

# DEAF CULTURAL IDENTIFICATION, COCHLEAR IMPLANTS, AND LIFE SATISFACTION

Kristen Mulderrig \*<sup>1</sup>, Dr. Sean Rogers †<sup>2</sup>  
MacEwan University

## 1 Introduction

Cultural identification within the Deaf community has 4 distinct subgroups: deaf (immersion), hearing, bicultural, and marginal [1, 2]. Each of these labels represent a specific internal stance about an individual's Deaf identity, and how they impact their overall well-being [1, 3]. Culturally deaf describes a profound, positive stance about their deafness, hearing describes the typical stance that the hearing world shares about Deaf culture, marginal describes a shifting loyalty between the hearing and Deaf worlds and culturally bicultural describes those who have integrated their Deaf pride in a way that is balanced with the hearing world [1].

This leads to wondering where Cochlear Implants (CI) users fit into the model for Deaf acculturation. Since CI's are electrical devices that create artificial sound processing, their perception of auditory signals is at a substantially lower rate than normal hearing (NH) individuals and an overall lower life satisfaction has been found [4, 5].

The present study seeks to address the problem of lower life satisfaction found in the Deaf community and seeks to identify how CI users fit into the community. The researchers hypothesized that Deaf individuals who identify with both the hearing and Deaf communities, will have the highest overall life satisfaction. Individuals identifying with either the Deaf or hearing community, will have high overall life satisfaction, however, individuals not identifying with either communities will have the lowest life satisfaction. In addition, Deaf individuals who have CI's will have higher overall life satisfaction than those without, and even higher life satisfaction with strong cultural identification.

## 2 Method

### 2.1 Participants

Thirty-three participants responded to the online survey, however, 20 scorable participants were used. The participants were recruited from the Edmonton area Deaf community through: The Connect Society, Facebook pages, and MacEwan University. The participants were 40% males and 60% females. Of those, 80% were 19 or older and 70% of the respondents reported English as their first language. As well, 50% indicated they were born deaf, 25% said they have CI's, and 95% reported they are Deaf or hard of hearing.

### 2.2 Measures

A total of 3 scales were used in this study: the Deaf Identity Development Scale (DIDS), the Deaf Acculturation Scale

(DAS), and the Satisfaction with Life Scale (SWLS). The DIDS asked questions revolving around one's preference for Deaf or hearing culture and resulted in the participant being categorized into either immersion, hearing, bicultural, or marginal cultural identification. The DAS is an extensive revision of the DIDS, asking questions centered around activities and preferences. Lastly, The SWLS asks questions about how the participant feels about their life.

### 2.3 Design

An online survey was used to examine how CI's impact cultural identification and life satisfaction. The predictor variables were whether the participant has CI's or not and what their cultural identification looked like. The outcome variable was the degree of life satisfaction reported.

### 2.4 Procedure

The study took place online where participants found a link to the study and began the survey. Once consent was given, they agreed to participate and completed personal demographic information, they filled out the 3 sections previously described and were then debriefed. Each session took around 30 minutes to complete and no verbal instructions were given. If MacEwan students completed the study, they received the same instructions but then were granted an additional 1% to their final grade in their introductory Psychology course for participating.

## 3 Results

### 3.1 Life Satisfaction

A total sample of 20 participants ( $N = 20$ ) revealed low confidence in the results. The mean life satisfaction for all groups was 26.0 ( $SD = 8.62$ ), with bicultural having the highest life satisfaction at 49.05 ( $SD = 9.92$ ,  $p > .05$ ), followed by the immersion group with a life satisfaction score of 28.05 ( $SD = 7.619$ ,  $p > .05$ ), the hearing group scored 21.15 ( $SD = 8.216$ ,  $p > .05$ ) on life satisfaction, and the marginal group scored a 24.75 ( $SD = 8.09$ ,  $p > .05$ ). The correlation between life satisfaction and hearing was  $-.349$  ( $p > .05$ ), life satisfaction correlated with immersion at  $.481$  ( $p > .05$ ), marginal scored a correlation of  $-.699$  ( $p < .05$ ), and bicultural correlated with life satisfaction at  $.434$  ( $p > .05$ ).

### 3.2 Regression Analysis

A regression analysis indicated an  $R^2$  of  $.586$ , an adjusted  $R^2$  of  $.475$ , and showed the model was statistically significant  $F(5,305)(4,15)$ ,  $p = 0.007$  (see Table 2). CI's were not significantly correlated with life satisfaction ( $r = -.025$ ,  $p < .05$ ). CI's and hearing identification were significantly related

\* mulderrigk@mymacewan.ca  
† RogersS10@macewan.ca

( $r = .025$ ,  $p < .05$ ), immersion and CI's scored .481, marginal scored -.699 and bicultural and CI's scored at a .434.

**Table 1:** Correlations with Life Satisfaction

Hearing	Immersion	Bicultural	Marginal
-.349	.481	.434	-.699

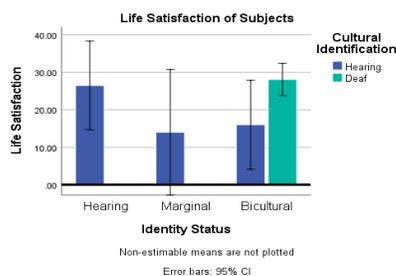
The hearing group consisted of 10% of the overall participants, 5% were marginal, 85% bicultural, and no participants fell into the immersion group. Culturally marginal was the only statistically significant group with an  $R^2$  of .488,  $F(1,18) = 17.174$ ,  $p = 0.01$ . Adding hearing identification resulted in a p-value of .067, bicultural led to a p-value of .724, and adding deaf acculturation resulted in a p-value of .980.

**Table 2:** Model Summary

R	R Square	Adjusted R Square	Sig. Change	F
.765	.586	.475	.007	

## 4 Discussion

The present study hypothesized that Deaf individuals who identify as bicultural will have the highest life satisfaction and those who do not identify with either the Deaf or hearing community will have the lowest life satisfaction. While the data gathered failed to provide significant support for this hypothesis, it is interesting that the trends match the pattern of this hypothesis. Results could not be drawn based on CI's due to the small sample size. This study found that 62% of Deaf individuals reported neutral life satisfaction, meaning the majority of the sample are relatively happy with their life. In comparison to the NH population, a world poll indicated 74% of over a million respondents report they are happy [6]. This shows the Deaf community does have lower than normal life satisfaction and additional research should be conducted to promote greater well-being in the Deaf.



**Figure 1:** Life Satisfaction of Subjects

The small sample of CI users ( $N=5$ ) indicated conclusions could not be drawn confidently and the study rejected the null hypothesis. Although the findings do show a trend toward the marginal group having a lower life satisfaction in relation to the implants, a larger sample size is necessary. Yet, life satisfaction did significantly correlate with cultural identification as hypothesized. Meaning that those who had a strong cultural identification had a higher overall life satisfaction than those who did not.

The total life satisfaction of the sample could vary from 5-9 (extremely dissatisfied) to 31-35 (extremely satisfied). This means the bicultural group scored the highest life satisfaction, followed by the immersion, marginal, and then hearing. This is relatively consistent with the researcher's hypothesis as they predicted that the bicultural group would have the highest life satisfaction and marginal would have the lowest. The correlation between hearing and life satisfaction was negative indicating that those who identified as hearing had a lower life satisfaction due to it. As well, marginal showed the same trend but with an even lower negative correlation.

## 5 Conclusion

The present study suggests that there is a link between how individuals feel overall and how strongly they identify with a culture. Because those who had stronger life satisfaction also had higher cultural identification, it can be concluded that Deaf cultural involvement has implications for overall well-being whether it be in both the Deaf and hearing communities [4, 7-8]. No correlation between CI's and cultural identification or life satisfaction was found, further research should be conducted to see if there is a relationship between these variables. Overall, this research has advanced the larger body of knowledge by showing there is a strong correlation between the Deaf community's well-being and how they fit into the Deaf or hearing communities.

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