsic, pertaining to interaction and integration with hearing peers. Two Pearson Correlation tests and a Hierarchical Multiple Regression Analysis were used to investigate how feelings of belonging impact self-esteem. An Inductive Thematic Analysis was utilized to identify themes amongst the answers of participants related to their opinions of their experience, or lack of, with social inclusion on both intrinsic and extrinsic levels. Three key themes have been identified by thematic analyses. In the discussion section real-world applications based on the universal use of Sign Language, social policy and inclusion laws and overall awareness campaigns are suggested as well as specific recommendations for further research including the use of specific methodologies which may further explain the unique relationship between social inclusion and self-esteem for the D/deaf community.

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Social Inclusion and Feelings of Belonging: Self-Esteem in the Deaf Community.

Introduction

Hearing is defined as the ability to perceive sound (Plack, 2016). If someone is unable to detect sound vibrations via the ear or nervous system, this is a hearing impairment ("Deafness -- Britannica Online Encyclopedia", 2011). As there are 250,000 adults in Ireland living with 'significant disabling hearing loss' ("DeafHear, 2018), people who are hearing impaired make up 8% of the country's population. Hearing impairments may range from mild to severe (Clark, 1981). Where a person has very little to no hearing, this is called deafness (Clark, 1981). Within the deaf community, the way in which people may discern their level of hearing loss is by utilizing a capital or lower case 'D', with 'deaf' replacing the terminology 'Hard of Hearing' or 'Hearing Impaired' (Berke, 2018). 'deaf' is indicative of minor to moderate hearing loss, with 'Deaf' indicating severe to profound hearing loss (Berke, 2018). This differentiation also speaks to the user's identification with the deaf community, as deaf people may be able to integrate with the hearing community easily and do so readily, while Deaf people may find this more challenging and more often interact with other Deaf people (Berke, 2018). That said, degree of deafness alone is not always the determining factor for which 'D' is utilized in self-identification (Berke, 2018), as other factors, such as predominance of interaction with other D/deaf or hearing people, can also influence this identity. While hearing impairments may vary in severity, any degree of impairment can negatively impact a variety of psychosocial factors; including development of spoken language, peer relationships throughout life, occupational interactions, and overall social integration with the predominantly hearing population (Cawthon, Wendel, Bond & Garberoglio, 2016; Lasak, Allen, McVay & Lewis, 2014; Webster, 2017). As such, it can be expected that these challenges may lead to variance in perceived social belongingness

(Allen, McVay & Lewis, 2014). As feelings of belonging are a known predictor of self-esteem (Lee, 1998), it is important to analyze how belongingness mediates self-esteem in the D/deaf community.

Belonging is a vital aspect of human experience as it impacts on a range of significant social factors (Abrams, Hogg & Marques, 2004) which notably includes self-esteem (Abrams, Hogg & Marques, 2004; Lee, 1998). Feelings of belonging within an established socially 'isolated' community, such as the D/deaf community (McAndrews, 1948), is a unique area of study as belongingness may be differentiated by access, interaction and participation with other members of the D/deaf community, or by access, interaction and participation with the hearing population (Woll & Ladd, 2003). In order to easily separate belongingness as it refers to in-group (amongst other deaf people) and outgroup (with hearing people) contexts, in-group belongingness will be referred to as Intrinsic, outgroup belongingness will be labelled as Extrinsic, with the aforementioned distinction influenced by the Multidimensional Model of Deaf Communities (Woll & Ladd, 2003).

Within both intrinsic and extrinsic contexts, hearing impairment and deafness can have a significant effect on an individual's ability to integrate with others (Charlson, Strong & Gold, 1992) In intrinsic cases, finding other deaf people who use a similar mode of communication (including but not limited to a sign language, lip reading, etc.) and who are within an accessible proximity may be challenging (Schein, 1989). In particular, sufficient social networks become harder to formulate (Schein, 1989). In extrinsic contexts, communication is an even more significant issue as the likelihood of the hearing population being able to fully support communication needs of a deaf person in all social contexts is unlikely (Schein, 1989), and most oftentimes is expensive- with personal translators being one of limited options (Jones & Gill,

1998). Furthermore, the lack of knowledge and (mis)understanding of deaf culture from the hearing population can drive a further wedge between hearing and non-hearing persons (Terry, Nguyen, & Malatzky, 2017; Freeman, 2018). Such issues serve as obstacles to feelings of belongingness for members of the D/deaf community. Therefore, it is important not only to evaluate the benefits of inclusion strategies, (Leyser & Kirk, 2004) but to compare across those targeted at integrating deaf people with each other and with the general hearing population in order to maximise the success of social inclusion efforts, which will in turn impact feelings of belongingness (Hayes, Gray & Edwards, 2008).

Feelings of Belonging

Considering intrinsic belongingness, many obvious socio-emotional benefits have been observed (Brewer & Yuki, 2007; Bernstein, Sacco, Young, Hugenberg, & Cook, 2010). The development of sign languages (Mellon et al., 2015) and furthermore, formation of specific deaf communities (Senghas & Monaghan, 2002) as well as Deaf culture (Ladd, 2003) has been a phenomenal advancement in the feelings of belonging amongst Deaf people (Senghas & Monaghan, 2002). These progressions have significantly enhanced perception of quality of life (Schick et al., 2012) and self-esteem (Chapman & Dammayer, 2016). However, the existence of these Deaf communities has caused debate (Erting & Kuntse, 2017) due to their isolated nature, existence separate from the general population is seen to be somewhat 'self-isolating'. The authors note that this may further damage the potential for overall integration and belonging. Specifically, it limits the potential for developing literacy skills (Zeshan et al., 2016) as per the nature of sign languages which don't have written counterparts, which may then lead to educational and vocational delays and roadblocks (Zeshan et al., 2016).

That said, numerous observations have displayed the importance of being able to identify with others based on shared experience- as per Tajfel's Social Identity Theory (SIT), which outlines that a person's sense of self is drawn from others who they see as being similar to them (Tajfel & Turner, 2015). This speaks to the importance of sign languages and Deaf culture, and what they represent, for those in the community who are unable to communicate via spoken language and lip-reading. Furthermore, SIT provides an explanation for the isolating nature of deaf communities based on the premise of the in-group, out-group phenomenon that divides groups perceived to be 'like' vs 'not like' (Bat-Chava, 2000).

Social Inclusion

Many studies have aimed to identify key aspects affecting feelings of belonging, positive or negative, from the hearing population in the deaf community. It is important to note that exposure to the majoritively hearing population cannot be avoided, and so investigating not only exposure but genuine belonging with or amongst hearing people is of great importance. Demographic information (Zandberg, 2005) indicates that the vast majority of deaf students attend regular schooling, as opposed to specialized classrooms or schools. Studies indicate that within these contexts, deaf children still prefer to interact with the minority of other deaf students (Kluwin, 2002), and that comparatively, deaf children rated better in social maturity than their hearing peers (Kluwin, 2002). Social coherence, when interacting with non-Deaf peers, is a significant factor which contributes to feelings of belonging, as scores for social coherence and belonging are positively correlated (Most, 2007). Studies of group identification within deaf specific samples have shown that group-identification contributes to feelings of belonging (Jambor & Elliot, 2005).

What can be said, however, is that inclusion with the general population is definitely of some overarching benefit as studies show that these feelings of belonging and relationships developed with non-Deaf peers have an immense impact on the self-esteem of Deaf individuals (Bat-Chava, 1993; Jombar & Elliot, 2005). While it seems most beneficial to implement interventions of inclusion/exposure both early and in educational settings to maximize developmental benefit (Hyde & Power, 2004), sources have argued against this form of integration (Winston, 1994; Marsh, Lang & Albertini, 2001) as having deaf children within hearing classrooms still leaves them open to exclusion in particular contexts and activities (Winston, 1994). This begs the question - what other avenues of integration may be significant enough to improve feelings of social inclusion for the Deaf community when it comes to extrinsic bodies such as the hearing community? Few studies report on Deaf-Extrinsic social inclusion outside of educational contexts, and so this question has not yet been answered.

Self Esteem

The American Psychological Association (APA) have defined self-esteem as having a positive perception of one's own characteristics and qualities ("APA Dictionary of Psychology", 2019). These qualities may be physical, pertaining to accomplishments and capabilities, or in relation to how others interact with and view them. This means that a high self-esteem is the result of accumulative positive perceptions, and low self-esteem is the result of negative self-perceptions. The absence of the physical ability to hear may lead to an impaired positive self-perception, (Tambs, 2004), or the degree to which this absence of hearing affects interactions with others (Tambs, 2004) and/or ability to partake in daily life (Bat-Chava, 1993) may all lead to individual or cumulative negative impact(s) on the self-esteem of those in the Deaf community. Social inclusion and the impact it has on feelings of belonging are of unique interest

to the self-esteem of D/deaf people, as deafness in and of itself creates a very particular set of obstacles for accessing typical social inclusion and, therefore, typical development of feelings of belonging.

Little research has been done which explains the exact interactions between social inclusion, feelings of belonging and self-esteem in deaf specific cohorts, however. A proposed and logical explanation is that the barrier to social inclusion that deafness creates is what then leads to low self-esteem as a result of negative feelings of belonging, when compared to hearing populations. This is because existing research (Jambor & Elliot, 2005; Chapman & Dammeyer, 2016) has identified social inclusion being a key contributor to self-esteem. As per Self-Determination Theory (Ryan & Deci, 2000), effective and meaningful inclusion and integration also acts as a buffering affect to protect against low self-esteem. In Deaf specific cohorts, Deafness and the obstructions to inclusion that it creates, are identified as the primary cause of a lack of feelings of belonging (Hadjikakou, Petridou & Stylianou, 2008)., and therefore it may be said that Social Inclusion is a primary factor in influencing self-esteem in the Deaf community (Leary, Tambor, Terdal, & Downs, 1995).

While no literature exists that attempts to create a model for the impacting factors on self-esteem in deaf specific cohorts (to the authors knowledge), there are studies of social inclusion in the deaf community that have also taken and considered measures for self-esteem. In Jambor and Elliot's study (2005), it was discovered that the self-esteem of participants was affected far more negatively in cases of negative experiences of Intrinsic inclusion rather than Extrinsic. This fits with the in-group, out-group framework of Social Identity Theory (Hornsey, 2008; Tajfel & Turner, 2015), as wanting to identify and be included with those identified as in-group (in this case, fellow Deaf people) is far more important to the integrity of self-esteem (Luhtanen &

Crocker, 1992) than trying to integrate with out-group members (hearing population). Punch, Creed and Hyde (2006) supported this on a longitudinal scale when their study provided evidence to suggest intrinsic isolation in childhood lead to low self-esteem in adulthood. That said, conflicting studies have suggested that low ratings for peer acceptance and perceived inclusion had no correlation with scores for self-esteem (van Gent, Knoors, Westenberg, & Treffers, 2012).

The Current Study

As group-identification in terms of intrinsic/extrinsic inclusion is a relatively new topic of research for the deaf community, no studies currently exist which compare intrinsic vs extrinsic effects on self-esteem. Scores for subjective measures of feelings of belonging, as well as personal accounts of what is or isn't helpful in terms of social inclusion efforts, will aid research in creating or improving therapies, interventions and integration strategies in order to maximize their benefit for the Deaf community. The reason that this is of interest to current research is due to Self Determination Theory (Ryan & Deci, 2000) which suggests that an improved integration experience for an individual will result in improved self-esteem.

Self-Determination Theory is the idea that all people have an inherent motivation to learn from their surroundings, and that self-esteem is gained or improved when those surroundings reciprocate a basic set of psychological needs (Ryan & Deci, 2000). These psychological needs include relatedness (in-group, out-group identification), competency and autonomy. Relatedness accounts for an individual's ability to create meaning and relationships by internalizing their experiences, while competency and autonomy refer to the individual's sense of self and how personally beneficial, they assess their interactions and learning to be via constructing a set of morals, engaging in cultural practices, etc (Ryan and Deci, 2004). When these needs are

sufficiently met, it is proposed that the well-being of an individual is improved or enhanced (La Guardia, Couchman & Deci, 2000).

The current study aims to confirm the applicability of self-determination theory to the deaf population in relation to Social inclusion and feelings of belonging, and to discover the extent to which overall measures of feelings of belonging explain variation for self-esteem in the Deaf community. Furthermore, the study will identify via self-report measures which kinds of social inclusion are most beneficial (intrinsic or extrinsic) to the deaf community.

Research Question: How do subjectively measured scores for Feelings of Belonging, as well as Accounts of the benefits of Social Inclusion efforts, relate to scores for Overall Self-Esteem in the Deaf community?

Research Aims:

1) To examine how feelings of belonging relate to overall scores for self-esteem when controlling for demographic variables.

2) To examine the how beneficial experiences with integration and integration programs are based on the feedback of the D/deaf community, and to compare across both intrinsic and extrinsic Social Inclusion.

3) To identify what improvements could be made to Social Inclusion efforts based on the accounts of members of the D/deaf Community.

Hypothesis:

Overall scores for feelings of belonging will positively correlate with scores for self-esteem to a significant degree when demographic variables have been controlled for.

Methods

Participants

Participants in the current study were recruited via opportunistic sampling. A survey was distributed online via public social media pages and forums targeted towards the D/deaf community, inviting people to participate in the study. Participants were recruited continuously until a deadline for analysis has been met. Though an ideal sample size of at least 67 participants was deemed to be representative for purpose of statistical analyses, a total number of 29 participants were recruited.

Participants were all over 18 years of age ($M= 35.90$ $SD= 13.7$, Range 19-64) with a gender ratio of (M=8, F=21). All participants were fluent in written English, had sufficient computer literacy to take part in the study independent of assistance, had no existing DSM diagnoses and were part of the d/Deaf community. For purposes of communication and recruitment, being deaf was specified to be anybody who met any one or more of the following criteria: A) The participant used a hearing aid or a pair of hearing aids, B) The participant had a cochlear implant or a pair of cochlear implants, C) The participant used a sign language as a means of personal communication, D) the participant had benefitted from educational/vocational/social programs and/or interventions catering to the D/deaf community or E) The participant had an official diagnosis of a hearing impairment, from any minor degree to complete Deafness.

No incentive or reward was offered to participants for their participation in the current study. As it was a requirement for all questions to be answered before submission, there is no missing data and so all responses have been used in the analyses of results of this study.

Materials

Quantitative analysis.

Demographic Variables: Participants were asked to provide information on the following demographic variables: age (McMullin & Cairney, 2004), gender (Josephs, Markus & Tafarodi, 1992; McMullin & Cairney, 2004), marital status (Dush & Amato, 2005) and level of education (Orth, Trzesniewski & Robins, 2010) which have all been shown to have a relationship with self-esteem, and so these demographic variables will be controlled for in order to more accurately assess the relationship between belongingness and self-esteem in the current sample.

Rosenburg Self Esteem Scale (RSES) (Appendix A): The RSES is one of the most widely used measures of self-esteem in the psychological community. The scale consists of 10 items rated on a 4-point Likert scale (1= Strongly Agree, 2= Agree, 3= Disagree, 4= Strongly Disagree). Of the 10 items, 5 items are reverse scored (3, 5, 8, 9 and 10). Scores for self-esteem utilizing this scale range from 0-30, with scores between 15 and 25 representing a normal, healthy self-esteem, and scores below 15 indicating low self-esteem. The scale has a Guttman Scale coefficient of reproducibility of .92 (Rosenburg, 1965), demonstrating exceptional internal reliability, with the test-retest correlations of .85 and .88 (Rosenburg, 1965), indicating more than sufficient stability. The RSES has received Cronbach's Alpha scores of .77 (Patchin and Hinduja, 2010) and .86 (Monticone et al., 2014). The Cronbach's Alpha score calculated for the current sample is .89.

Social Connectedness and Social Assurance Scales (Appendix B): These Scales were developed in conjunction with each other to represent two fundamental components of Perceived Belongingness, where Social Assurance is Factor 1, and Social Connectedness Factor 2. Each

scale consists of 8 items, with responses mapped on a 6-point Likert scale ranging from 1 (Agree) to 6 (Disagree) for a total 16 item measure of Belongingness. Test-retest reliability was stable over a two-week period ($r_s = .96$ [Social Connectedness] and $.84$ [Social Assurance]). Each scale The Social Connectedness Scale has received a Cronbach's Alpha score of $.91$ while the Social Assurance Scale score was $.82$ (Lee and Robbins, 1995); with current calculations indicating scores of $.92$ and $.82$, respectively.

Qualitative analysis.

In order to investigate views and opinions concerning intrinsic vs extrinsic belongingness, a unique schedule of questions was created for the current study based on standardized interview schedules. All participants were asked the same questions in the same order. This schedule consisted of 4 questions which aimed to discern preference for either intrinsic or extrinsic inclusion efforts; where participants were given an unlimited opportunity to respond. The fifth question required a direct A or B response where A and B represented intrinsic and extrinsic preferences, respectively. This question was not phrased in a way in which A or B were viewed more positively than the other so as not to sway the participants answer. The sixth and final question offered participants an opportunity to express any final thoughts or feelings related to belongingness in/for the D/deaf community, where their opinions may not have been encompassed under the previous 'talking points' of questions 1 through 5 (see Appendix C).

These scales and additional question items were presented as an amalgamative questionnaire via a Google Doc Survey which was distributed online. Participants utilized their own devices in order to access and take part in this study via internet connection.

Design

The current study implemented a cross-sectional, concurrent-nested mixed methods approach, whereby findings of the quantitative section were used to support findings found in the qualitative section. This design was also utilized to target specific hypotheses and aims of the study. The quantitative section of the study was comprised of the Rosenberg Self Esteem Scale and the Social Connectedness and Social Assurance Scales and was subject to statistical analysis. Of the six predictor variables, age, gender, marital status and level of education were demographic variables while social connectedness and social assurance were used to measure and represent feelings of belonging. Self-esteem was the criterion variable. The qualitative section was comprised of a novel questionnaire schedule. Utilizing both quantitative and qualitative aspects aided in addressing specific research aims and hypothesis, while comparing and integrating findings helped to strengthen conclusions made based on results.

Theoretical assumptions of the researcher on the subject matter of the current research are as follows:

- D/deafness exists on a variety of levels, each of which have different social impacts; i.e. someone with mild hearing impairment is not viewed in social contexts the same way someone who is profoundly deaf might be. This creates an inherent difference in social dynamics and ability to integrate.
- Hard definitions that separate sub-communities within the overall D/deaf community are neither widely established nor agreed upon universally. For purpose of analysis only one of many possible categorization systems was chosen for this study.

- Factors other than demographic variables and feelings of belongingness have an impact on self-esteem, but social belongingness in D/deaf contexts is unique in nature, as D/deafness is a unique impact variable that is not applicable to the general population.

The Epistemological approach taken by the current researcher is Constructivism, and, as such, the assumptions made hereafter are derived from the perspective that objective reality cannot be accessed via subjective recollections/accounts, though the impact that those recollections and accounts have on the experience of an individual are just as important as the objective reality. Moreover, where objective experience can be altered, the resulting subjective experience is altered also.

Epistemological assumptions identified by the researcher are outlined below:

- D/deaf people are predisposed to feeling isolated, as being deaf limits communication and interaction (fundamental elements of successful belongingness) with the majoritively non-deaf community.
- Feelings of Belonginess are not entirely reliant on the person feeling them, they are influenced by *genuine experiences* of belonginess. As such, an individual is not entirely responsible for the level to which they feel like they belong.
- Feeling included alongside like-minded people/people of similar lifetime experience is more beneficial to self-esteem than feeling included alongside non-likeminded or people of different lifetime experience.

Procedure

The questionnaire (containing Appendix A, B and C, in that order) utilized in this study was distributed online, inviting participants to partake in this study. When participants clicked on the link to the questionnaire, briefing materials (see Appendix D) were automatically displayed. These briefing materials outlined the nature of the study, what it aimed to do, and the inclusion and exclusion criteria for potential participants. Participants are also informed that all data is automatically anonymized, and it was explained in detail that this meant they could not withdraw their consent/responses once those responses had been submitted. Additionally, participants were invited to ask questions or clarify confusion about their potential participation, or the study itself, before and throughout their participation with contact details of both the researcher and research supervisor provided. At the end of these briefing materials, participants are prompted to indicate whether they understand the information presented to them and consent to participation by checking the designated box. It was a requirement of participation that all questions were answered in order to progress. The questionnaire took about 20-30 minutes to complete in total. Once all answers had been inputted, participants were directed to debriefing materials (see Appendix E). In these materials, aims of the study were reiterated, participants were thanked for their time and participation, and asked once more to confirm their consent in the knowledge that once answers were submitted, they could no longer withdraw responses. At this stage participants were reminded that although they could not withdraw their answers once submitted, they could never be identified as the data was automatically anonymized.

In order to perform the inductive thematic analysis, firstly, the current researcher familiarized themselves with all responses (29) to the questionnaire items by reading over the material multiple times. Once a comprehensive understanding and familiarization of the recorded

data had been achieved, initial concepts of potential themes, quotes, etc. were noted. Following this, preliminary codes were identified. These codes identified prominent ideas within the text that were either particularly significant or recurrent throughout responses, such as frequent mention of hearing aids, interpreters, etc. These preliminary codes provided context for the response content and aided in forming concrete themes.

During the interpretive analysis, sorting coded data involved funneling specific quotes, instances, etc. into overarching themes, i.e. integration aids identified by codes may now be grouped into categories such as ‘personal aids’, ‘integration programs’ etc. This process involved referring to the recorded responses consistently and ensuring coded data was properly assigned into respective themes. Re-reviewing data caused further funneling and combination of themes and enhanced the distinction across different themes. At this stage, irrelevant codes were either discarded (not included as instances within themes) or were re-assigned into refined themes. Once these themes had been identified, concrete labels with clear, concise definitions were produced, as well as associated quotes taken from responses which illustrate the presence and relevance of that theme as can be seen throughout the data.

As this is an inductive report, inferences and interpretations were made by the researcher following the initial thematic analysis. Ethical approval for this study was granted by the Ethics Committee of National College of Ireland in November 2018.

Pilot Study

Due to the reliability and consistency of the scales used, a pilot study was not deemed necessary to test the scales utilized in this study. As the interview questionnaire schedule was a novel section created specifically for this study, it was determined that a pilot study should be

conducted on this section alone. As the proposed sample size of the entire study was between 67 and 80, it was decided that a sample of 10 participants would be required for the pilot study based on the parameters suggested by (Treece & Treece, 1977), who suggest that at least 10% of the projected sample size should be recruited for a pilot study; and (Isaac & Michael, 1997), who propose a minimum of 10 participants for a pilot study. The pilot study contained only the novel questionnaire items and aimed to identify any potential issues with the interview questionnaire. As no clarification for the meaning of questions posed was sought, and considering no participants encountered difficulty in answering questions based on their comprehension of the questions themselves it has been decided that the questions are appropriate for inclusion and use in the full study without any edit/revision.

Results

Descriptive Statistics

Descriptive statistics for frequencies and valid percentages of all categorical demographic variables recorded within the current sample can be found in Table 1, while descriptive statistics for all continuous variables are found in Table 2. The sample (N=29, M=8), mean age 35.9 (SD = 13.67, Range = 19-64) was an insufficient sample size and so it must be considered that the current data is of low statistical power and may be subject to inflated effect size of findings (type 1 errors), as well potential issues with reproducibility. Opposingly, there may also be a failure to detect significant relationships between variables that do exist in the general population (Type 2 error) Therefore, statistical results and conclusions made based on said results may not be applicable to the general D/deaf population.

Variable	Frequency	Valid Percentage
Gender		
Male	8	27.6%
Female	21	72.4%
Level of Education		
No Schooling Complete	0	0%
Completed Primary School	1	3.4%
Completed Secondary School	4	13.8%
Some College, No Degree	13	44.8%
Bachelor's Degree	7	24.1%
Postgraduate Degree	4	13.8%

Marital Status

Single	8	27.6%
In a Relationship, Unmarried	10	34.5%
Married	8	27.6%
Separated/Divorced	2	6.9%
Widowed	1	3.4%

Table 1: Descriptive statistics of all categorical variables (N = 29).

	Mean (95% Confidence Intervals)	Std. Error Mean	Median	SD	Range
Age	35.90 (30.70 - 41.09)	2.5	11.00	13.67	19-64
Social Connectedness	29.10 (25.22 - 32.99)	1.9	32.00	10.21	10-47
Social Assurance	25.38 (22.19 - 28.57)	1.6	24.00	8.39	10-46
Self-Esteem	12.17 (10.05 - 14.30)	1.0	12.00	5.59	0-23

Table 2: Descriptive statistics for all continuous variables.

Inferential Statistics

A hierarchical multiple regression analysis was performed to determine how well scores for self-esteem could be explained by a model comprised of three variables; demographic predictors of self-esteem (Block 1), social connectedness and social assurance (Block 2).

Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, and homoscedasticity. The correlations between the predictor variables and the criterion variable included in the study were examined (see Table 3 for full details).

In the first step of the hierarchical multiple regression, four predictors were entered; these were age, gender, marital status and level of education. This model was not statistically significant $F(4, 24) = .391; p < .001$ and explained only 6.1% of variance in self-esteem. After the entry of predictors measuring belongingness (social connectedness and social assurance) at Step 2 the total variance explained by the model was 9.6% ($F(6, 22) = .39; p < .001$). The introduction of social connectedness and social assurance explained an additional 3.5% of variance in self-esteem after controlling for demographic predictors (age, gender, marital status and level of education) (see Table 3 for full details). This change remained non-statistically significant ($R^2 \text{ Change} = .034; F(2, 22) = .417; p = .005$).

In the final model, none of the predictor variables uniquely predicted self-esteem to a statistically significant degree (see Table 3 for full results).

Table 3: Multiple regression model predicting self-esteem scores.

	R	R ²	R ² Change	B	SE	β	<i>t</i>	<i>p</i>
Step 1	.247	.061						
Age				-.02	.11	-.04	-.15	.88
Gender				-2.2	2.70	-.18	-.83	.42
Marital Status				.52	1.49	0.9	.35	.73
Level of Education				-1.44	1.34	-.22	-1.07	.06
Step 2			.034					
Age				-.01	.12	-.02	-.06	.94
Gender				-1.32	2.95	-.12	-.45	.66
Marital Status				.71	1.69	.03	.10	.92
Level of Education				-1.54	1.45	-.24	-1.06	.30
Social Connectedness				.12	.13	.21	.91	.37
Social Assurance				-.06	.17	-.09	-.35	.73

Note. R² = R-squared; β = standardized beta value; B = unstandardized beta value; SE = Standard errors of B; Statistical significance: **p* < .05; ***p* < .01; ****p* < .001

Thematic Analysis Results

In order to address a specific research aim, the qualitative section of this study utilised answers to the standardized questionnaire (Appendix C) formulated specifically for this study to perform an inductive thematic analysis. This was chosen to identify trends and/or themes in the opinions and answers expressed by participants.

In the current study three predominant themes were observed in the transcripts collected from 29 participants. Post-coding these themes have been identified as follows: 1) Wanting Universal Use of Basic Sign Language/Finger Spelling, 2) Improvement to Vocational and Academic Inclusion for the Deaf 3) Negative Perceptions Towards the Potential for Extrinsic Inclusion. Though Participants remain anonymous, they are labelled by number in order of response for purposes of quotation.

Wanting universal use of basic sign language and/or finger spelling.

Consistently mentioned throughout the transcripts, a majority of the respondents of the current study feel that a basic knowledge of sign language and/or the use of finger spelling (whereby the signs which represent letters of the roman alphabet are used to spell words via sign instead of utilising the specific signs for said words) would be highly beneficial in facilitating communication with the D/deaf community who utilize sign languages as a means of communication. Several participants also pointed out that sign languages are not only beneficial to D/deaf people, but people with disabilities and extra communication needs too. Participants expressed that this enablement of communication would greatly enhance social inclusion and integration in both intrinsic and extrinsic contexts.

Participant 5: “It would make for a more accessible society for deaf and all other people that use sign language”

Participant 14: “More people to connect with regardless of D/deaf status”

Participant 17: “Basic sign language is something everyone should learn...Fingerspelling should be common knowledge”

Improvement to vocational and academic Inclusion of D/deaf people.

Several Participants identified and called for an improvement to the academic accommodations and/or vocational rights of the D/deaf community. Participants cited issues such as sourcing interpreters for lectures or meetings, feeling like people didn't want to take the time or effort to include them in academic/vocational events and on-goings, improper considerations for their needs, etc. A number of participants also cited their preference for standard schools facilitating deaf students, rather than deaf specific schooling. Participants felt that stricter policies and legal enforcements of inclusion laws in these contexts would be of great benefit and improve the inclusion efforts made by academic staff and employers on behalf of their D/deaf students and staff. This, in turn, would improve overall Social Inclusion and feelings of Belonging amongst the D/deaf community in Extrinsic contexts.

Participant 22: "Over 80% of deafies are unemployed. It's a huge part of someone's mental health or have a job or career".

Participant 3: "D/deafness needs to be normalized, deaf and hearing growing and learning together means everyone becomes more comfortable with each other and living in society together".

Negative perceptions towards the potential for extrinsic inclusion.

Though the majority of responses viewed integration with the general population as favorable, they also expressed seeing this sort of inclusion as difficult to achieve for a variety of reasons. The overall impression of these comments is a hopelessness associated with the participants perceptions of how willing the hearing community are in implementing accommodations for the D/deaf community when it serves no personal benefit to them.

Participant 11: "I'm not sure if it ever could be done." *

Participant 22: “That is a big *if* and will never happen” *

*Both responses in relation to questions pertaining to extrinsic integration, specifically.

As per the concurrent nested approach, findings from the quantitative section were considered in relation to the qualitative section of this study to support the relevance of themes/ideas identified by the inductive thematic analysis of this section; as well as to offer alternative avenues of explanation of the findings, as proposed in the following section of this paper.

Discussion

The current study aimed to investigate how impactful feelings of belonging are on scores for self-esteem when demographic variables had been controlled for; assuming that feelings of belonging will have a significant impact on self-esteem scores. It also aimed to discern whether intrinsic social inclusion or extrinsic social inclusion were more beneficial to the D/deaf community based in their own accounts of experiences with current efforts and services. Finally, the current research aimed to infer avenues for improvement based on these accounts.

Using a hierarchical multiple regression, the relationship between feelings of belonging and self-esteem were investigated when demographic variables had been controlled for. Results showed that this relationship was non-significant. These results indicate that feelings of belonging do not have a relationship with self-esteem in the current sample. That said, the demographic variables controlled for were also uniquely insignificant within the current model, despite previous research indicating that each of these variables had a significant relationship with self-esteem (Dush & Amato, 2005; Josephs, Markus & Tafarodi, 1992; McMullin & Cairney, 2004; Orth, Trzesniewski & Robins, 2010). It may be speculated that a failure to detect a significant relationship between both demographic variables and feelings of belonging with self-esteem occurred due to a type 2 error – a failure to detect a significant relationship where one exists due to the low statistical power of the current sample. Though the alternate must be considered – that these predictor variables truly had no relationship with self-esteem – it seems more plausible that a type 2 error explains this failure of detecting a significant relationship between variables. As per these results, the current hypothesis that feelings of belonging and scores for self-esteem will have a significant relationship when demographic variables are controlled for has been rejected.

Though the quantitative findings of the current study fail to support the importance of the qualitative findings, the answers provided by participants and the implication of said answers still offers an excellent insight into the feelings, wants, and potential needs of members of the D/deaf community. The prospect that Social Identity Theory (Tajfel & Turner, 2015) would have an influence on the current sample didn't seem to hold through, as no preference for intrinsic inclusion seemed present in the current sample. Taking this into consideration, it is now suggested that perhaps the frustration at a lack of extrinsic inclusion somehow 'trumps' the in-group out-group affect that was predicted based on psychological theory.

Via inductive thematic analysis, an overwhelming partiality towards matters concerning extrinsic inclusion was identified. Question 5 of the unique questionnaire schedule created for this study required participants to indicate their opinion on which type of integration had been or is more beneficial to them, with 58% of participants indicating this to be extrinsic social inclusion. Furthermore, all three themes identified via thematic analysis indicated a strong focus towards extrinsic inclusion both A) being the most beneficial to the D/deaf community and B) needing the most improvement.

The first theme identified the immense call for the use of sign language within the general population. Participants did not seem to indicate that they want people to learn an entire language, but, rather, asked that efforts towards introducing basic sign or 'finger-spelling' would be hugely beneficial in aiding communication and integration between D/deaf people and the general population. The simple introduction of the use of the 26 signs used to represent letters of the alphabet in order to spell them when interacting with the D/deaf community seemed to be something that the D/deaf community have found/ would find incredibly useful in their day-to-day lives, existing within a predominantly hearing world.

Secondly, participants voiced their frustration at the accessibility of academia beyond secondary schools as well as occupational/vocational pursuits. Participants feel that there is a barrage of hurdles in pursuing their academic and professional desires as they just weren't accommodating nor accessible. Citing the expense of private interpreters, reluctance of employers and colleagues to be accommodating as well as the overarching lack of awareness, participants indicated that stricter laws concerning inclusion/accommodation as well as a push towards a widespread general awareness would be hugely beneficial in creating more accessible academic and work spaces.

The third and final theme highlighted an underlying frustration of the D/deaf community – the absence of awareness and reluctance of the general, hearing population to learn about and include members of the D/deaf community. This issue underpins the relevance of the first two themes while also highlighting the inherent need for improvement. Though the current study failed to detect any statistical relevance of the relationship between feelings of belonging and self-esteem, participants cited the benefits to mental health that inclusion within the hearing population would offer. They noted the importance of empathy and understanding, careers, meaningful work, and enhanced potential for social interaction have on mental health. Self-esteem and positive mental health are notoriously linked in current literature (Mann, Hosman, Schaalma, & De Vries, 2004; Neff, 2016). Therefore, the findings of the current data indicate the need for improvements in integration efforts - specifically in terms of extrinsic integration.

Current literature has focused intensely on efforts in integration in purely education contexts. This literature has highlighted the benefits of both intrinsic and extrinsic inclusion though it is limited in that it does not consider the many different pursuits and desires of the D/deaf population once they've finished interacting within these contexts. The current study,

which targeted D/deaf adults specifically, has highlighted how these efforts seem to come to an abrupt stop once D/deaf people leave school and reach adulthood. It has also emphasized the need for integration *between* the D/deaf community and the hearing population; where existing literature has investigated within intrinsic and extrinsic contexts specifically rather than across them, i.e. the benefits of deaf schooling for deaf children (O’Connell & Deegan, 2014; Scott, Goldberg, Connor, & Lederberg, 2019), or the benefits of integration for deaf children within hearing schools (Keating & Mirus, 2003; Potter, 2018) - rather than comparing and analysing which of the two is more beneficial overall. The current study has targeted these gaps and identified that outside of childhood educational contexts, extrinsic integration is more beneficial to the D/deaf community based on their own accounts and experiences.

Limitations and Strengths of the Current Study

Several limitations existed within the current study. Firstly, the ratio of male to female participants was weighted heavily to females, who made up 72% of the current sample. This suggests that perhaps the findings of the current study are more so applicable to female members of the D/deaf community. This said, limitations which impacted upon or restrained the sample size could potentially erase this unbalanced ratio in further studies. For example, time restraints impacted upon number of participants which could be recruited. As it may be coincidence that of the 29-person sample 21 were female, allowing more time for participant recruitment in replication studies may repair this gap in the gender ratio of participants. Similarly, a study with more time for recruitment in a replication study (especially considering the somewhat niche target population) may insure a sufficient sample size for statistical testing. Therefore, the primary hypothesis of the current study may be investigated more thoroughly – with a lessened potential for errors. Moreover, the sampling method of the current study offered a limited reach

of potential participants. Allowing a budget for recruitment in terms of advertising the study and inviting participants via a medium other than social media may yield a more widespread, representative sample than that of the current study.

These limitations acknowledged, several strengths reinforce the validity and relevance of the current study. Targeting the D/deaf population meant targeting a relatively niche population that remain under-researched in certain contexts. Implementing qualitative methods as the primary investigative method based on the research aims meant that the current research accessed data that could not be obtained nor analyzed via statistical testing. Furthermore, where current research is primarily focused on the social experiences of D/deaf people in childhood educational contexts, the current research focused on D/deaf adults and, moreover, allowed for insight into their experiences of academic and vocational experiences as D/deaf people. Useful themes were identified which are both highly applicable and may feasibly be integrated into society.

Potential Applications and Suggestions for Further Research

Findings of the current research lead to conclusions about both real-world applications and suggestions for further research. In relation to real-world applications, ISL classes or once-off courses may be introduced to primary and secondary school syllabuses to ensure that the general population have access to finger spelling and may potentially be able to use basic signs. Furthermore, it is suggested that law makers consider the unique aspects of being deaf in relation to future social policy and employment law, as the diversity and inclusion laws which currently exist mainly pertain to disability and chronic illness in a more general sense rather than catering to the needs of specific differences. Going forward, efforts to target specific needs in law making, especially the specific needs of D/deaf academics and employees in this context, may

greatly improve attendance, adherence and success of said members of the D/deaf community in said contexts. Finally, a push towards more effective awareness efforts and campaigns has been called for and should be heavily considered by school/college inclusion officers, Human Resource Departments, and general services targeted at raising awareness for diversity in society.

In further research, it is suggested that replication studies may refer to the limitations discussed above. As for related future studies, there is a plethora of directions research may go within this field. Firstly, it is recommended that a model of the relationship between feelings of belonging and the self-esteem of the D/deaf community be investigated further. This model may include additional potential predictor factors and/or alternate measures of feelings of belonging. Comparing the findings of this model utilized on a D/deaf sample with the same model applied to the hearing population may aid in identifying how inclusion and feelings of belonging are uniquely related to self-esteem for the D/deaf community. Moreover, if any other predictor variables are uniquely related to self-esteem for the D/deaf community when compared to the hearing population, this relationship may also be investigated further. Finally, dividing participants into groups based on degree of D/deafness may yield interesting findings rather than examining participants with all degrees of deafness as one group. If/when the suggested real-world applications of the current findings are implemented, future studies may also aim to investigate their effectiveness by both quantitative and qualitative means, and to see whether their effectiveness has an impact of self-esteem scores.

Conclusion

Regardless of the fact that the statistical analyses failed to support the primary hypothesis of this research, nor offer further insight into the findings of the thematic analysis of the current study, it was clear to see from the accounts of participants that the subject matter of the current

study was of great relevance and importance to them and their community. All research aims have been addressed and met to the extent that pertinent conclusions can be made based on these findings. A strong argument has been made for the significance of efforts towards integrating D/deaf people with the hearing population, especially when the hearing population are an active part of said effort – making it less difficult for the D/deaf people involved to feel integrated and welcome based on the approach and attitudes they perceive from their hearing peers. Analyzing this in D/deaf adults outside of childhood education has offered a unique perspective not thoroughly researched in existing literature and suggests many pathways for further research. Though limitations exist within the current study, the strengths of the research ensure that the applicability of current findings is relevant not only in considering future research, but also in creating feasible applications to real-world scenarios. Said applications of the findings have been suggested, and further research may solidify the importance of these findings in relation to the self-esteem and wellbeing of the D/deaf community.

References

Abrams, D., Hogg, M. A., & Marques, J. M. (Eds.). (2004). Social psychology of inclusion and exclusion. Psychology Press.

APA Dictionary of Psychology. (2019). Retrieved from <https://dictionary.apa.org/self-esteem>

Bat-Chava, Y. (1993). Antecedents of self-esteem in deaf people: A meta-analytic review. *Rehabilitation Psychology, 38*(4), 221-234. doi: 10.1037//0090-5550.38.4.221.

Bat-Chava, Y. (1994). Group Identification and Self-Esteem of Deaf Adults. *Personality And Social Psychology Bulletin, 20*(5), 494-502. doi: 10.1177/0146167294205006.

Bat-Chava, Y. (2000). Diversity of deaf identities. *American annals of the deaf, 420-428*.

Berke, J. (2018). Self-Identification in the Deaf Community. Retrieved from <https://www.verywellhealth.com/deaf-culture-big-d-small-d-1046233>.

Bernstein, M. J., Sacco, D. F., Young, S. G., Hugenberg, K., & Cook, E. (2010). Being “in” with the in-crowd: The effects of social exclusion and inclusion are enhanced by the perceived essentialism of ingroups and outgroups. *Personality and Social Psychology Bulletin, 36*(8), 999-1009.

Brewer, M. B., & Yuki, M. (2007). Culture and social identity. *Handbook of cultural psychology, 307-322*.

Cawthon, S. W., Wendel, E. M., Bond, M. P., & Garberoglio, C. L. (2016). The impact of intensive vocation-related course taking on employment outcomes for individuals who are deaf. *Remedial and Special Education, 37*(3), 131-145.

Chapman, M., & Dammeyer, J. (2016). The significance of deaf identity for psychological well-being. *The Journal of Deaf Studies and Deaf Education*, 22(2), 187-194.

Charlson, E., Strong, M., & Gold, R. (1992). How Successful Deaf Teenagers Experience and Cope With Isolation. *American Annals Of The Deaf*, 137(3), 261-270. doi: 10.1353/aad.2012.0447.

Clark, J. G. (1981). Uses and abuses of hearing loss classification. *Asha*, 23(7), 493-500.

DeafHear. (2019). Retrieved from

<https://www.deafhear.ie/DeafHear/mediaCentreCommunities.html>

Deafness -- Britannica Online Encyclopedia. (2011). Retrieved from

<https://web.archive.org/web/20120625153552/http://www.britannica.com/EBchecked/topic/154327/deafness>

Dush, C., & Amato, P. (2005). Consequences of relationship status and quality for subjective well-being. *Journal Of Social And Personal Relationships*, 22(5), 607-627. doi: 10.1177/0265407505056438.

Erting, C. J., & Kuntze, M. (2017). Signed Language Socialization in Deaf Communities. *Language Socialization*, 383.

Freeman, V. (2018). Attitudes Toward Deafness Affect Impressions of Young Adults With Cochlear Implants. *The Journal of Deaf Studies and Deaf Education*, 23(4), 360-368.

Hadjikakou, K., Petridou, L., & Stylianou, C. (2008). The academic and social inclusion of oral deaf and hard-of-hearing children in Cyprus secondary general education: investigating

- the perspectives of the stakeholders. *European Journal of Special Needs Education*, 23(1), 17-29.
- Hayes, A., Gray, M., & Edwards, B. (2008). Social inclusion: Origins, concepts and key themes. Department of the Prime Minister and Cabinet.
- Hornsey, M. J. (2008). Social identity theory and self-categorization theory: A historical review. *Social and Personality Psychology Compass*, 2(1), 204-222.
- Hyde, M., & Power, D. (2004). Inclusion of deaf students: An examination of definitions of inclusion in relation to findings of a recent Australian study of deaf students in regular classes. *Deafness & Education International*, 6(2), 82-99.
- Isaac, S., & Michael, W. (1997). *Handbook in research and evaluation*. San Diego, Calif.: EDITS.
- Jambor, E., & Elliott, M. (2005). Self-esteem and coping strategies among deaf students. *Journal of Deaf Studies and Deaf Education*, 10(1), 63-81. doi: 10.1093/deafed/eni004.
- Jones, D., & Gill, P. (1998). Breaking down language barriers: The NHS needs to provide accessible interpreting services for all. *BMJ: British Medical Journal*, 316(7143), 1476.
- Josephs, R., Markus, H., & Tafarodi, R. (1992). Gender and self-esteem. *Journal Of Personality And Social Psychology*, 63(3), 391-402. doi: 10.1037/0022-3514.63.3.391.
- Keating, E., & Mirus, G. (2003). Examining interactions across language modalities: Deaf children and hearing peers at school. *Anthropology & education quarterly*, 34(2), 115-135.

- Kluwin, T. (2002). Social Processes and Outcomes of In-School Contact Between Deaf and Hearing Peers. *Journal Of Deaf Studies And Deaf Education*, 7(3), 200-213. doi: 10.1093/deafed/7.3.200.
- Ladd, P. (2003). Understanding deaf culture: In search of deafhood. *Multilingual Matters*.
- Lasak, J., Allen, P., McVay, T., & Lewis, D. (2014). Hearing Loss. Primary Care: Clinics In Office Practice, 41(1), 19-31. doi: 10.1016/j.pop.2013.10.003.
- Leary, M. R., Tambor, E. S., Terdal, S. K., & Downs, D. L. (1995). Self-esteem as an interpersonal monitor: The sociometer hypothesis. *Journal of personality and social psychology*, 68(3), 518.
- Lee, R., & Robbins, S. (1995). Social Connectedness and Social Assurance Scales. *Psyctests Dataset*. doi: 10.1037/t01359-000.
- Lee, R. M., & Robbins, S. B. (1998). The relationship between social connectedness and anxiety, self-esteem, and social identity.
- Leyser, Y., & Kirk, R. (2004). Evaluating inclusion: An examination of parent views and factors influencing their perspectives. *International Journal of Disability, Development and Education*, 51(3), 271-285.
- Luhtanen, R., & Crocker, J. (1992). A collective self-esteem scale: Self-evaluation of one's social identity. *Personality and social psychology bulletin*, 18(3), 302-318.
- Mann, M. M., Hosman, C. M., Schaalma, H. P., & De Vries, N. K. (2004). Self-esteem in a broad-spectrum approach for mental health promotion. *Health education research*, 19(4), 357-372.

Marschark, M., Lang, H. G., & Albertini, J. A. (2001). *Educating deaf students: From research to practice*. Oxford University Press.

McAndrew, H. (1948). Rigidity and isolation: a study of the deaf and the blind. *The Journal Of Abnormal And Social Psychology*, 43(4), 476-494. doi: 10.1037/h0062596.

McMullin, J., & Cairney, J. (2004). Self-esteem and the intersection of age, class, and gender. *Journal Of Aging Studies*, 18(1), 75-90. doi: 10.1016/j.jaging.2003.09.006.

Mellon, N. K., Niparko, J. K., Rathmann, C., Mathur, G., Humphries, T., Napoli, D. J., ... & Lantos, J. D. (2015). Should all deaf children learn sign language?. *Pediatrics*, peds-2014.

Monticone, M., Ferrante, S., Giorgi, I., Galandra, C., Rocca, B., & Foti, C. (2014). The 27-Item Coping Strategies Questionnaire — Revised: Confirmatory Factor Analysis, Reliability and Validity in Italian-Speaking Subjects with Chronic Pain. *Pain Research And Management*, 19(3), 153-158. doi: 10.1155/2014/956828.

Most, T. (2007). Speech Intelligibility, Loneliness, and Sense of Coherence Among Deaf and Hard-of-Hearing Children in Individual Inclusion and Group Inclusion. *Journal Of Deaf Studies And Deaf Education*, 12(4), 495-503. doi: 10.1093/deafed/enm015.

Neff, K. (2016). Self-compassion. *Mindfulness in Positive Psychology: The Science of Meditation and Wellbeing*, 37, 1-8.

O'Connell, N. P., & Deegan, J. (2014). 'Behind the teacher's back': an ethnographic study of deaf people's schooling experiences in the Republic of Ireland. *Irish educational studies*, 33(3), 229-247.

- Orth, U., Trzesniewski, K., & Robins, R. (2010). Self-esteem development from young adulthood to old age: A cohort-sequential longitudinal study. *Journal Of Personality And Social Psychology*, 98(4), 645-658. doi: 10.1037/a0018769.
- Patchin, J. W., & Hinduja, S. (2010). Cyberbullying and self-esteem. *Journal of school health*, 80(12), 614-621.
- Plack, C. (2016). *The sense of hearing* (2nd ed., p. 1). New York: Routledge / Psychology Press.
- Potter, J. (2018). *Most Restrictive Environment: The Impacts of a Mainstream Education on Deaf Children* (Doctoral dissertation).
- Punch, R., Creed, P. A., & Hyde, M. B. (2006). Career barriers perceived by hard-of-hearing adolescents: Implications for practice from a mixed-methods study. *Journal of Deaf Studies and Deaf Education*, 11(2), 224-237.
- Rosenberg, M. (1965). Rosenberg self-esteem scale (RSE). *Acceptance and commitment therapy. Measures package*, 61, 52.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American psychologist*, 55(1), 68.
- Schein, J. (1989). At home among strangers (pp. 106-134, 181-220). Washington, D.C.: Gallaudet University Press.
- Schick, B., Skalicky, A., Edwards, T., Kushalnagar, P., Topolski, T., & Patrick, D. (2012). School Placement and Perceived Quality of Life in Youth Who Are Deaf or Hearing. *Journal Of Deaf Studies And Deaf Education*, 18(1), 47-61. doi: 10.1093/deafed/ens039.

- Scott, J. A., Goldberg, H., Connor, C. M., & Lederberg, A. R. (2019). Schooling Effects on Early Literacy Skills of Young Deaf and Hard of Hearing Children. *American annals of the deaf*, 163(5), 596-618.
- Senghas, R. J., & Monaghan, L. (2002). Signs of their times: Deaf communities and the culture of language. *Annual Review of Anthropology*, 31(1), 69-97.
- Tajfel, H., & Turner, J. C. (2015). The social identity theory of intergroup behavior. 2004. Google Scholar.
- Tambs, K. (2004). Moderate effects of hearing loss on mental health and subjective well-being: results from the Nord-Trøndelag Hearing Loss Study. *Psychosomatic medicine*, 66(5), 776-782.
- Terry, D. R., Nguyen, Q. L. H. B., & Malatzky, C. (2017). Misconceptions of the Deaf: Giving voice to the voiceless. *Health, Culture and Society*, 9, 49-61.
- Treece, E., & Treece, J. (1977). ELEMENTS OF RESEARCH IN NURSING. *Nursing Research*, 26(3), 239. doi: 10.1097/00006199-197705000-00032.
- van Gent, T., Goedhart, A., Knoors, H., Westenberg, P., & Treffers, P. (2012). Self-concept and Ego Development in Deaf Adolescents: A Comparative Study. *Journal Of Deaf Studies And Deaf Education*, 17(3), 333-351. doi: 10.1093/deafed/ens002.
- Webster, A. (2017). *Deafness, development and literacy*. Routledge.
- Winston, E. A. (1994). An interpreted education: Inclusion or exclusion. Implications and complications for deaf students of the full inclusion movement, 55-62.

Woll, B., & Ladd, P. (2003). Deaf communities. Oxford handbook of deaf studies, language, and education, 151-163.

Zandberg, S. (2005). Educating children with hearing impairment: Targets and their realization. Unpublished report, Israeli Ministry of Education, Jerusalem, 150(4).

Zeshan, U., Fan, R. H., Gillen, J., Panda, S., Papen, U., Tusting, K., ... & Webster, J. M. B. (2016). Literacy development with deaf communities using sign language, peer tuition, and learner-generated online content: sustainable educational innovation.

Appendices

Appendix A

Rosenbug Self-Esteem Scale

1. On the whole, I am satisfied with myself.
2. At times I think I am no good at all.
3. I feel that I have a number of good qualities.
4. I am able to do things as well as most other people.
5. I feel I do not have much to be proud of.
6. I certainly feel useless at times.
7. I feel that I'm a person of worth, at least on an equal plane with others.
8. I wish I could have more respect for myself.
9. All in all, I am inclined to feel that I am a failure.
10. I take a positive attitude toward myself.

A 10-item scale that measures global self-worth by measuring both positive and negative feelings about the self. The scale is believed to be uni-dimensional. All items are answered using a 4-point Likert scale format ranging from strongly agree to strongly disagree. Items 2, 5, 6, 8, 9 are reverse scored. Give "Strongly Disagree" 1 point, "Disagree" 2 points, "Agree" 3 points, and "Strongly Agree" 4 points. Sum scores for all ten items. Keep scores on a continuous scale. Higher scores indicate higher self-esteem.

Appendix B

Social Connectedness and Social Assurance Scales

Factor 1 (Social Connectedness)

1. I feel disconnected from the world around me.
2. Even around people I know, I don't feel that I really belong.
3. I feel so distant from people.
4. I have no sense of togetherness with my peers.
5. I don't feel related to anyone.
6. I catch myself losing all sense of connectedness with society.
7. Even among my friends, there is no sense of brother/sisterhood.
8. I don't feel I participate with anyone or any group.

Factor 2 (Social Assurance)

1. I feel more comfortable when someone is constantly with me.
2. I'm more at ease doing things together with other people.
3. Working side by side with others is more comfortable than working alone.
4. My life is incomplete without a buddy beside me.
5. It's hard for me to use my skills and talents without someone beside me.
6. I stick to my friends like glue.
7. I join groups more for the friendship than the activity itself.
8. I wish to find someone who can be with me all the time.

The Social Connectedness Scale and the Social Assurance Scale contain 8 items each, forming an amalgamative 16-item indicator of Social inclusion. Both measures employ a 6-point Likert-scale (from 1 = agree to 6 = disagree) All items are reverse scored.

Appendix C

Standardized Questionnaire

1. Which kind of educational or workplace intervention do you feel is most beneficial to the D/deaf community- Deaf exclusive schooling, or an interpreter/other supports provided for D/deaf people *within mainstream* schooling. Please give reason for your choice.
2. Do you feel it would be beneficial if ISL/Sign language was taught in mainstream schooling/workplaces to the hearing population? If so, why? If not, why not?
3. What, do you feel, has been the best help to you in terms of integration? This can be anything from deaf schooling, interpreters, meeting other deaf people, etc.
4. What could be done to improve integration for the D/deaf community? This can be with other D/deaf people or with the hearing population. Please explain your answer.
5. Which kind of integration programmes have you found most beneficial overall?
 - A) integration programmes targeted at integrating you with other D/deaf people
 - B) B) Integration programmes targeted at integrating you with the general, hearing population
6. Are there other comments you wish to add to this survey in relation to integrating D/deaf people with each other and/or with the general population?

Participants are provided an unlimited bracket for response and are encouraged to provide as much detail as possible. These questions have been designed to provoke answers pertaining to specific experiences of identified social inclusion, be it intrinsic or extrinsic, with a further prediction of a preferred kind being identified.

Appendix D

Briefing Materials

Information and Consent Form

Hello! My name is Carrie Grennan and I am an Undergraduate Psychology Student at National College of Ireland being supervised by (NAME, QUALIFICATION/JOB TITLE). I am interested in the relationship between social isolation and self-esteem for members of the HOH/Deaf community. This study has been approved by the Ethics Committee at National College of Ireland.

WHAT WILL HAPPEN

In this study, you will be asked to complete two surveys (which will take approximately 15 minutes) and 6 additional open-ended questions (an additional 5-10 minutes). You will not be required to identify yourself in any part of this material.

Please be aware that participation in this study involves completion of some standardised tests (the Revised UCLA Loneliness Scale and the Rosenberg Self-Esteem Scale) which are routinely used as preliminary screens for clinical conditions/impairments of which you might not be aware. Please understand that these assessments are not sufficient for diagnostic purposes, nor will they be used in this manner in this study. Researchers cannot inform participants of individual test scores.

CRITERIA FOR PARTICIPATION

To participate in this study you must:

- Have a significant hearing impairment. This is classified as any ONE or more of the following:

A) use a hearing aid or a pair of hearing aids, B) have a cochlear implant or implants, C) use sign language as a means of personal communication, D) have benefited from educational/vocational/social programmes or interventions designed for the Hard of Hearing/Deaf community (such as deaf schooling, interpreters, etc) and/or E) have an existing diagnosis of significant hearing loss/deafness

- Be over the age of 18

-Be fluent in written English.

- Have sufficient IT skills that you can complete the survey independently.

Please note: You may NOT participate in this survey if you have any mental health condition, disability, significant ongoing illness or developmental disorder other than your hearing impairment.

PARTICIPANTS' RIGHTS

Your participation in this study is completely voluntary and as such you may decide to stop being a part of the research study at any time without explanation. You will not be penalised for retracting your consent.

You have the right to have your questions about the procedures answered. If you have any questions as a result of reading this information sheet, you should ask the researcher before the study begins (contact details below).

BENEFITS AND RISKS

A benefit to participating in this study is that you will be contributing to current knowledge concerning social isolation and integration in the HOH/Deaf community, and aiding us in researching how to create and implement better support structures for the community in a variety of areas- educational, vocational, social and integrative.

Though it is highly unlikely, due to the nature of the surveys and the subjects they target (Social Isolation and Self Esteem), engagement in the current study may become upsetting. Should this happen, you will be provided with contact details for who you can talk to at the end of the study.

CONFIDENTIALITY/ANONYMITY

The entire process of this study has been anonymised. This means that I, the researcher, have no way of identifying you if you choose to participate. You may decide at any point throughout this survey to withdraw from the study without penalty. However, once you submit your answers they are added to the pool of all survey answers provided by participants, and therefore cannot be removed from the study once submitted.

FOR FURTHER INFORMATION

I, Carrie Grennan, will be glad to answer any questions you may have throughout the study. You may contact me at ncihearingimpairmentstudy@gmail.com. If you want to find out about the final results of this study, you may contact me in June at the address above for the full report. If you have questions about your rights in this research, or you have any other questions, concerns, suggestions, or complaints that you do not feel can be addressed by the researcher, my supervisor may be contacted via the following:

Please check this box if you have read the information above and confirm that A) you understand this information, B) you are over the age of 18 and C) consent to participation in this study:

Appendix E

Debriefing Materials

Thank you so much for participating in this study!

The reason for this research is to enhance our understanding of the relationship between social isolation and self-esteem scores within the hard of hearing and deaf community and your participation has contributed to that. It is the wish of the researcher to use this information to identify ways in which support for the HOH/D community can be improved and how integration between the HOH/D community can be enhanced.

Though the findings of this research will be utilised for examination purposes, and potentially at student conferences, you will not be identifiable in any public record of the data collected in this study, nor in any reports, writings, publications etc that utilise the data. Your privacy is our priority.

Should you wish to view this report once it is complete you may contact the researcher (Carrie Grennan) in June 2019 of for a copy of the full report at ncihearingimpairmentstudy@gmail.com.

If you have become concerned by the content of this study or if any personal issues have been brought to your attention via your participation, it is advised that you speak to your GP.

Alternatively, you may contact DeafHear at the following

link: <https://www.deafhear.ie/DeafHear/contactUs.html?who=0>

I may be contacted at the following address: ncihearingimpairmentstudy@gmail.com, or
if you wish to contact my supervisor they are contactable at the following address:

Again, thank you very much for your contribution to this study.