Disability Identity Development, Disclosure, and Accommodation Seeking Spanning the Educational Pipeline: A Mixed Methods Study Using a Social Justice Lens

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The research reported herein was performed pursuant to a grant from Policy Research, Inc. as part of the U.S. Social Security Administration’s (SSA’s) Analyzing Relationships between Disability, Rehabilitation and Work. The opinions and conclusions expressed are solely those of the author(s) and do not represent the opinions or policy of Policy Research, Inc., SSA or any other agency of the Federal Government.
Abstract

BACKGROUND: Spanning school to workplace, people with disabilities have yet to realize equal access and outcomes. Researchers acknowledge the role of higher education in increasing likelihood of employment and associated higher socioeconomic status among working age people with disabilities. However, the higher educational attainment of students with disabilities (SWDs) remains problematic in spite of ongoing research. Scholars attribute poor degree completion to SWDs’ reluctance to disclose and seek accommodations. Among other factors, identity issues contribute to delay or failure of SWDs to disclose, compromising vital degree completion.

OBJECTIVE: Using Gibson’s Scale, this preliminary study examines the role of disability identity development (DID) in the disclosure and accommodation seeking of college SWDs, considers the influence of a priori factors, influencing disclosure, and engages the voices of SWDs to understand their current and future accommodation needs. Throughout, a social justice lens aims to identify gaps in the educational pipeline for SWDs for the purpose of increasing access to postsecondary education, degree completion, and employment.

METHOD: This study uses an advanced mixed methods, sequential explanatory design with a social justice lens, combining the strengths of Phase I quantitative survey data with Phase II qualitative interviews. The transformative theoretical lens addresses the economic inequality of PWDs, coupling neglected quantitative research on this marginalized group with qualitative depth, strengthening results, furthering transformative change, and informing policy.

RESULTS: Disability identity achievement is associated with earlier disclosure and more timely accommodations. SWDs with regressed DID lack readiness to disclose and exhibit stigma avoidance, overcompensation, and denial of support. Doubts, microaggressions, and stigma deter DID and undermine support seeking. Interviewees report that uncertainty about mental illness accommodation eligibility, self or others’ doubts of legitimacy, avoidance of stigma, and past negative support experiences discourage disclosure whereas participation in a disability community, role models with disabilities, know how to seek accommodations, and proactive response to past negative experience of support motivate disclosure. SWDs report uncertainty about future workplace accommodations, fear future workplace discrimination, and foremost desire a flexible and receptive future work environment.

CONCLUSION: Use of Gibson’s scale in both school and work can foster disability identity development and combat resistance to valuable supports that increase both academic and workplace retention. Practitioners need to create opportunities to engage PWDs with disability community and role models. Guided forms can support difficult student-faculty or employee-employer accommodation conversations. The pipeline can vertically inform future accommodations. Policy efforts need to redress mental illness stigma and invest in affordable counseling services for students and employees. Stakeholders need training to understand how invisible disabilities exhibit and how to create inclusive spaces that foster support seeking. Addressing uncertainty, discrimination, and job security concerns will support SWDs entering the workforce. Employers need support in creating flexible, remote and supportive work environments, welcoming diverse ability. Given limitations (small uniform sample, only disclosed students, Hawthorne effect), future research need examine multiple institutions (public, private, open access) and capture student DID before disclosure and spanning pipeline.
Introduction

The social inequalities for people with disabilities remain problematic. Strides to confront the systemic inequalities are necessary in order to change the marginalization that occurs. The systemic challenges trickle down into institutions of higher education, where social stratification negatively impacts people with disabilities. (Myers, Lindburg, & Neid, 2013, pp. 102-103)

Historically, inclusive efforts have aspired to improve the financial and social position of people with disabilities via educational opportunity (Barton & Armstrong, 2001; Linton, 1998; Madaus, 2001). Yet, the higher educational attainment of students with disabilities also remains problematic in spite of ongoing research (Newman & Madaus, 2015a). In the field, many attribute poor degree completion to students with disabilities’ reluctance to disclose and seek accommodations (Lightner, Kipps-Vaughan, Schulte, & Trice, 2012; Newman & Maddaus, 2015). Students with disabilities who disclose their disability to appropriate personnel at postsecondary institutions increase their likelihood of receiving reasonable accommodations, which are academic supports intended to provide access to the curriculum that inherently support persistence and lead to degree attainment. Identity issues, among other factors, have been found to contribute to the failure of students with disabilities to choose to disclose (Marshak, Van Wieren, Ferrell, Swiss, & Dugan, 2010; Trammell, 2009).

This preliminary study examines the role of disability identity development in the disclosure and accommodation seeking of people with disabilities in higher education. To avoid examination of disability identity in a vacuum, the study considers a priori factors that have been found to contribute to the failure of students with disabilities to disclose. Some of those discouraging factors include avoidance of stigmatized identity (Blockmans, 2015; Cole & Cawthon, 2015; De Cesarei, 2015; Kranke, Jackson, Taylor, Anderson-Fye, & Floersch, 2013; Marshak et al., 2010; Stamp, Banerjee, & Brown, 2014; Stein, 2013; Trammell, 2009a, 2009b), veteran status (Burnett & Segoria, 2009; Shackelford, 2009), and type of disability and necessity of accommodations (Blockmans, 2015, Hahn & Belt, 2004). Other motivating factors are considered as well, such as transition planning experience in K-12, which have been linked to increased disclosure (Morningstar, Lombardi, Fowler, & Test, 2015; Newman & Madaus, 2015b). To round out this examination, the study engages the voices of students with disabilities to discover the status of current higher education accommodations, to identify their desirable future workplace accommodations, and to understand their experience of disability as it intersects with education. Throughout this study, an embedded social justice objective aspires to identify gaps in the educational pipeline for students with disabilities with the intent of increasing access to postsecondary education, degree completion, and employment of people with disabilities. In this manner, higher education can be the lever with which more equitable outcomes for people with disabilities realize.

Literature Review and Statement of the Problem

American higher education historically has served as a means of social mobility, gradually growing more inclusive in its reach, and preparing citizens for leadership, civic participation, and the workforce (Linton, 1998; Rudolph, 1962). Despite aristocratic origins, it piloted democratic aspirations that paved the way for diverse generations: the working class, farmers, immigrants, freedmen, women (Rudolph, 1962). In this role, it advanced social justice
initiatives, led reform, and removed barriers for otherwise marginalized groups (Barton & Armstrong, 2001). This history demonstrates higher education’s “support of the state” (Rudolph, 1962, p. 13) as a lever to address social injustice and economic inequality, faced by many individuals with disabilities today. For example, the state leveraged higher education to rehabilitate injured veterans. The Vocational Rehabilitation Act of 1918, its successors, and the Serviceman’s Readjustment Act of 1944 (The GI Bill of Rights) provided educational assistance to veterans with disabilities (Madaus, 2001). The latter assured “disabled” veterans access to jobs (Madaus, 2001) and “resulted in a corresponding increase in students with disabilities enrolling in college” (Madaus, 2001, p. 6).

The Office of Disability Employment Policy (ODEP, 2017) affirms the role of higher education in producing gainful activity for people with disabilities: “. . . increased employment of people with disabilities will be realized . . . in part on public and corporate policies regarding access to appropriate education.” Both the Bureau of Labor Statistics (BLS, 2016) and National Council on Disability (NCD, 2015) concur that employment outcomes are greater for people with disabilities, who attain a college degree.

However, exclusionary beliefs and practices persist in the education pipeline - K-12, postsecondary education, and the workforce (Foley, Mishook, & Lee, 2013). Newman and Madaus (2015) contend these experiences discourage vital disclosure of disability and accommodation seeking. Only 35 percent of entering college students revealed their disabilities. Of the 95 percent receiving accommodations in secondary schools, only 23 percent disclosed their disabilities in postsecondary education (Newman & Madaus, 2015a). Given the shortfalls in disclosure and accommodation seeking, research on the role of disability identity development is needed. “Understanding the identities and development of students with disabilities is important in providing access to higher education and working toward more equitable academic, social, and professional outcomes” (Patton, Renn, Guido, & Quaye, 2016, p. 230).

Gibson (2006), highly recognized disability scholar and practicing psychologist, informed from over twenty years of clinical practice and influenced by multicultural identity, offers a disability identity development stage model and instrument, Gibson’s Disability Identity Development Scale (2011). The fluid model spans three stages of development, respectively, Stage 1: Passive Awareness, Stage 2: Realization, and Stage 3: Acceptance, and identifies factors attributable to each stage, such as Superman/superwoman Complex, which may explain failure to disclose disability as it describes a denial of support (Gibson, 2006; see Figure 1 or Appendix M). O’Shea and Meyer (2016) identified a link between decision to disclose nonvisible disabilities and acceptance of disability like that in Gibson’s Stage 3 of the same name.
A Social Justice Lens

Delay of disclosure of disability, required for accommodation in higher education, impacts the persistence of people with disabilities and inhibits degree completion (Newman & Madaus, 2015a; Trammell, 2009a), which decreases likelihood of joining the workforce (BLS, 2016; NCD, 2015; ODEP, 2017), a future workforce that demands a more highly skilled and educated worker (Zumeta, 2012). Higher education can serve rehabilitation purposes (Madaus, 2001; ODEP, 2017) and realize the Social Security Administration’s objective to increase substantial gainful activity (ARDRAW, 2017; ODEP, 2017). Social justice and equity remains a large goal, particularly of institutions of higher education (Barton & Armstrong, 2001; Colker, 2009; Linton, 1998; Zumeta, 2012).

Economic inequalities exist for people with disabilities (BLS, 2016; NCD, 2017). The working age population of people with disabilities is twice as likely to be unemployed than people without disabilities (BLS, 2016). To address the employment and economic inequality of people with disabilities, this study utilizes an advanced mixed methods approach, incorporating a social justice or transformative theoretical lens throughout each phase of data collection and analysis (Creswell, 2015). Evans, Broido, Brown, and Wilke (2017) employ a similar social justice lens to address ableism in career development. A social justice lens and a mixed methods approach, coupling neglected quantitative research for this marginalized group (Vaccaro, Kimball, Wells, & Ostiguy, 2015) with qualitative depth (Merriam & Tisdell, 2016), will strengthen results (Clark & Ivankova, 2016; Creswell, 2015), further transformative change or social justice goals (Clark & Ivankova, 2016), and inform both institutional and public policy (Vaccaro et al., 2015).

Purpose of the Study

The purpose of this study is to investigate the relationship between disability identity development and disclosure of disability by people with disabilities seeking higher education and employment outcomes. Results describe how college students with disabilities, who have disclosed, report: (1) disability identity development, (2) factors that impact disclosure and accommodation seeking, and (3) higher education accommodations desirable in the workplace.

Definition of Terms

Disclose means to officially inform one’s college of a disability for the purpose of seeking accommodations in higher education. Disclosure does not mean a student receives or accepts...
accommodations. Generally, college students disclose to a Disability Resources, Student Support Services, or Americans with Disabilities Act (ADA) office.

Academic accommodations provide students with disabilities access to their learning environment and course content. Some students disclose their disability but do not seek accommodations. Typical accommodations may include extended testing time, alternative test location, note taker, preferential seating, accessible print materials, permission to record lectures, consideration of absences, hearing impairment services, access to class PowerPoint or other presentation materials, permission to leave or to move about the classroom, and flexible deadlines on assignments. This list is not exhaustive.

A Transition Plan is a part of a secondary education accommodation plan (e.g. Individualized Education Program (IEP), 504 Plan, etc.) that identifies goals and outlines a plan for life after high school. It may include job training, preparation for college, or general life skill development. It may have originated in middle or high school.

College students with disabilities may potentially receive Supplemental Security Income (SSI), a low income support program for people with disabilities, or Social Security Disability Insurance (SSDI), an earned insurance benefit provided to workers who contribute to the Social Security Trust Fund (SSA, 2018). A traditional aged college student may qualify for SSI due to never having worked or not having worked long enough to qualify for SSDI. However, nontraditional students (typically defined as those over 24 years old), are more likely to have the work history to qualify for SSDI.

**Research Questions and Hypotheses**

Five mixed methods questions guide this study:

**Research Question 1.** How do college students with disabilities report their disability identity development, based on Gibson’s Disability Identity Development Model?

**Hypothesis 1.1.** College students with disabilities who disclose their disability for the purpose of seeking accommodations exhibit Stage 3: Acceptance on Gibson's Disability Identity Development Model.

**Research Question 2.** Do variations in disclosure for the purpose of seeking accommodations and disability identity development, based on Gibson's Disability Identity Development Model, exist among variable demographics of college students with disabilities? (Demographics include timing of disclosure, gender, ethnicity, veteran status, transition planning experience, visibility of disability, and SSI/SSDI recipient.)

**Hypothesis 2.1.** College students with disabilities and concurrent time of disclosure of disability with enrollment are more likely to disclose than those with non-concurrent time of disclosure of disability with enrollment, and exhibit Stage 3: Acceptance on Gibson's Disability Identity Development Model.
Hypothesis 2.2. College students with disabilities and female gender are more likely to disclose than those who are male and exhibit Stage 3: Acceptance on Gibson’s Disability Identity Development Model.

Hypothesis 2.3. College students with disabilities and Caucasian/White ethnicity are more likely to disclose and exhibit Stage 3: Acceptance on Gibson’s Disability Identity Development Model.

Hypothesis 2.4. College students with disabilities and veteran status are less likely to disclose than those without veteran status and exhibit Stage 2: Realization on Gibson's Disability Identity Development Model.

Hypothesis 2.5. College students with disabilities and transition planning experience are more likely to disclose than those without transition planning experience and exhibit Stage 3: Acceptance on Gibson's Disability Identity Development Model.

Hypothesis 2.6. College students with disabilities and visible type disability are more likely to disclose than those with non-visible type disabilities and exhibit Stage 3: Acceptance on Gibson's Disability Identity Development Model.

Hypothesis 2.7. College students with disabilities with no SSI/SSDI are more likely to disclose than those with SSI/SSDI and exhibit Stage 3: Acceptance on Gibson’s Disability Identity Development Model.

Research Question 3. What factors do college students with disabilities identify that impact disclosure and accommodation seeking?

Research Question 4. What accommodations do college students with disabilities receive in higher education and desire in the workplace?

Research Question 5. How do qualitative findings enhance understanding of quantitative results and lead to identification of inequalities for college students with disabilities?

Methodology

Research Design

An advanced mixed methods, sequential explanatory design was used to maximize the benefits of both data types (Creswell, 2015). Phase I quantitative data provided for generalization of a small sample to a larger population while Phase II qualitative data engaged individual perspectives and personal stories, which are intended to strengthen one another and add value to the data (Creswell, 2015). The qualitative aspects were intended to support the social justice lens more thoroughly, giving voice to the feelings and lived experiences of a marginalized group, students with disabilities (Creswell, 2015). The combined strengths of quantitative generalizability and qualitative depth; therefore, complemented one another in this design (Creswell, 2015). Figure 2 provides a diagram of the social justice research design for this study.
Throughout the study, qualitative and quantitative data were synthesized or integrated. Each was used to inform the interpretation of the other. In particular, the interview script was revised in response to survey responses. For example, many respondents identified not having a transition plan, despite such a plan being common practice. As a result, the interviews included a question about the type of high school students attended. It was discovered that many interview participants attended private high schools, which would not customarily have transition plans, which may explain the unexpected number of no responses. Likewise, many medical students, unlike those in other fields, reported no need for job accommodations. Interview participants communicated how the medical field was perhaps naturally more understanding of disability, thus reducing the need for official accommodations. In these instances, interpretation of survey data benefited from the interviews. Both data collection and analysis phases were integrated in this fashion.

**Sampling**

An electronic recruitment email with attached Qualtrics (Qualtrics, Provo, Utah, 2018) survey link was distributed by the university’s Disability Services office via their student listserv, under the approval of the director. In addition to the anonymous survey link, the recruitment email included a description of the study, researcher contact information, Institutional Review Board (IRB) approval documentation, and consent statement. Of the 610 students registered with the Disability Services office, there were 46 randomly sampled respondents of which three were eliminated for failing to complete the survey (n=43; 93%).

Of the 43 survey respondents, six volunteered to be interviewed. Survey participants were not required to complete interviews. Contact information was collected anonymously.

**Instrumentation**
Respondents completed an online survey. Those students who voluntarily provided contact information via the survey, not connected to their survey responses, were then contacted by email to arrange in person or phone interviews. The semi-structured interviews were recorded with an audio device. Pseudonyms were used for transcription of the interviews to protect students’ identities. Data was coded and analyzed in Statistical Package for the Social Sciences (IBM SPSS Windows, version 25.0; IBM Corp., Armonk, NY, 2017). Results from the quantitative data were used to fine tune open-ended, qualitative interview questions. Interviews were transcribed, coded thematically, and evaluated with a social justice lens. After transcription, recordings were destroyed.

**Survey.** Gibson’s Disability Identity Development Scale (2011; see Appendix M) was modified for a college student audience, both traditional age, 18 to 24 years, and nontraditional age, 24 plus years. Refer to Appendix L for Qualtrics survey. Disability types were updated to present diagnostic terminology. Survey questions were added to collect additional demographic data on current class standing, veteran status, transition planning experience, type of institution attended, timing of disclosure, higher education accommodations, current job, job accommodations, future career, desirable future accommodations, and SSI/SSDI. No changes were made to the scale portion of Gibson’s instrument, which has been assessed for content validity and reliability by expert panel and pilot group. Internal consistency was determined by Cronbach’s coefficient alpha of .73 (Gibson, n.d.).

To assure anonymity, pursuant to IRB guideline on protected information, two Qualtrics surveys were hyperlinked. Respondents experienced a slight pause but perceived only one survey. The first survey collected all demographic information and scale, while the second separately collected voluntary contact information for follow-up interview.

Language clarifications, such as definitions, were made to assure college student audience would understand higher education and disability jargon. Concepts, such as disclosure, accommodations, and transition plan were explained using approachable language. The institution’s Disability Services Director and disability expert provided guidance on word choice, in particular for accommodations, assuring student understanding and familiarity.

Survey questions were also revised to provide students alternative response opportunities, e.g. decline to state, unknown, or other, in which respondents were able to provide additional information in a blank textbox. These efforts were made to assure that respondents’ voices were unfettered.

**Interview protocol.** Per IRB requirement, an initial or proposed interview script was created based on a priori observations in the literature (see Appendix N). The interview was designed to be semi-structured, allowing for responsiveness to participant input and open-ended to solicit broad uninfluenced responses (Merriam & Tisdell, 2016). The interview script included five broad questions, each with several sub questions, used only when needed to prompt response.

To preserve anonymity, survey responses were not connected to interviewee contact information; therefore, the interview was designed both to collect survey data again as well as expand understanding as typifies the sequential explanatory design. The intent was to collect qualitative results to help explain quantitative findings. Interpretation and integration mandated repeating survey questions and administration of scale. Some shared content included institution type, veteran status, transition planning experience, timing of disclosure, accommodations, SSI/SSDI, current job, job accommodations, future career, and desired future job accommodations.
During the interview, participants were not required to reveal their disability, but allowed to volunteer how they identified. Instead, the interview addressed questions about the visibility of their disability. Overall, interview questions were designed to capture participants’ self-identification of disability, educational experience, use and perceptions of accommodations in both higher education and the workforce; ability to self-advocate, timing and motivation of disclosure, perceived attitudes toward disability, engagement or sense of belonging in a disability community, role models with disability, denial of support, overcompensation, hiding disability, and perception of disability in general. Additionally, Gibson’s Disability Identity Development Scale (2011) was administered, scored and shared with participants for their feedback.

In response to the quantitative survey data, the interview script underwent minor changes (See Appendix O). With regard to educational experience, the interview was adapted from the survey to include questions about type of high school attended, public or private in an attempt to explain the lack of transition planning experience of respondents. Clarification about the meaning of visibility of disability was also provided to interviewees when it was discovered that the first interviewee reported situational nature of visibility.

Data Analysis

All quantitative analysis was conducted in SPSS statistical package (IBM SPSS Windows, version 25.0; IBM Corp., Armonk, NY, 2017). The research design called for Chi-Square analysis of categorical variables. Pearson Correlation was conducted to determine any significant association between continuous variables.

Variables. Variables of interest include stage of disability identity development, timing of disclosure, gender (two levels), ethnicity (two levels), veteran status (two levels), transition planning experience (two levels), visibility of disability (two levels), and Social Security Disability Insurance recipient (two levels). Continuous variables were used for Gibson’s scaled score and timing of disclosure. All others variables were categorical.

Interviewer identity and reflexivity. To address reflexivity, the researcher was cognizant of the participant-researcher relationship during data collection and analysis (Merriam & Tisdell, 2016). The researcher made every effort to remain objective and avoid influencing participants’ responses with both survey language and interview dialogue.

The researcher identifies as a parent of a college student with a disability with a personal interest in increasing the access and outcomes of students with disabilities. To be transparent, interviewees were made aware of familial relation and advocacy affiliation.

Findings

Descriptive Statistics

Of the 46 respondents who attempted the survey, three failed to complete all questions, resulting in missing values. Those three incomplete cases were removed from the dataset. All 43 remaining complete responses were used in the final analysis. The following demographic characteristics can be found in Table 1 (see Appendix A) and measures of central tendency in Table 2 (see Appendix B).

Gibson’s Disability Identity Development Stage distributed near equally between Stage 2: Realization (53.5%) and Stage 3: Acceptance (46.5%) with only a slightly higher percentage (7%) in the former stage. There were no respondents who scored within the Stage 1 range (12-18), which typifies childhood, but in the fluid model, may exhibit in adulthood (Gibson, 2006).
For that reason, analysis proceeded with a comparison of two groups, Stage 2: Realization and Stage 3: Acceptance, instead of all three stages.

Most respondents elected to disclose their disability for the purpose of seeking accommodations at time of enrollment (53.5%). Others disclosed shortly thereafter at almost a declining rate each semester: first semester (11.6%), second semester (7.0%), fourth semester (11.6%), sixth semester (4.7%), seventh semester (4.7%), eighth semester (4.7%), tenth plus semester (2.3%). On average, respondents disclosed their disability 1.93 semesters from time of their enrollment (see Table 2).

The large majority of survey participants were female (76.7%) and Caucasian (76.7%). Most also had no transition planning experience (65.1%), possessed invisible disabilities (86.0%), were not recipients of SSI/SSDI (88.4%), and were domestic students (90.7%) or reported a U.S. K-12 experience (95.3%). There were absolutely no veteran respondents (0.0%; see Table 1). The average respondent age was 21.24 years and they were currently enrolled in their 3.49 year of college or junior year (see Table 2).

Respondents reported the following disability types in descending frequency: Psychiatric/psychological (23), Attention Deficit Hyperactivity Disorder (13), Learning Disability (10), Medical (8), Neurological (7), Physical or Musculoskeletal (6), and Deaf (2; see Table 3). When provided an opportunity to report all disability types that apply, respondents reported one (48.8%), two (39.5%), three (9.3%), or four (2.3%) disabilities (see Table 4). Most respondents reported disability onset between six and ten years of age (25.6%; see Table 5). Collapsing those intervals demonstrated that the vast majority of respondents identified onset preceding their college enrollment (86.0%; see Table 6). Others identified onset during college (11.6 %) within the traditional college age range, 18 to 24 years (9.3%), and within the nontraditional college age range, 24 plus years (1.0%; see Table 6).

**Hypothesis 1.** College students with disabilities who disclose their disability for the purpose of seeking accommodations exhibited Stage 3: Acceptance on Gibson's Disability Identity Development Model.

This hypothesis was rejected as the majority of respondents exhibited Stage 2: Realization (53.5%), not Stage 3: Acceptance (46.5%), on Gibson’s Disability Identity Development Model with a mean score of 35.42 (see Table 2), situated on the cusp of score intervals for Stage 2 (19-35) and Stage 3 (36-48). Refer to Figure 1 or see Appendix M for Gibson’s Disability Identity Development Model.

**Hypothesis 2.** College students with disabilities and concurrent time of disclosure of disability with enrollment are more likely to disclose than those with non-concurrent time of disclosure of disability with enrollment and exhibit Stage 3: Acceptance on Gibson's Disability Identity Development Model.

This hypothesis was accepted. A Chi-square test for independence (with Yates Continuity Correction) indicated a significant association between Disability Identity Development Stage and time of disclosure with enrollment, $\chi^2(1, n = 43) = 8.66, p = .003, \phi = .50$. 

<table>
<thead>
<tr>
<th>Stage 2</th>
<th>Stage 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7: Chi Squared Test for Independence between Disability Identity Development Stage and Disclosure at Enrollment (Using Yates Continuity Correction for a 2 x 2 Table)
A Pearson correlation coefficient was also utilized to determine the relationship between time of disclosure and disability identity stage (as measured by Gibson’s scaled score), revealing a significant negative correlation so the hypothesis was accepted, \( r = -0.29, n = 42, p = .03 \), with higher levels of Gibson’s scaled score associated with earlier disclosure. One case reporting a disclosure time of 10 plus semesters from time of enrollment was removed \((n = 42)\), in order to change time of disclosure variable from categorical to continuous. Given the directional nature of the hypothesis, a one-tailed Pearson correlation was used.

\textbf{Hypothesis 2.2.} College students with disabilities and female gender are more likely to disclose than those who are male and exhibit Stage 3: Acceptance on Gibson’s Disability Identity Development Model.

This hypothesis was rejected. A Chi-square test for independence (with Yates Continuity Correction) indicated no significant association between Disability Identity Development Stage and gender, \( \chi^2 (1, n = 42) = .00, p = 1.00, \phi = -.03 \).

More females (76.7\%) than males (20.9\%) were exhibited in the sample. One student reported being transgender (2.3\%; see Table 1). In order to have adequate power, said case was removed for Chi-square analysis purposes \((n = 42)\).

\textbf{Table 8: Chi Squared Test for Independence between Disability Identity Development Stage and Gender (Using Yates Continuity Correction for a 2 x 2 Table)}

<table>
<thead>
<tr>
<th>Gender</th>
<th>Stage 2</th>
<th>Stage 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Female</td>
<td>17</td>
<td>40.5</td>
</tr>
<tr>
<td>Male</td>
<td>5</td>
<td>11.9</td>
</tr>
</tbody>
</table>

\textbf{Hypothesis 2.3.} College Students with disabilities and Caucasian/White ethnicity are more likely to disclose than minority students with disabilities and exhibit Stage 3: Acceptance on Gibson’s Disability Identity Development Model.

This hypothesis was rejected. A Chi-square test for independence (with Yates Continuity Correction) indicated no significant association between Disability Identity Development Stage and minority status, \( \chi^2 (1, n = 43) = .01, p = .91, \phi = -.07 \).

Most respondents reported Caucasian/White (76.7\%). The remaining included Asian American/Asian (7.0\%), African American/African (9.3\%), and Latino American/Latino (7.0\%). The latter three were collapsed into a Minority (23.3\%) category, \( n = 43 \); see Table 1.
**Hypothesis 2.4.** College students with disabilities and veteran status are less likely to disclose than those without veteran status and exhibit Stage 2: Realization on Gibson's Disability Identity Development Model.

None of the respondents reported having veteran status. At the time of this report, no data was available on the percentage of veterans within the population to gauge expected frequency.

**Hypothesis 2.5.** College students with disabilities and transition planning experience are more likely to disclose than those without transition planning experience and exhibit Stage 3: Acceptance on Gibson's Disability Identity Development Model.

This hypothesis was rejected. A Chi-square test for independence (with Yates Continuity Correction) indicated no significant association between Disability Identity Development Stage and transition planning experience, $\chi^2 (1, n = 41) = .10, p = .749, phi = .10$.

Most respondents reported no transition planning experience (65.1%). Two responded transition planning experience unknown (4.7%), and the remainder reported transition planning experience (30.2%; see Table 1). For analysis purposes, unknown cases were removed ($n = 41$).

**Table 9: Chi Squared Test for Independence between Disability Identity Development Stage and Minority Status (Using Yates Continuity Correction for a 2 x 2 Table)**

<table>
<thead>
<tr>
<th>Minority Status</th>
<th>Stage 2</th>
<th>/</th>
<th>Stage 3</th>
<th>/</th>
<th>$\chi^2$ (1)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>17</td>
<td>39.5</td>
<td>16</td>
<td>37.2</td>
<td>.01</td>
<td>.913</td>
</tr>
<tr>
<td>Minority</td>
<td>6</td>
<td>14.0</td>
<td>4</td>
<td>9.3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Hypothesis 2.6.** College students with disabilities with visible type disability are more likely to disclose than those with non-visible type disabilities and exhibit Stage 3: Acceptance on Gibson's Disability Identity Development Model.

This hypothesis was rejected. A Chi-square test for independence (with Yates Continuity Correction) indicated no significant association between Disability Identity Development Stage and visibility of disability, $\chi^2 (1, n = 43) = .39, p = .53, phi = .16$.

**Table 10: Chi Squared Test for Independence between Disability Identity Development Stage and Transition Planning Experience (Using Yates Continuity Correction for a 2 x 2 Table)**

<table>
<thead>
<tr>
<th>TP Experience</th>
<th>Stage 2</th>
<th>/</th>
<th>Stage 3</th>
<th>/</th>
<th>$\chi^2$ (1)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transition Plan</td>
<td>6</td>
<td>14.6</td>
<td>7</td>
<td>17.1</td>
<td>.10</td>
<td>.749</td>
</tr>
<tr>
<td>No Transition Plan</td>
<td>16</td>
<td>39.0</td>
<td>12</td>
<td>29.3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Most respondents reported an invisible disability (86.0%). Disability types collected on
the survey were categorized as visible or invisible. Many respondents indicated both, and in that
instance, were recorded as visible. Respondents reported visible disability (7.0%) and both
(7.0%; see Table 1). The three respondents who reported both were categorized as visible for the
purpose of data analysis, resulting in overall, invisible (86.0%) and visible (14%), n = 43.

Table 11: Chi Squared Test for Independence between Disability Identity Development Stage and Visibility of Disability (Using Yates Continuity Correction for a 2 x 2 Table)

<table>
<thead>
<tr>
<th>Visibility</th>
<th>Stage 2</th>
<th></th>
<th>Stage 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Visible</td>
<td>2</td>
<td>4.7</td>
<td>4</td>
<td>9.3</td>
</tr>
<tr>
<td>Invisible</td>
<td>21</td>
<td>48.8</td>
<td>16</td>
<td>37.2</td>
</tr>
</tbody>
</table>

**Hypothesis 2.7.** College students with disabilities with no SSI/SSDI are more likely to
disclose than those with SSI/SSDI and exhibit Stage 3: Acceptance on Gibson’s Disability
Identity Development Model.

This hypothesis was rejected. A Chi-square test for independence (with Yates Continuity
Correction) indicated no significant association between Disability Identity Development Stage
and SSI/SSDI, $\chi^2 (1, n = 42) = .00$, $p = 1.00$, phi = .02.

The majority of respondents reported not receiving SSI/SSDI (88.4%). Four students
reported receiving SSI/SSDI (9.3%) and one declined to state (2.3%; see Table 1). For the
purpose of data analysis, the declined to state case was removed ($n = 42$).

Table 12: Chi Squared Test for Independence between Disability Identity Development Stage and SSI/SSDI (Using Yates Continuity Correction for a 2 x 2 Table)

<table>
<thead>
<tr>
<th>SSSI/SSDI Status</th>
<th>Stage 2</th>
<th></th>
<th>Stage 3</th>
<th></th>
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<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
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<td>4.8</td>
<td>2</td>
<td>4.8</td>
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<td>20</td>
<td>47.6</td>
<td>18</td>
<td>42.9</td>
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</table>

*Note. SSI = Supplemental Security Income; SSDI = Social Security Disability Insurance.*

**Conclusion.** Quantitative analysis determined only one significant association, disability
identity stage and time of disclosure. This may be attributable to a small sample size. A larger
sample would allow for more precise analysis.

**Qualitative and Mixed Methods Findings**
These findings addressed research questions 3, 4, and 5. Research question 3 was drawn from six voluntary interviews. Research question 4 was drawn from open response survey items. Research question 5 integrated the quantitative findings with the qualitative data.

**Research question 3.** What factors do college students with disabilities identify that impact disclosure and accommodation seeking?

Interviewee voices, from which this question was drawn, were not as representative as the survey sample. All interviewees reported invisible disabilities with exception of one, who stated that progression would necessitate a wheel chair, and current service animal drew some attention. Disabilities represented by interviewees included Psychiatric/psychological, Attention Deficit Hyperactivity Disorder, Learning Disability, Medical, Physical or Musculoskeletal, and Dyslexia, and Dysgraphia. The majority scored Stage 3: Acceptance (83.3%), were Caucasian female (83.3%) with only one male voice represented (16.6%) and one African American female (16.6%). All reported limited transition planning experience; however, most also reported attending private school with limited special education services. All were traditional aged and enrolled in later years of undergraduate or beginning graduate school with exception of one freshman. Half reported disclosing at time of enrollment. Most received accommodations for extended testing time, flexible deadlines, and consideration for absences, but despite accommodation approval, voiced their limited use of accommodations. Most only “took advantage” of extended testing time. Here, their word choice illuminates undeserving feelings toward their accommodations. Consensus was that having accommodations, even if they should not use them, provided a safety net, utilized when most needed.

These college students with disabilities identified several factors that impacted their decision to disclose for the purpose of seeking accommodations. Some factors were identified that discourage disclosure while others served to foster disclosure. Concerns of meeting eligibility criteria for accommodations lead to avoidance of disclosure. Participants voiced uncertainty about mental illness eligibility, doubts of legitimacy, both internally and externally ascribed, or desired to avoid any associated stigma surrounding mental illness altogether. A denial of support, like that in Gibson’s Stage 2: Realization (2011), “‘Superman/woman’ complex” (2006), was also identified as a discourager of disclosure. Interviewees, possibly recounting only the positive, highlighted their academic achievements, high work ethic, and drive to overcompensate for their disability. Most interviewees did recount rare times when without supports they faltered academically. Often, they voiced their own accountability, claiming they needed to work even harder than their peers without disabilities. For this reason, many did not explore their eligibility for accommodations earlier or simply assumed mental health issues would not qualify them until someone intervened, advising them to disclose.

Peer or role models with disabilities, or authority figures were often attributed with ultimately encouraging disclosure. Those authorities included professors or other sources of available institutional guidance. In some cases, an academic crisis did prompt a need to disclose, and a professional recommendation followed, sometimes outside the bounds of higher education. One interviewee, who did not seek accommodations for an existing anxiety diagnosis, remarked that her family doctor who mostly worked with students, encouraged her disclosure when she was diagnosed with Crohn’s disease. Interviewees voiced that their invisible disabilities were much less likely to be disclosed because others might doubt their legitimacy. At times, faculty may have been dismissive of their need of accommodation. Despite these students knowing about resources available for students with disabilities, they did not identify themselves as eligible or deserving of accommodations. They internalized their doubts and persisted in creating
their own unique ways to manage their disability until prompted by a peer with a disability or encouraged by a professional, they sought accommodations. For those who avoided disclosure, it was not a lack of how to knowledge, but a choice to internalize ownership of their own accommodating efforts, donning their superhero capes in true superman/woman fashion (Gibson, 2006).

**Research question 4.** What accommodations do college students with disabilities receive in higher education and desire in the workplace?

**Higher education accommodations.** Respondents reported receiving the following surveyed accommodations in higher education in order of descending frequency: Extended testing time (35), Alternative test location (34), Consideration for absences (20), Flexible deadlines on assignments (17), Permission to record lectures (13), Permission to leave or move about classroom (12), Access to class PowerPoint or other presentation materials (11), Preferential seating (9), Note taker (6), Accessible print materials (5), Hearing impairment services (1). Respondents additionally reported other accommodations: Priority registration for courses (3), Assistive technology device (2), Audio format textbook (2), Food or drink in classroom (2), Service animal (1). Respondents were permitted to report all of their accommodations, totaling 173 reported accommodations (see Table 13).

**Current job.** Respondents reported current job description in descending frequency: Student only (22), Restaurant (4), Technical (4), Intern (3), Public safety (3), Social service (3), Childcare (1), Office (1), Research (1), Retail (1), Teacher (1), Work study (1; see Table 14). The majority of respondents reported having no accommodations in their current job (88.4%). Three respondents identified flexible schedule (7%). One respondent reported service animal (2.3%) and another reported technical support (2.3%; see Table 15).

**Future careers.** Future careers of respondents include Medical (14), Social Work (4), Undecided (4), Academic/Research (3), Biomedical Engineering (3), Law (2), Marketing (2), Other Engineering (2), Public Health Administration (2), Speech Language Pathology (2), Criminal Justice (1), Culinary (1), Finance (1), Intelligence (1), Military (1), Philanthropist (1), Teacher (1), Technology (1), Unknown (1; see Table 16). The majority of respondents reported future careers related to healthcare professions (e.g. medical, social work, biomedical engineer, public health administration, and speech language pathology).

**Future workplace accommodations.** College students with disabilities report a desire for the following accommodations in their future workplace: None (12), Flexible schedule (10), Unknown (7), Consideration for absences (5), Flexible deadlines (4), Accessible environment (3), Assistive technology (3), Remote work (3), Supportive environment (3), Clear direction (1), Distraction reduced environment (1), Food and drink permitted (1), Memory support (1), Reduced workload (1), Routine (1), Service animal (1), Visual aids (1; see Table 17).

**Research question 5.** How do qualitative findings enhance understanding of quantitative results and lead to identification of inequalities for college students with disabilities?

While the survey captured greater variation, both Stage 2: Realization and Stage 3: Acceptance, interviews mostly provided the voices of those most achieved, Stage 3: Acceptance, and potentially, those more vocal on disability. Blockmans (2015) asserts that the voluntary nature of respondents likely contributes to their comfort with disability-disclosure. On the other hand, the voices of those with a less developed disability identity lacked representation, suggesting that Stage 2: Realization as well as Stage 1: Passive Awareness voices may falter at times. Students with disabilities, once approved for accommodations, still must self-advocate with faculty. Should they avoid these essential interactions, they may miss out on valuable
supports and jeopardize degree completion. The inability to advocate with faculty would limit a student with a disability to utilize accommodations, which may result in an academic crisis, adversely affecting their persistence. Institutional policies that require students to self-advocate with faculty to implement approved accommodations therefore potentially jeopardize equitable outcomes for students with disabilities, who lack Stage 3: Acceptance.

Despite the interviewees mostly scoring within Stage 3: Acceptance range, only half chose to disclose at time of enrollment. To explain this, many relayed flight or flight stories. While some chose to avoid disclosure, others shared stories of how past bad experiences seeking support while in K-12 prepared them for advocacy. They recognized they would have to be persistent to gain accommodations, and at times, challenged K-12 teachers or later faculty resistance. Instead of responding with avoidance, these interviewees therefore became more proactive, and upon immediate transition to higher education, disclosed at time of enrollment. Most interviewees shared experiences in K-12 in which others questioned their invisible disability. As a result, they readied to prove their disability to potential doubters in postsecondary. Assuring equitable outcomes for students with disabilities demands that concerns of legitimacy be addressed in both secondary and postsecondary. Students with disabilities must be assured of their eligibility and rights to accommodations before enrollment.

No students reporting veteran status in the survey and resulting interviews may be a telling sign. At the time of this report, numbers of veterans in the population were unavailable, but merit attention in future study. According to research, military culture holds stigmatized attitudes toward expressing weakness, associated with disability that hinders veteran student identification with disability (Burnett & Segoria, 2009; Shackelford, 2009). Rising numbers of veterans with disabilities have enrolled in higher education Post-9/11 Veterans Educational Assistance Act of 2008 (also known as the New GI Bill; Madaus, 2011; Shackelford, 2009). Over two million veterans are anticipated to enroll in higher education (ACE, 2008) and that as many as 25 percent of these students will have hidden disabilities, such as traumatic brain injury, posttraumatic stress disorder, and other emotional disabilities” (p. 12). Additionally, disabilities of veterans exhibit a trend in non-apparent disabilities, which have been show to further inhibit disclosure (Shackelford, 2009). Procuring VA documentation, required to receive accommodations, also presents challenges (Shackelford, 2009). To assure equitable outcomes for veterans may require transformation of a culture that assigns the stigma of weakness to disability.

Qualitative findings additionally enhanced understanding of the low survey report of transition planning experience (30.2%). The survey failed to consider that students having attended private schools would not have experienced transition planning. Future modification of the survey in subsequent study may include more questions about student K-12 experience to better evaluate the effectiveness of transition planning experience and potential inequalities with regard to college readiness and transition.

The qualitative findings also focused the lens of this study on workplace discrimination concerns and avoidance of stigma, particularly related to mental health disabilities. Several interview participants voiced their choice to hide their disability from a potential employer until after a job offer was made, and additionally, shared their need to find a supportive work environment. Concerns of workplace discrimination existed in their narrative.

However, several interview participants also voiced greater acceptance among those working in the medical field. Upon reexamination of the quantitative data in light of these student voices, a reduced need for current accommodations and future accommodations was
observed for those pursuing future careers in healthcare related professions, potentially explaining the low report for future job accommodations among survey participants with healthcare career types. The need for accommodations may be reduced in these environments. Initial Chi-square analysis yielded no significant association. Subsequent study may address more thorough analysis of future career type or field and need of accommodation to determine if some fields are more receptive to people with disabilities than others.

For any college student, much uncertainty exists surrounding future career and workplace. Interviewees shared an additional uncertainty about what their needs might be in that future workplace. All highlighted the desire to find a flexible and understanding workplace, reiterating much of the survey data, such as flexible schedule, ability to work remotely, and consideration of absences. Interviewees highlighted the need to have the ability to miss work, even if they went unpaid, and voiced fears of job security, given the impact of their disability on attendance. These added concerns exacerbate an already challenging transition and if addressed, may increase the equitable outcomes in employment for people with disabilities.

**Discussion**

This study determined a significant association between Gibson’s Disability Identity Development stage and time of disclosure at enrollment. Higher scores on Gibson’s scale were also associated with earlier time of disclosure. In other words, students with disabilities, who disclose earlier appear to exhibit a more achieved disability identity. Since earlier disclosure benefits student retention, supporting disability identity development is then linked with increasing student degree attainment, and ultimately, increasing entrance of people with disabilities into the workforce. Therefore, efforts aimed at developing disability identity should span the educational pipeline and be integral to those working in the transition of students with disabilities from secondary to postsecondary education. Practitioners need also address the factors identified that present barriers to disclosure and increase efforts that support disclosure. Forecasted future workplace accommodations, although low, emphasis the importance of a receptive and flexible future work environment. Efforts to minimize the impact of stigma and to address uncertainty surrounding anticipated future workplace will support these burgeoning workforce entrants, potentially leading to more equitable outcomes.

**Limitations.** Several limitations presented in this research that merit consideration and offer guidance for future research. A small sample size placed constraints on generalizability. Sampling occurred at a private, four-year institution, not representative of all colleges attended by students with disabilities. There were no respondents who were Stage 1: Passive Awareness and there were no veterans. There were also significantly more females, students with invisible disability types, and Caucasians. The majority of respondents reported future careers related to healthcare professions (e.g. medical, social work, biomedical engineer, public health administration, and speech language pathology), and reported a reduced need for future workplace accommodations, given their anticipated patient-centered workplace, which may be more responsive to disability.

Interviews, while enriching the depth of the study, also presented several limitations. Ultimately, only six of those who responded with contact information volunteered to be interviewed. Interviews were conducted during the summer, potentially limiting the availability of interviewees. Among those participants, most scored Stage 3: Acceptance. Given their choice to participate, it follows interview volunteers tend to be more vocal or desire to advocate on the
subject of disability in accordance with Gibson’s Stage 3: Acceptance. Interviewees also tend to report in a more positive light, exhibiting the Hawthorne effect (Leedy & Ormrod, 2016). Delayed self-reported data contains potential bias from selective memory, telescoping, attribution, or exaggeration. Therefore, participant voices may not have fully recounted experiences of stigma or adversity. Additionally, this preliminary study lacked interrater reliability (Leedy & Ormrod, 2016), easily remedied in future study with multiple coders.

**Future research.** Prior research on disability identity development is limited. This study is the first use of Gibson’s Disability Identity Development Scale (2011) with college students with disabilities. To address limited generalization, future research should include multiple institutions, both public and private, as well as those with open access, such as community colleges, which potentially have greater diversity in student disability type and overall demographics. Future research also need capture student decision making at or before disclosure. Ideally, recruitment should explore transitioning high school students, Vocational Rehabilitation transition participants, incoming college freshmen, or college students who have chosen not to disclose. Likewise, future timing need be more conducive to college student schedules to capture greater participation.

In addition to replicating this research with a more diverse sample, more research overall is needed to identify how disability identity factors into those dropping out of the educational pipeline. Examination of disability identity development should occur throughout primary, secondary, postsecondary, and employment. Little is known about how practitioners can support disability identity development. However, awareness of disability identity itself can benefit efforts to overcome resistance to support, discourage overcompensation, and promote self-advocacy.

**Implications and Recommendations for Practice.** Spanning the educational pipeline, policy makers can implement best practices that better support students with disabilities. Although it often requires generations and cultural change, the roots of inclusion continue to grow. Parents, often drafted into advocacy for their students with disabilities, continue to challenge the status quo. However, parental power declines as students with disabilities progress to higher education where applicable law changes and adult students are required to self-advocate. Little attention has been paid to their disability identity development, and despite being capable, some falter at owning an identity they are required to assert to staff, faculty, and potentially, peers, when they are inadvertently outed. Having struggled with a stigmatized identity in K-12, many incoming college students elect to start anew, shake off their stigmatized identity, and attempt to work harder than they ever have before. Even with “superhero” capes on, they may struggle as they transition, a time of great difficulty for any college student with or without disability. Policy makers can respond to the voices of these students, implement professional development to better train those serving these students to recognize overcompensation and denial of support, and reconsider applicable law. Are we really assuring the rights of students with disabilities when ADA is inconsistently interpreted from institution to institution with variances in provided services and accommodations? Student retention efforts need to identify ways to better support the persistence of students with disabilities and bolster disability identity development spanning the educational pipeline.

**Primary.** Inclusive efforts in K-12 began to realize decades ago; however, students with disabilities continue to encounter eligibility obstacles, poor practices, administrative shortcomings, and inconsistent support from general classroom teachers, often ill-equipped to differentiate or make their instruction accessible to students with disabilities. Given their lack of
expertise in special education, some general classroom teachers even question students with invisible disabilities as avoidant behavior often appears as defiance or laziness. Such doubts and resistance to supporting students with disabilities sends a hidden message. These embedded communications are microaggressions, and they undermine student disability identity development. They come from both teachers and peers, and reflect pervasive ableism in a society, in which the mocking of disability is sometimes mainstream. Students with disabilities need heroes like themselves with disabilities; role models with disability are lacking at this Stage 1: Passive Awareness (Gibson, 2006). Practitioners should expose these young students to the voices of people with disabilities in classroom literature and with guest speakers. These lessons, coupled with role playing activities, can work to increase empathy for all students and minimize stigma. As a whole, the increased awareness of educators and classmates will ameliorate the adverse effects of ableism for future generations to come.

Secondary. Adolescence presents additional challenges. As students struggle to assert their independence, they become more concerned with how their peers perceive them. Gone are the powerful praises of their parents, who no longer have the influential position they once held in their young child’s eyes. To avoid appearing different, teenage students with disabilities will deny support. General education and special educators unaware of this “superman/woman” complex” (Gibson, 2006) will fall hook, line, and sinker, and happily, reduce their already overburdened workload. A resistant student will often opt out if their special education services require them to be pulled-out of the general classroom, separating them from their peers. This may result in students missing a valuable metacognition lesson, losing service minutes, declining in study skills, falling behind without weekly check-ins, and the like. Practitioners in secondary education must be made aware of Gibson’s Disability Identity Development Model. Special educators should administer Gibson’s Disability Identity Development Scale as part of annual IEP reevaluations and formal Transition Plan. This information may be shared with students who may self-reflect and identify areas of growth. Additionally, high schools should be encouraged to develop disability community through inclusive student organizations, which support disclosure skill development, combat stigma through peer support, and expose students to role models with disability.

In addition to understanding the students with disabilities while in high school, disability identity development provides a roadmap for preparing students to transition to life after high school. Current Transition Planning does little to address such self-awareness required of self-advocacy. Students with disabilities must gain sufficient comfort in their disability identity in order to expose themselves to student personnel staff and faculty they will encounter in college. K-12 college counselors, who are overburdened themselves, must encourage students with disabilities to disclose when they enroll. Many higher education institutions do communicate disability policies as part of admissions, but these overwhelmed and stigma avoidant high school students may require additional nudging. Furthermore, public policy should mandate curriculum on disability identity as part of ongoing professional development and teacher training programs.

Postsecondary. Microaggressions do not go unnoticed by students with disabilities, who perhaps, by the time they reach college are unduly willing to shake off any part of their identity connected with disability. Higher education policies surrounding disclosure need to be attentive to disability identity development. Potentially, college students with disabilities may not be developmentally ready to disclose and/or self-advocate. Because so many students are reluctant or avoid seeking support, higher education faculty should adopt Universal Instructional Design, providing essential supports across the board without students having to “out” themselves. In
some cases, form-like accommodation contracts have been used to support student and faculty interaction. One interviewed graduate student shared use of a contract made negotiating terms of class attendance and accommodation interpretation much more manageable. These are not mandated or common practices, but should be adopted universally. Many campuses have also strived to create disability organizations, which support essential community engagement, provide peer role models, and combat stigma. Several interviewed students noted participation in such advocacy groups both on campus and online. Like their K-12 peer educators, university faculty, content, not pedagogy experts, require even greater support in identifying how various invisible disabilities exhibit in the classroom and how to better support students with disabilities. Such education can counter questions of legitimacy that undermine student disability identity development. Many students reported cases of both positive and negative interactions with faculty. This inconsistency caused students to avoid use of accommodations. They were often amazed at faculty understanding and flexibility, when it occurred, because of prior experiences with more rigid professors.

Student personnel professionals working in admissions must do more than simply assure students with disabilities are aware of the process for disclosure and accommodation seeking. Particular attention need be made to make students comfortable sharing stigmatized mental illness identities. Students need to better understand what disabilities meet eligibility requirements. Likewise, they should be informed of all types of accommodations that may be available to them. Higher education professionals need to understand that accommodations in higher education may vary from those in K-12, and it may require time for students to identify what works. Those working in disabilities services must also understand that students may not possess awareness of what accommodations they may need in higher education learning settings, just as they may not know where they stand in terms of their own disability identity development. Interviewees did not recognize their own repertoire of overcompensation strategies. Repeatedly, they voiced going above and beyond to avoid their disability wreaking havoc on their academic performance.

Disability services personnel, who engage incoming freshmen, should assess student disability identity development. In addition to supporting the administration of accommodations, personnel should follow-up with more frequent check-ins to ascertain student disability identity development over time and taper off with achievement. Students may have accommodations on paper, but require additional support in their implementation with self-advocacy coaching. College administrators can also do their part to foster more inclusive campuses and fund faculty training. Better privacy policies surrounding students with disabilities would additionally safeguard students.

Workforce. Many of the accommodations that survey and interview participants identified for higher education resembled those desired in their future workplace. In this way, higher education informs industry about future workforce needs. For students with disabilities, those needs include future workplace accommodations. The students in this study reported extended time, consideration of absences, and flexible deadlines in higher education. In their future work, many indicated no accommodation, but uncertainty persisted in a number of unknowns. Flexible schedule, remote work location, and a supportive work environment were reiterated. The effects of stigma lingered on this end of the educational pipeline. The culmination of student experiences, both good and bad, potentially prompted students to don superhero capes again and deny future need of accommodations. However, the stand out message of these future
workers was a responsive and understanding employer, who would allow for flexibility in a supportive environment, resembling that sought on their campuses.

Students also voiced concerns of job security, resulting from missed work, workplace discrimination, and fear of not being hired because of a disability. Stigma and ableism span the pipeline. Like their education counterparts, those working to identify workplace accommodations need to recognize that those they serve may lack self-awareness or resist support. Evaluating their disability identity development with Gibson’s Disability Identity Development Scale (2011) presents a great opportunity to begin identifying a successful employment placement and potential accommodations. Vocational Rehabilitation, partnering with job coaches, can support soft and technical job skill development. Gibson’s Disability Identity Development Scale (2011) presents a new tool for identifying and combating resistance to essential workplace supports that will lead to continued substantial gainful activity. Given the rise in psychiatric/psychological disabilities, employers additionally need invest in mental health counseling services for employees.

**Conclusion.** This study showed that disability identity achievement is associated with earlier disclosure. Earlier disclosure increases the likelihood of students with disabilities receiving accommodations in a timely manner, potentially averting academic crisis, supports student persistence, and results in degree attainment, which also has been linked to greater likelihood of employment. Efforts to address developing disability identity should be explored spanning the educational pipeline to increase equitable outcomes for people with disabilities.
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Social Security Administration


Appendix A

Table 1  
*Demographic Characteristics of Participants (N = 43)*

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*Note. Totals of percentages are not 100 for every characteristic because of rounding.*
Appendix B

Table 2

*Participant Characteristics (N = 43)*

<table>
<thead>
<tr>
<th>Characteristic</th>
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</thead>
<tbody>
<tr>
<td>Age at time of survey</td>
<td>21.14</td>
<td>1.922</td>
</tr>
<tr>
<td>Year in college</td>
<td>3.49</td>
<td>1.203</td>
</tr>
<tr>
<td>Disability identity development score</td>
<td>35.42</td>
<td>3.692</td>
</tr>
<tr>
<td>Timing of disclosure in semesters</td>
<td>1.93</td>
<td>2.823</td>
</tr>
</tbody>
</table>
**Appendix C**

**Table 3**  
*Frequency of Reported Disability Types*

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Reported Disability Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>Psychiatric/Psychological (e.g. anxiety disorder, major depression, etc.)</td>
</tr>
<tr>
<td>13</td>
<td>Attention Deficit Hyperactivity Disorder</td>
</tr>
<tr>
<td>10</td>
<td>Learning Disability</td>
</tr>
<tr>
<td>8</td>
<td>Medical (e.g. diabetes, asthma, etc.)</td>
</tr>
<tr>
<td>7</td>
<td>Neurological (e.g. brain stroke, etc.)</td>
</tr>
<tr>
<td>6</td>
<td>Physical or Musculoskeletal Disability (e.g. multiple sclerosis, etc.)</td>
</tr>
<tr>
<td>2</td>
<td>Deaf</td>
</tr>
</tbody>
</table>
Appendix D

Table 4

*Number of Disabilities Reported per Respondent (N=43)*

<table>
<thead>
<tr>
<th>Number of Disabilities</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>21</td>
<td>48.8</td>
</tr>
<tr>
<td>Two</td>
<td>17</td>
<td>39.5</td>
</tr>
<tr>
<td>Three</td>
<td>4</td>
<td>9.3</td>
</tr>
<tr>
<td>Four</td>
<td>1</td>
<td>2.3</td>
</tr>
</tbody>
</table>

*Note.* Total of percentages is not 100 because of rounding.
Appendix E

Table 5

*Onset of Disability Interval Frequencies (N=43)*

<table>
<thead>
<tr>
<th>Onset Interval</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth</td>
<td>4</td>
<td>9.3</td>
</tr>
<tr>
<td>1 month to 1 year</td>
<td>2</td>
<td>4.7</td>
</tr>
<tr>
<td>1 to 5 years</td>
<td>4</td>
<td>9.3</td>
</tr>
<tr>
<td>6 to 10 years</td>
<td>11</td>
<td>25.6</td>
</tr>
<tr>
<td>11 years</td>
<td>3</td>
<td>7.0</td>
</tr>
<tr>
<td>12 years</td>
<td>3</td>
<td>7.0</td>
</tr>
<tr>
<td>13 years</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>14 years</td>
<td>3</td>
<td>7.0</td>
</tr>
<tr>
<td>15 years</td>
<td>2</td>
<td>4.7</td>
</tr>
<tr>
<td>16 years</td>
<td>2</td>
<td>4.7</td>
</tr>
<tr>
<td>17 years</td>
<td>2</td>
<td>4.7</td>
</tr>
<tr>
<td>18 years</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>19 years</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>20 years</td>
<td>2</td>
<td>4.7</td>
</tr>
<tr>
<td>21 years</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>22 years</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>23 years</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>24+ years</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>Unknown</td>
<td>1</td>
<td>2.3</td>
</tr>
</tbody>
</table>

*Note.* Total of percentages is not 100 because of rounding.
Appendix F

Table 6

*Collapsed Onset of Disability Interval Frequency (N=43)*

<table>
<thead>
<tr>
<th>Collapsed Onset Interval</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to college total</td>
<td>37</td>
<td>86.0</td>
</tr>
<tr>
<td>Birth to 5 years (Pre-K age)</td>
<td>10</td>
<td>23.3</td>
</tr>
<tr>
<td>6 to 10 years (Elementary age)</td>
<td>11</td>
<td>25.6</td>
</tr>
<tr>
<td>11 to 13 years (Middle school age)</td>
<td>7</td>
<td>16.3</td>
</tr>
<tr>
<td>14 to 17 years (High school age)</td>
<td>9</td>
<td>20.9</td>
</tr>
<tr>
<td>During college total</td>
<td>5</td>
<td>11.6</td>
</tr>
<tr>
<td>18 to 23 years (Traditional college age)</td>
<td>4</td>
<td>9.3</td>
</tr>
<tr>
<td>24+ years (Nontraditional college age)</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>Unknown</td>
<td>1</td>
<td>2.3</td>
</tr>
</tbody>
</table>

*Note.* Total of percentages is not 100 because of rounding.
Appendix G

Table 13

*Frequency of Accommodations in Higher Education*

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Accommodation in HE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Surveyed</strong></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Access to class PowerPoint or other presentation materials</td>
</tr>
<tr>
<td>5</td>
<td>Accessible print materials</td>
</tr>
<tr>
<td>34</td>
<td>Alternative test location</td>
</tr>
<tr>
<td>20</td>
<td>Consideration for absences</td>
</tr>
<tr>
<td>35</td>
<td>Extended testing time</td>
</tr>
<tr>
<td>17</td>
<td>Flexible deadlines on assignments</td>
</tr>
<tr>
<td>1</td>
<td>Hearing impairment services</td>
</tr>
<tr>
<td>6</td>
<td>Note taker</td>
</tr>
<tr>
<td>12</td>
<td>Permission to leave or move about the classroom</td>
</tr>
<tr>
<td>13</td>
<td>Permission to record lectures</td>
</tr>
<tr>
<td>9</td>
<td>Preferential seating</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Assistive technology device</td>
</tr>
<tr>
<td>2</td>
<td>Audio format textbooks</td>
</tr>
<tr>
<td>2</td>
<td>Food or drink in classroom</td>
</tr>
<tr>
<td>3</td>
<td>Priority registration for courses</td>
</tr>
<tr>
<td>1</td>
<td>Service animal</td>
</tr>
</tbody>
</table>
Appendix H

Table 14

*Frequency of Current Employment*

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Current Employment Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>Student only</td>
</tr>
<tr>
<td>4</td>
<td>Restaurant</td>
</tr>
<tr>
<td>4</td>
<td>Technical</td>
</tr>
<tr>
<td>3</td>
<td>Intern</td>
</tr>
<tr>
<td>3</td>
<td>Public safety</td>
</tr>
<tr>
<td>3</td>
<td>Social service</td>
</tr>
<tr>
<td>1</td>
<td>Childcare</td>
</tr>
<tr>
<td>1</td>
<td>Office</td>
</tr>
<tr>
<td>1</td>
<td>Research</td>
</tr>
<tr>
<td>1</td>
<td>Retail</td>
</tr>
<tr>
<td>1</td>
<td>Teacher</td>
</tr>
<tr>
<td>1</td>
<td>Work study</td>
</tr>
</tbody>
</table>
Table 15

*Current Employment Accommodations (N = 43)*

<table>
<thead>
<tr>
<th>Current Job Accommodation</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>None/No response</td>
<td>38</td>
<td>88.4</td>
</tr>
<tr>
<td>Flexible schedule</td>
<td>3</td>
<td>7.0</td>
</tr>
<tr>
<td>Service animal</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>Technical support</td>
<td>1</td>
<td>2.3</td>
</tr>
</tbody>
</table>
Table 16

*Frequency of Future Career*

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Future Career Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>Medical</td>
</tr>
<tr>
<td>4</td>
<td>Social Work</td>
</tr>
<tr>
<td>4</td>
<td>Undecided</td>
</tr>
<tr>
<td>3</td>
<td>Academic/Research</td>
</tr>
<tr>
<td>3</td>
<td>Biomedical Engineering</td>
</tr>
<tr>
<td>3</td>
<td>Law</td>
</tr>
<tr>
<td>2</td>
<td>Marketing</td>
</tr>
<tr>
<td>2</td>
<td>Other Engineering</td>
</tr>
<tr>
<td>2</td>
<td>Public Health Administration</td>
</tr>
<tr>
<td>2</td>
<td>Speech Language Pathology</td>
</tr>
<tr>
<td>1</td>
<td>Criminal Justice</td>
</tr>
<tr>
<td>1</td>
<td>Culinary</td>
</tr>
<tr>
<td>1</td>
<td>Finance</td>
</tr>
<tr>
<td>1</td>
<td>Intelligence Analyst</td>
</tr>
<tr>
<td>1</td>
<td>Military</td>
</tr>
<tr>
<td>1</td>
<td>Philanthropist</td>
</tr>
<tr>
<td>1</td>
<td>Teacher</td>
</tr>
<tr>
<td>1</td>
<td>Technology</td>
</tr>
<tr>
<td>1</td>
<td>Unknown</td>
</tr>
<tr>
<td>Frequency</td>
<td>Future Accommodation</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>12</td>
<td>None</td>
</tr>
<tr>
<td>10</td>
<td>Flexible schedule</td>
</tr>
<tr>
<td>7</td>
<td>Unknown</td>
</tr>
<tr>
<td>5</td>
<td>Consideration for absences</td>
</tr>
<tr>
<td>4</td>
<td>Flexible deadlines</td>
</tr>
<tr>
<td>3</td>
<td>Accessible environment</td>
</tr>
<tr>
<td>3</td>
<td>Assistive technology</td>
</tr>
<tr>
<td>3</td>
<td>Remote work</td>
</tr>
<tr>
<td>3</td>
<td>Supportive environment</td>
</tr>
<tr>
<td>1</td>
<td>Clear direction</td>
</tr>
<tr>
<td>1</td>
<td>Distraction reduced environment</td>
</tr>
<tr>
<td>1</td>
<td>Food and drink permitted</td>
</tr>
<tr>
<td>1</td>
<td>Memory support</td>
</tr>
<tr>
<td>1</td>
<td>Reduced workload</td>
</tr>
<tr>
<td>1</td>
<td>Routine</td>
</tr>
<tr>
<td>1</td>
<td>Service animal</td>
</tr>
<tr>
<td>1</td>
<td>Visual aids</td>
</tr>
</tbody>
</table>
Appendix L
Qualtrics Survey

Default Question Block

What is your age?

- 18
- 19
- 20
- 21
- 22
- 23
- 24+

What is your ethnicity (click all that apply)?

- African American/Black
- Asian American/Asian
- Caucasian/White
- Indian American/Indian
- Latino American/Latino
- Native American/Alaska Native
- Native Hawaiian/Pacific Islander
- Other
- Decline to state

What is your gender?

- Female
- Male
- Transgender
- Other
- Decline to state

What is your current class standing?

- Freshman (Year 1)
- Sophomore (Year 2)
- Junior (Year 3)
- Senior (Year 4+)
- Graduate Student (Undergraduate degree complete)

Were you born in the United States?
Appendix L (Continued)

Qualtrics Survey

9/24/2018

 qualitative survey software

At what age (years) did you move to the United States?

In what country were you born?

What is your disability type (click all that apply)?

- [ ] Attention Deficit Hyperactivity Disorder
- [ ] Autism Spectrum Disorder
- [ ] Blind
- [ ] Deaf
- [ ] Hard of Hearing
- [ ] Learning Disability
- [ ] Low Vision
- [ ] Medical (e.g. diabetes, asthma, etc.)
- [ ] Neurological (e.g. brain injury, stroke, etc.)
- [ ] Physical or Musculoskeletal Disability (e.g. multiple sclerosis, etc.)
- [ ] Psychiatric/Psychological (e.g. anxiety disorder, major depression, etc.)
- [ ] Speech/Language
- [ ] Other, please specify in the text box below:

At what age did onset (start) of your primary disability occur?

- [ ] Birth
- [ ] 1 month to 1 year
- [ ] 1 to 5 years
- [ ] 6 to 10 years
- [ ] 11 years
- [ ] 12 years
- [ ] 13 years
- [ ] 17 years
- [ ] 18 years
- [ ] 19 years
- [ ] 20 years
- [ ] 21 years
- [ ] 22 years
- [ ] 23 years

Appendix L (Continued)

Qualtrics Survey

9/24/2018

- 14 years
- 15 years
- 16 years

Qualtrics Survey Software
- 24+ years
- Unknown

Does one or both of your parents have a disability?
- Yes
- No
- Unknown
- Decline to state

What is your mother's disability type (click all that apply)?
- Attention Deficit Hyperactivity Disorder
- Autism Spectrum Disorder
- Blind
- Deaf
- Hard of Hearing
- Learning Disability
- Low Vision
- Medical (e.g. diabetes, asthma, etc.)
- Neurological (e.g. brain injury, stroke, etc.)
- Physical or Musculoskeletal Disability (e.g. multiple sclerosis, etc.)
- Psychiatric/Psychological (e.g. anxiety disorder, major depression, etc.)
- Speech/Language
- Other, please specify in text box below:

- Unknown
- No Disability

What is your father's disability type (click all that apply)?
- Attention Deficit Hyperactivity Disorder
- Autism Spectrum Disorder
- Blind
- Deaf
- Hard of Hearing


3/8
Appendix L (Continued)

Qualtrics Survey

☐ Learning Disability
☐ Low Vision
☐ Medical (e.g. diabetes, asthma, etc.)
☐ Neurological (e.g. brain injury, stroke, etc.)
☐ Physical or Musculoskeletal Disability (e.g. multiple sclerosis, etc.)
☐ Psychiatric/Psychological (e.g. anxiety disorder, major depression, etc.)
☐ Speech/Language
☐ Other, please specify in text box below:

☐ Unknown
☐ No Disability

Does your brother or sister have a disability?

☐ Yes
☐ No
☐ Unknown
☐ Decline to state

What is your brother's disability type (click all that apply)?

☐ Attention Deficit Hyperactivity Disorder
☐ Autism Spectrum Disorder
☐ Blind
☐ Deaf
☐ Hard of Hearing
☐ Learning Disability
☐ Low Vision
☐ Medical (e.g. diabetes, asthma, etc.)
☐ Neurological (e.g. brain injury, stroke, etc.)
☐ Physical or Musculoskeletal Disability (e.g. multiple sclerosis, etc.)
☐ Psychiatric/Psychological (e.g. anxiety disorder, major depression, etc.)
☐ Speech/Language
☐ Other, please specify in text box below:

☐ Unknown
Appendix L (Continued)

Qualtrics Survey

9/24/2018

What is your sister's disability type (click all that apply)?

☐ Attention Deficit Hyperactivity Disorder
☐ Autism Spectrum Disorder
☐ Blind
☐ Deaf
☐ Hard of Hearing
☐ Learning Disability
☐ Low Vision
☐ Medical (e.g. diabetes, asthma, etc.)
☐ Neurological (e.g. brain injury, stroke, etc.)
☐ Physical or Musculoskeletal Disability (e.g. multiple sclerosis, etc.)
☐ Psychiatric/Psychological (e.g. anxiety disorder, major depression, etc.)
☐ Speech/Language
☐ Other, please specify in text box below:

☐ Unknown
☐ No Disability

Are you a veteran?

☐ Yes
☐ No
☐ Decline to state

Did you participate in any Transition Planning while in middle or high school?

A Transition Plan is part of an accommodation plan (e.g. IEP, 504 plan, etc.) that identifies goals and outlines a plan for life after high school. It may include job training, preparation for college, or general life skills development.

☐ Yes
☐ No
☐ Unknown
Appendix L (Continued)

Qualtrics Survey

What type of college do you attend?

- A private college is privately funded.
- A public college is typically funded by the government.
- A 2-year degree program is typically an associate's degree or certificate program at a community, vocational, or technical college.
- A 4-year degree is typically a bachelor's degree at a college or university.

〇 Public, 2-year degree
〇 Public, 4-year degree
〇 Private, 2-year degree
〇 Private, 4-year degree
〇 Unknown

When did you disclose your disability to your college?

- Disclose means to officially inform your college of your disability for the purpose of seeking accommodations.
- This does not mean you have to receive or accept accommodations.
- Generally, college students disclose to a Disability Resources, Student Support Services, or ADA (Americans with Disabilities Act) office.

Select the number of semesters that passed from the time you began attending your college to the time that you officially disclosed your disability. For example, "0" means at the same time as you began, and "5" means 5 semesters after you began attending.

〇 0  〇 1  〇 2  〇 3  〇 4  〇 5  〇 6  〇 7  〇 8  〇 9  〇 10+

What accommodations do you have or have you used while in college? (Click all that apply.)

- Academic accommodations provide students with disabilities access to their learning environment and course content.
- The following list is not exhaustive.
- You may have disclosed your disability, but never sought accommodations.
- Please respond with any accommodations you have had in the past or "none" if you have never had accommodations in place.

〇 Extended testing time

Appendix L (Continued)

Qualtrics Survey

☐ Alternate test location
☐ Note taker
☐ Preferential seating
☐ Accessible print materials
☐ Permission to record lectures
☐ Consideration for absences
☐ Hearing impairment services
☐ Access to class PowerPoint or other presentation materials
☐ Permission to leave or to move about the classroom
☐ Flexible deadlines on assignments
☐ None
☐ Other, please specify in the text box below:

☐ Unknown
☐ Decline to state

What is your current job? (If you do not currently have another job, please respond as "student.")

If you are employed, what accommodations do you have or use in your current job?

What future career or job are you currently preparing for with your education? (If you are unsure, please respond "undecided.")

What accommodations do you desire in your future career or job? (Imagine and describe any accommodations that would benefit you in your future job.)

Do you currently receive any form of Social Security Disability Benefits?
☐ Yes
☐ No
☐ Decline to state
Appendix L (Continued)
Qualtrics Survey

Instructions: Please read the following statements carefully. Indicate how much you agree or disagree with each statement by clicking your choice. There are no right or wrong answers to any of these statements.

1 = Strongly Disagree  
2 = Disagree  
3 = Agree  
4 = Strongly Agree

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am comfortable talking about my disability with my parents and siblings.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have friends with disabilities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most of my problems are caused by my disability.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I really do not ever think about my disability.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Because of my disability, I often do more than others to prove my abilities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I want to work with others with disability.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am the reason for most of my family's problems.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I care very much about what others think of me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Though I have a disability, I am as important as anyone else who does not have a disability.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My disability is only spoken on during doctor appointments.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I like who I am.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I often wonder “why me?”</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Powered by Qualtrics
Appendix M
Gibson’s Disability Identity Development Scale

Gibson’s Disability Identity Development Scale 1

Gibson’s Disability Identity Development Scale

1. Age
   12 13 14 15 16 17 18 19 20 21 22 23 24+

2. Ethnicity (mark all that apply):
   a. African American/Black
   b. Asian American/Asian
   c. Caucasian/White
   d. Indian American/Indian
   e. Latino American/Latino
   f. Native American/Alaska Native
   g. Native Hawaiian/Pacific Islander
   h. Other
   i. Decline to state

3. Gender:
   a. Female
   b. Male
   c. Transgender
   d. Other
   e. Decline to state

4. Highest grade completed
   -7 8 9 10 11 12 13 14 15 16 17 18+

Revised April 2018
Appendix M (Continued)

Gibson’s Disability Identity Development Scale

Gibson’s Disability Identity Development Scale 2

5. Born in United States:
   Yes ______  No ______
   If no, age when moved to United States: ______
   Born in this country: ____________________________

6. Disability type (mark all that apply):
   a. Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder
   b. Autism Spectrum
   c. Blind
   d. Deaf
   d. Hard of Hearing
   e. Learning Disability
   f. Low Vision
   g. Medical (e.g. diabetes, asthma, etc.)
   h. Neurological (e.g. brain injury, stroke, etc.)
   i. Physical or Musculoskeletal Disability (e.g. multiple sclerosis, etc.)
   j. Psychiatric/Psychological (e.g. anxiety disorder, major depression, etc.)
   k. Speech/Language
   l. Other

7. Age of onset of disability
   Birth 1 month – 1 yr 1-5 yrs 6-10 yrs 11
   12 13 14 15 16 17 18 19 20 21 22 23 24+

Revised April 2018
Appendix M (Continued)

Gibson’s Disability Identity Development Scale

Gibson’s Disability Identity Development Scale 3

8. One or both of my parents has a disability  Yes _____  No _____

9. Mother disability type (mark all that apply):
   a. Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder
   b. Autism Spectrum
   c. Blind
   d. Deaf
   d. Hard of Hearing
   e. Learning Disability
   f. Low Vision
   g. Medical (e.g. diabetes, asthma, etc.)
   h. Neurological (e.g. brain injury, stroke, etc.)
   i. Physical or Musculoskeletal Disability (e.g. multiple sclerosis, etc.)
   j. Psychiatric/Psychological (e.g. anxiety disorder, major depression, etc.)
   k. Speech/Language
   l. Other

10. Father Disability type (mark all that apply):
    a. Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder
    b. Autism Spectrum
    c. Blind
    d. Deaf

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Appendix M (Continued)
Gibson’s Disability Identity Development Scale

Gibson's Disability Identity Development Scale 4

d. Hard of Hearing

e. Learning Disability

f. Low Vision

 g. Medical (e.g. diabetes, asthma, etc.)

h. Neurological (e.g. brain injury, stroke, etc.)

i. Physical or Musculoskeletal Disability (e.g. multiple sclerosis, etc.)

j. Psychiatric/Psychological (e.g. anxiety disorder, major depression, etc.)

k.. Speech/Language

l. Other

11. My brother/sister has a disability? Yes _____ No _____

12. Brother disability type (mark all that apply):
   a. Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder
   b. Autism Spectrum
   c. Blind
   d. Deaf
   d. Hard of Hearing
   e. Learning Disability
   f. Low Vision
   g. Medical (e.g. diabetes, asthma, etc.)
   h. Neurological (e.g. brain injury, stroke, etc.)
   i. Physical or Musculoskeletal Disability (e.g. multiple sclerosis, etc.)

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Appendix M (Continued)
Gibson’s Disability Identity Development Scale

Gibson’s Disability Identity Development Scale 5

j. Psychiatric/Psychological (e.g. anxiety disorder, major depression, etc.)
k. Speech/Language
l. Other

13. Sister disability type (mark all that apply):
   a. Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder
   b. Autism Spectrum
   c. Blind
   d. Deaf
   d. Hard of Hearing
   e. Learning Disability
   f. Low Vision
   g. Medical (e.g. diabetes, asthma, etc.)
   h. Neurological (e.g. brain injury, stroke, etc.)
   i. Physical or Musculoskeletal Disability (e.g. multiple sclerosis, etc.)
   j. Psychiatric/Psychological (e.g. anxiety disorder, major depression, etc.)
k. Speech/Language
l. Other

Revised April 2018
Appendix M (Continued)

Gibson’s Disability Identity Development Scale

Gibson’s Disability Identity Development Scale 6

Instructions: Please read the following statements carefully. Indicate how much you agree or disagree with each statement by selecting your choice. There are no right or wrong answers to any of these statements.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>14. I am comfortable talking about my disability with my parents and/or siblings.</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>15. I have friends with disabilities.</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>16. Most of my problems are caused by my disability.</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>17. I really do not ever think about my disability.</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>18. Because of my disability, I often do more than others to prove my abilities.</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>19. I want to work with others with disability.</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>20. I am the reason for most of my family’s problems.</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>21. I care very much about what others think of me.</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>22. Though I have a disability, I am as important as anyone else who does not have a disability.</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>23. My disability is only spoken of during doctor appointments.</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>24. I like who I am.</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>25. I often wonder “Why me?”</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

Revised April 2018
Appendix M (Continued)
Gibson’s Disability Identity Development Scale

Gibson’s Disability Identity Development Scale

Using the above survey, reverse the Likert scale for item #s 16, 17, 20, 21, 23 and 25 (ie. 1 – 4 will read 4 -1).

Add up the score for each item 14 – 25.

The total score will range between 12 points and 48 points.

Scoring is as follows:

<table>
<thead>
<tr>
<th>12 - 18 points</th>
<th>19 – 35 points</th>
<th>36 – 48 points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STAGE 1:</strong></td>
<td><strong>STAGE 2:</strong></td>
<td><strong>STAGE 3:</strong></td>
</tr>
<tr>
<td>Passive Awareness</td>
<td>Realization</td>
<td>Acceptance</td>
</tr>
<tr>
<td>First part of life 0-? Can continue into adulthood</td>
<td>Often occurs in adolescence/early adulthood</td>
<td>Adulthood</td>
</tr>
</tbody>
</table>

- **STAGE 1:**
  - No role model of disability
  - Medical needs are met
  - Taught to deny social aspects of disability
  - Disability becomes silent member of family
  - Co-dependency/"Good-Boy/Good-Girl"
  - Shy away from attention
  - Will not associate w/others w/disability

- **STAGE 2:**
  - Begins to see self as having a disability
  - Self-hate
  - Anger: Why me?
  - Concerned with how others perceive self
  - Concerned w/appearance
  - "Superman/woman" Complex

- **STAGE 3:**
  - Shift focus from "being different" in a negative light to embracing self
  - Begins to view self as relevant; no more no less than others
  - Begins to incorporate others with disabilities into life
  - Involves self in disability advocacy and activism
  - Integrates self into majority (able-bodied) world

Revised April 2018
Appendix N
Interview Script

Proposed Interview Script

Final interview script will be developed in response to Phase I Survey Data Collection. It will then be reviewed by expert panel. Interview will not collect health information. The following tentative script addresses the intersection of disability, education, and identity. Five main questions will lead the dialogue. Sub questions will only be used when needed.

Tentative Questions & Sub Questions

1. Please describe yourself.
   a. Are you a traditionally aged student?
   b. Year in college?
   c. Institution type? Public or private? Two or four year?
   d. Are you a veteran?
   e. Is your disability visible or nonvisible?

2. How do you identify yourself?
   a. Do you share your disability with others?

3. Please describe your experience of disability in terms of your education.
   a. What was your high school experience?
      i. Did you have a Transition Plan?
      ii. Do you feel you were prepared to advocate in college?
   b. What was your college experience?
      i. When did you choose to disclose your disability in college?
      ii. What motivated you to disclose your disability?
   c. What do you think about your accommodations?
      i. Have you used them?
      ii. How do you feel about using them?
      iii. Are there accommodations you wish you had?
   d. Have you or do you disclose your disability to an employer?
      i. Are you an SSA recipient?
      ii. Do you utilize accommodations in the workplace?
      iii. Are there accommodations you wish you had in the workplace?

4. How do you feel about having a disability?
   a. Do you identify with others who have a disability?
   b. Do you participate in disability advocacy organizations?
      i. Do you feel you belong to such an organization or other groups?
   c. Have you ever denied support or felt you had to overcompensate for having a disability?
   d. Do you feel you have to hide your disability?
   e. Do you have role models with disability?

5. How do you feel people perceive disability?
   a. What experiences have shaped your belief about public perceptions of disability?
Appendix O

Revised Proposed Interview Script

Tentative Questions & Sub Questions

1. Please describe yourself.
   a. Are you a traditionally aged student?
   b. Year in college?
   c. Institution type? Public or private? Two or four year?
   d. Are you a veteran?
   e. Is your disability visible or nonvisible?

2. How do you identify yourself?
   a. Do you share your disability with others?

3. Please describe your experience of disability in terms of your education.
   a. What was your high school experience? (public/private/college counselor)
      i. Did you have a Transition Plan?
      ii. Do you feel you were prepared to advocate in college?
   b. What was your college experience?
      i. When did you choose to disclose your disability in college?
      ii. What motivated you to disclose your disability? What factors did you consider in the timing of your choice to disclose?
   c. What do you think about your accommodations?
      i. Have you used them?
      ii. How do you feel about using them?
      iii. Are there accommodations you wish you had?
   d. Have you or do you disclose your disability to an employer?
      i. Are you an SSA recipient?
      ii. Do you utilize accommodations in the workplace?
      iii. Are there accommodations you wish you had in the workplace?

4. How do you feel about having a disability?
   a. Do you identify with others who have a disability?
   b. Do you participate in disability advocacy organizations?
      i. Do you feel you belong to such an organization or other groups?
   c. Have you ever denied support or felt you had to overcompensate for having a disability?
   d. Do you feel you have to hide your disability?
   e. Do you have role models with disability?

5. How do you feel people perceive disability?
   a. What experiences have shaped your belief about public perceptions of disability?