Emerging adulthood is a developmental period that is not adolescence nor adulthood, but rather a separate period of change and exploration (Arnett, 2000). During this time, emerging adults consolidate aspects of their identity to begin psychosocially establishing their adult self (Arnett, 2000). According to Erikson, Paul, Heider, and Gardner (1959), young adulthood is a time for exploring identity and developing a sense of intimacy with others. Emerging adults’ pursuit of identity consolidation and relationships with others have been associated with increased feelings of belonging and improved quality of life (Arnett, 2000; Blatt & Luyten, 2009; Montgomery, 2005; Schwartz, Côté, & Arnett, 2005).

Few studies have examined how identity formation occurs in emerging adults with disability. According to the World Health Organization (2011), approximately 15% of people worldwide experience some sort of disability, including a disabling impairment or activity limitation. Most research has suggested that emerging adults with disabilities experience a delay in achieving markers...
of adult development, including educational, vocational, and social markers (Holmbeck & Devine, 2010; Verhoof, Maurice-Stam, Heymans, & Grootenhuis, 2012). This delay in adult development may be related to limitations which may inhibit independent functioning (Van Naarden Braun, Yeragin-Allsopp, & Lollar, 2006). In addition to developmental limitations, emerging adults with disabilities are at greater risk for discrimination and prejudice in the workplace, poor social adjustment, and internalization of symptoms (Hombeck & Devine, 2010). Similarly, when compared to their nondisabled peers, this group of emerging adults presents higher rates of symptoms of anxiety, depression, withdrawal, and somatic complaints (Dykens, Shah, Sagun, Beck, & King, 2002; Hombeck & Devine, 2010; Lindstrom, Kahn, & Lindsey, 2013).

Rather than focusing on disability as a deficit, psychologists are embracing an emphasis on the role of social and environmental factors in defining disability (American Psychological Association, 2012; Olkin & Pledger, 2003). To examine these social factors, one must consider disability identity, and whether people claim disability status as part of their identity (Shakespeare, 1996). In line with social identity theory, disability identity denotes a recognition and acceptance that one belongs to this social group (Tajfel & Turner, 1979). Previous research has suggested that as many as 74%–82% of emerging adults with a disabling impairment may not self-identify as a person with a disability (Chalk, 2016; Nario-Redmond, Noel, & Fern, 2013). Given that such a substantial portion of emerging adults with a disability do not self-identify as a person with a disability, it is likely that many emerging adults with disability are being excluded from research samples.

The present study explores challenges for those emerging adults with a disability, whether or not they self-identify as disabled. Research has suggested that individuals who experience impairments but do not identify as disabled may be experiencing a level of dissonance, and that identifying with one’s disability may provide a level of protection against the stressful effects that the disability may pose (Chalk, 2016). By identifying with the disability, individuals may also be protecting themselves from a lowered self-esteem because their more clearly defined identity may allow for the formation of advocacy groups and more achievable relationships with peers (Chalk, 2016).

### Sense of Belonging and Need to Belong

Research has suggested that young adults and adolescents who have an overall higher sense of belonging experience more positive psychological and physical outcomes (Begen & Turner-Cobb, 2015). In undergraduate college students, sense of belonging is positively correlated with academic motivation, self-efficacy, and positive mental health (Freeman, Anderman, & Jansen, 2007; Stebleton, Soria, & Huesman, 2014). In addition, low social isolation is predictive of subjective well-being, especially in emerging adults with disabilities (Yurkevitch, Berslav, & Araten-Bergman, 2015). These positive benefits that are associated with an increased sense of overall belongingness suggest that there may be some protection created by these social interactions.

Unsurprisingly, many researchers have found that emerging adults with disabilities feel as if they generally belong less than their peers (Bramston, Bruggerman, & Pretty, 2002; Hall, 2004). This lesser sense of belonging in those with a disability may be related to the increased levels of social rejection that they experience (Chen & Shu, 2012; Salmon, 2013). Although students with disabilities report more difficulty connecting with nondisabled peers, they also report an eased connection with those who also report having a disability, due to their common experiences of being socially isolated and suppressed by stigma (Salmon, 2013). This social isolation may be related to identifying with one’s disability, as those who identify as disabled are isolated from their nondisabled peers, potentially as a result of the stigma surrounding disability.

Although those with disabilities do connect with peers of similar disability status, it appears that their opportunities for social connection are more limited than those of nondisabled peers. When seeking social relationships outside the disability community, individuals with a disability report turning to teachers, coaches, and counselors more frequently than their peers (McMahon, Parnes, Keys, & Viola, 2008). Relationships with faculty members on college campuses, as well as involvement in clubs and organizations, provide opportunities to increase sense of belonging, but these are limited to those who pursue higher education (Doubt & McColl, 2003; Jones, Brown, Keys, & Salzer, 2015). The more constricted social network among emerging adults with a disability may be related to the increased difficulty with feelings of belongingness.
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Those who feel that they generally belong on a daily basis often experience a lessened overall need to belong. Need to belong is defined as the need to form and maintain lasting, positive interpersonal relationships (Baumeister & Leary, 1995). Although no studies could be located that have examined need to belong in emerging adults with disabilities, limited findings have suggested an inverse relationship between need to belong and sense of belonging in nondisabled emerging adults (Pillow, Malone, & Hale, 2015). Adults who have a higher need to belong experience lower sense of belonging, lower life and relationship satisfaction, and higher loneliness (Mellor, Stokes, Firth, Hayashi, & Cummings, 2008; Pillow et al., 2015).

Because emerging adults who reported having a disability also reported a lower sense of belonging, it was expected that they would also experience a greater need to belong due to the inverse relationship between the two (Pillow et al., 2015).

Importance of Marriage

A decreased sense of belonging, combined with a difficulty in maintaining interpersonal, meaningful relationships, may suggest that the search for a romantic partner or pursuit of a marriage would be more difficult for those who experience some level of disability. Although no studies have specifically addressed this issue in emerging adulthood, some studies have suggested that the marital trends and preferences do differ in those with a disability (Goodall et al., 2018). With an already increased vulnerability to poorer mental health, increased social anxiety, lessened self-efficacy, and a lesser sense of belonging, those with a disability may find it difficult to establish a more intimate relationship, thus potentially influencing the perceived value of marriage.

During this critical time of development, emerging adults begin establishing their preferences regarding love, work, worldviews, and hobbies (Arnett, 2000). At large, no matter one’s disability status, emerging adults’ view of marriage seems to have shifted, as the median age of first marriage is now approximately 29.2 years for men and 27.1 for women (U.S. Census Bureau, 2017). This delay in marriage may be explained by a variety of factors including nonintact families of origin, parents’ attitudes toward marriage, financial concerns, and increased educational aspirations (Cherlin, 2009; Cui, Wickrama, Lorenz, & Conger, 2011; Li, 2014; Muraco & Curran, 2012; Plotnick, 2007; Willoughby, 2010; Willoughby, Carroll, Vitas, & Hill, 2012; Willoughby, Olson, Carroll, Nelson, & Miller, 2012). Despite limited background research in this area, it was hypothesized that challenges with belonging and social connection experienced by emerging adults with disability may be associated with these individuals’ views of marital importance, rendering marriage as less important to those with a disability.

The Present Study

The present study examined the differences in overall sense of belonging, need to belong, and importance of marriage in those who have a disability and those who do not. Additionally, it examined a third group of emerging adults: those who have a disabling impairment but do not self-identify as disabled. As previously mentioned, this third group of individuals is often omitted from research because these individuals do not identify with their disability (Chalk, 2016; Nario-Redmond et al., 2013). By assessing both disability identity and the presence of a disabling impairment, this study aimed to capture how participants identify with their disability.

Based on the existing literature, it was hypothesized that those with no disability would have a greater sense of belonging and lower need to belong than those who have a disability, whether or not they self-identify as disabled. It was also hypothesized that those who have a disability would view marriage as less important (and relatively less important, when compared to hobbies, leisure activities, and career development) than those who do not have a disability. Significant differences were expected between those who do and do not self-identify with their disability, regarding the importance of marriage.

Method

Participants

Data for this project were collected through a multicampus collaborative project investigating dimensions of emerging adulthood (Grahe et al., 2018). A full description of the sample, measures, and data gathering procedures is included in the Open Science Framework (OSF) project page (https://osf.io/te54b/). Data were collected by researchers at 32 institutions, including 29 sites in the United States and one each in England, Grenada, and Greece. Each recruitment site received approval from the appropriate institutional review board, and all data collection procedures followed American Psychological Association ethical
Participants identified as multiracial (10%, \( n = 137 \)), Native American (0.4%, \( n = 8 \)), or other (3.8%, \( n = 76 \)). The remaining participants identified as Asian/Pacific Islander (6.8%, \( n = 137 \)), Hispanic (10.5%, \( n = 212 \)), or White/European American, with the remainder identifying as African American (8.1%, \( n = 163 \)), nonbinary (0.6%, \( n = 11 \)), or other (3.8%, \( n = 76 \)). The remaining participants identified as a gender identity other than male or female (i.e., nonbinary). Most participants (60.4%, \( n = 1,218 \)) identified as White/European American, with the remainder identifying as African American (8.1%, \( n = 163 \)), Hispanic (10.5%, \( n = 212 \)), Asian/Pacific Islander (6.8%, \( n = 137 \)), Native American (0.4%, \( n = 8 \)), or other (3.8%, \( n = 76 \)). The remaining participants identified as multiracial (10%, \( n = 201 \)). Most of the sample (94.1%, \( n = 1,897 \)) had attended some college, and most (84.8%, \( n = 1,710 \)) were currently in college. Of the participants, only 6.4% (\( n = 129 \)) stated that they were married, and 85.5% (\( n = 1,723 \)) stated that they were unmarried.

**Measures**

As part of the online EAMM12 survey, participants completed measures assessing markers of adulthood, dimensions of emerging adulthood, political views, well-being, self-esteem, perceived esteem, mindfulness, belonging, self-efficacy, social support, social media use, transgressions, personality, disability, somatic symptoms, stress, importance of marriage, and demographics. All participants completed all measures in one survey, which lasted approximately 30 minutes. Measures were presented to each participant in a fixed order. Only the following measures were included in this study.

**Need to belong.** Participants completed the 10-item Need to Belong Scale by rating items addressing their need to belong to a group (Leary, Kelly, Cottrell, & Schreindorfer, 2013). Participants used a 5-point Likert scale, from 1 (strongly disagree) to 5 (strongly agree), to indicate their level of agreement with each of the 10 items. Items included statements such as “I want other people to accept me” and “I have a strong need to belong.” Higher scores indicated a greater need to belong.

**Sense of belonging.** Participants used a 5-point Likert-type scale, from 1 (not at all) to 5 (very much), to rate their current sense of belonging based on a single item, “I feel like I belong.” This single-item assessment was based on the Belonging subscale of the Basic Social Needs Scale (Zadro, Williams, & Richardson, 2004). No reference group was provided so that participants would rate their overall sense of belonging rather than a sense of belonging to a particular group.

**Disability identity.** Participants first completed a dichotomous item asking whether they identify as disabled, in order to determine their disability identity. Subsequently, participants were asked to state whether they experience a disabling impairment in any of six categories (e.g., physical, sensory, learning psychiatric, chronic health, or other). Participants responded “yes” or “no” to each category of disability and were then categorized into three groups accordingly. The disability identity group refers to those who had a disability and identified as disabled. The disability impairment group includes those who had a disabling impairment but did not identify as disabled. The no disability group includes those who reported no disabling impairment or disability identity. This methodology has been used in recent studies to more clearly differentiate the groups (Chalk, 2016; Nario-Redmond et al., 2013).

Of the participants in this study, 163 (8%) self-identified as a person with a disability, and 1,853 did not self-identify as having a disability (92%). Participants indicated that they experience disabling impairments in the following categories: psychiatric (13.6%, \( n = 275 \)), learning (6.9%, \( n = 140 \)), chronic health (4.3%, \( n = 86 \)), physical (3.9%, \( n = 79 \)), sensory (3.8%, \( n = 77 \)), or other (2.8%, \( n = 57 \)). Some participants (6.8%, \( n = 138 \)) indicated that they experience a disabling impairment in multiple areas. Of those who reported having any disabling impairment (\( n = 521 \)), 31.2% (\( n = 163 \)) self-identified as disabled, and 68.7% (\( n = 358 \)) did not self-identify as disabled. This ratio is consistent with the findings from other samples of emerging adults (e.g., Chalk, 2016).

**Importance of marriage.** A single-item scale (derived from a longer scale) was used to determine the perceived importance of marriage (Willoughby,
Hall, & Goff, 2015). The item asked participants to rate how important getting married is to them. Participants rated their responses on a 5-point Likert-type scale ranging from 1 (not important at all) to 5 (very important).

Relative importance of marriage. To determine the relative importance of marriage, participants were asked to assign percentage values (totaling 100%) to four listed centralities: marriage, parenting, career, and personal/leisure hobbies. The percentage values assigned to “marriage” were compared to the values assigned to other centralities in order to examine the potential differences in the value of marriage, relative to other aspects of human development (Hall & Willoughby, 2016; Willoughby et al., 2015).

Markers of adulthood. Participants self-rated their achievement of selected markers of adulthood using the Markers of Adulthood Scale (Arnett, 1997, 2001). To determine the number of participants who were married or unmarried, researchers examined only the marker pertaining to the individual’s marital status. Participants used a 3-point scale (yes, no, or unsure) to indicate whether they are married (N = 1,723).

Results
A one-way Analysis of Variance (ANOVA) revealed a significant difference in sense of belonging based on disability identity, F(2, 2011) = 31.71, h² = .031, p < .001. Levene’s test revealed that the assumption of homogeneity of variances was violated for sense of belonging, F(2, 2011) = 10.67, p < .001. Therefore, the Games Howell post hoc test was used. As reflected in Table 1, those who self-identified as disabled reported a lesser sense of belonging than those with no disability (d = 0.59, p < .001) and those with a disabling impairment (d = .33, p = .001). Participants with a disabling impairment reported a lesser sense of belonging compared to those with no disability (d = .25, p < .001).

A one-way ANOVA also revealed a significant difference in participants’ need to belong based on disability identity, F(2, 2011) = 4.63, h² = .005, p = .01. Due to unequal sample sizes, the Games Howell post hoc test was used. As reflected in Table 1, those who self-identified as disabled reported a higher need to belong than those with no disability (d = .55, p = .03). No other group differences were significant.

A one-way ANOVA revealed a significant difference in participants’ perception of the importance of marriage, based on disability identity, F(2, 2009) = 6.95, h² = .003, p = .001. Games Howell post hoc tests revealed that those who reported having a disabling impairment viewed marriage as being less important, overall, than those who did not have a disability (d = .22, p = .001). However, there were no significant differences between those who self-identified as disabled and those with no disability.

Last, a one-way ANOVA revealed a significant difference in the relative importance of marriage based on disability identity, F(2, 2009) = 3.52, h² = .007, p = .03. Games Howell post hoc tests indicate that those who reported having a disabling impairment viewed marriage as being less important when compared to career, parenting, and hobbies, than those who did not have a disability (d = .14, p = .04). However, those who self-identified as disabled did not differ significantly in their relative perception of marriage when compared to those with no disability or those who have a disabling impairment.

Discussion
Emerging adults who self-identified as disabled had a lower sense of belonging than those who reported having a disabling impairment and those who did not have a disability. This finding is consistent with the literature; many researchers have suggested that those with a disability experience higher levels of social rejection and isolation from nondisabled peers (Chen & Shu, 2012; Salmon, 2013). For those who self-identify with their disability, this decreased sense of belonging amongst peers could potentially lead them toward more professionally driven relationships with their teachers, coaches, and counselors, which may delay searching for a mate.

Emerging adults who did not have a disability reported a significantly lower need to belong than those who self-identified as disabled. Again, these findings are consistent with the literature because

### TABLE 1
Descriptive Statistics for the Full Sample and by Disability Identity

| Dependent Variable | Disability Identity (n = 163) | Disabling Impairment (n = 358) | No Disability (n = 1493) | Full Sample (n = 2014) |
|--------------------|-------------------------------|--------------------------------|--------------------------|------------------------|
|                    | M(SD)                         | M(SD)                          | M(SD)                    | M(SD)                  |
| Need to Belong     | 3.41 (0.77)                   | 3.35 (0.69)                    | 3.26 (0.73)              | 3.29 (0.72)            |
| Sense of Belonging | 3.07 (1.18)                   | 3.42 (1.03)                    | 3.67 (0.96)              | 3.58 (1.01)            |
| Importance of Marriage | 3.63 (1.19)                  | 3.46 (1.14)                    | 3.70 (1.08)              | 3.65 (1.10)            |
| Relative Importance of Marriage | 25.25 (18.72)               | 24.80 (20.12)                  | 27.58 (19.64)            | 26.90 (19.68)          |
they suggest that there is an inverse relationship between sense of belonging and need to belong (Pillow et al., 2015). Those who report feeling like they belong among peers find ease in forming and maintaining positive, peer-to-peer interpersonal relationships (Baumeister & Leary, 1995). This increased simplicity in developing interpersonal relationships for those with no disability might yield a less strenuous search for a mate, possibly making the idea of marriage more attractive. However, given the correlational nature of the data, causal interpretations should be considered hypotheses for future research.

Some previous research has suggested that identifying with one’s disability may be protective for self-esteem (Chalk, 2016). However, the present study suggests no difference in sense of belonging in emerging adults with a disability based on whether they self-identify as disabled. The findings of Raver, Murchake, and Chalk (2018) suggest that identifying with one’s disability is only associated with positive outcomes if one maintains a positive disability identity, a positive view of oneself as a person with a disability (Bolton & Brookings, 1998). It may be that there is no significant difference in belonging based on disability identity, because this identity might have a positive or negative valence for different participants.

Those who identify as disabled report a greater need to belong than those with no disability. A higher need to belong has been linked with lower relationship satisfaction and higher rates of loneliness (Mellor et al., 2008; Pillow et al., 2015). This, combined with the increased levels of social vulnerability, may be related to the delay in achieving markers of adulthood in this group (Arnett, 2000).

Those who reported having a disabling impairment viewed marriage as being less important, overall and relative to career/parenting, than those who did not have a disability, although the effect size is small. Emerging adults with disabilities report lower levels of independence than their non-disabled peers, which may be associated with decreased confidence about functioning with a marital partner and decreased interest in pursuing marriage (Van Naarden Braun et al., 2006). This lower perceived value of attaining a marital partner and decreased interest in pursuing marriage (Van Naarden Braun et al., 2006). This lower perceived value of attaining a marital partner and decreased interest in pursuing marriage may also be related to delays in achieving markers of adulthood, including economic instability, in those with a disabling impairment (Arnett, 2000). Furthermore, research has suggested that emerging adults with a disabling impairment experience greater benefits from peer and mentor support, rather than marital partner support (McMahon et al., 2008). Any of these factors might contribute to the decreased importance of marriage in this group. However, findings should be interpreted with caution because the effect size was modest.

Limitations

This study was one of the first to examine the relationship between disability identity and the importance of marriage. Results suggest differences in sense of belonging, need to belong, and marital preferences between those who identify with their disability and those who do not.

It is important to consider these findings in light of the study’s limitations. Due to the large sample size of the EAMMI2, some significant findings had low effect sizes, which are noted throughout the discussion. Given the novel nature of the topic, these findings are important but should be interpreted in light of these effect sizes.

Furthermore, several limitations arise from the nature of the EAMMI2 collaborative project. First, because this study utilized a pre-existing data set, we were not able to select the measures for key variables. For this reason, sense of belonging was assessed using a single-item scale, limiting this variable to a direct measure of self-identified belonging. To more comprehensively assess belonging, researchers should consider using a multi-item scale such as the Basic Social Needs Scale (Zadro, Williams, & Richardson, 2004). By doing so, researchers can examine various aspects of belonging because this assessment includes social acceptance by others, social networks, and levels of social independence. Additionally, due to the limited number of items that could be included in the EAMMI2, this study relies on a single item to assess the perceived importance of marriage. Future studies should use a more comprehensive measure of the centrality of marriage (e.g., Willoughby et al., 2015).

This study is also limited by the lack of diversity in the sample. Most respondents were college students, which is not representative of all emerging adults because participants who are in college have already overcome some barriers to achieving markers of adulthood. Due to the improved nature of college campus disability services, the experience of a college student with a disability or disabling impairment is likely unique, and therefore limits the generalizability of these findings. Additionally, most participants identified as White or European American, thus limiting the generalizability to persons of color. Future studies should take the necessary steps to increase the diversity of the sample by including a more educationally and racially diverse participants with varying disability identities.
Implications

Although this study is limited, the findings shed light on the differing preferences of emerging adults with disabling impairments. Additionally, this study allows researchers to see the significant differences in sense of belongingness across varying disability statuses during emerging adulthood. This study further solidifies that there is a relationship between disability status and belonging. Furthermore, findings suggest differing social goals, attainments, and preferences between emerging adults with differing disability identities.

Because those who identify as disabled feel that they belong less than their nondisabled peers and have a greater need to belong, clinicians should consider the potential benefit of developing social skills to aid in establishing and maintaining social connections with other emerging adults of differing disability statuses. Cognitive-behavioral therapy techniques that target the negative connotations and stigmas surrounding disability could be incorporated by practitioners to empower individuals to develop long-lasting and more intimate relationships with peers. If such clinical practices can increase feelings of belongingness and decrease need to belong, the idea of pursuing a marital relationship may feel more attainable for emerging adults with disabling impairments.

Although these findings are strictly correlational, they show a clear relationship between belongingness, the importance of marriage, and disability identity during emerging adulthood. Results demonstrate that differences exist between those who self-identify as disabled and those who have a disabling impairment, suggesting that future studies should include this differentiation. By developing an understanding of the correlates of identifying with one’s disability, clinicians can assist emerging adults with disability to navigate this challenging developmental period.

References

American Psychological Association. (2012). Guidelines for assessment of and intervention with persons with disabilities. American Psychologist, 67, 43–62. https://doi.org/10.1037/a0025929
Arnett, J. J. (1997). Young people’s conceptions of the transition to adulthood. Youth & Society, 29, 1–23. https://doi.org/10.1177/0044118X9702900101
Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. American Psychologist, 55, 469–480. http://dx.doi.org/10.1037/0003-066X.55.5.469
Arnett, J. (2001). Conceptions of the transition to adulthood: Perspectives from adolescence through midlife. Journal of Adult Development, 8, 133–143. http://dx.doi.org/10.1023/A:1006450103225
Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. Psychological Bulletin, 117, 493–525. https://doi.org/10.1037/0033-2909.117.3.497
Begen, F. M., & Turner-Cobb, J. M. (2015). Benefits of belonging: Experimental manipulation of social inclusion to enhance psychological and physiological health parameters. Psychology & Health, 30(5), 568–582. https://doi.org/10.1080/08870446.2014.908644
Blatt, S. J., & Luquet, P. (2009). A structural–developmental psycho-dynamic approach to psychopathology: Two polarities of experience across the life span. Development and Psychopathology, 21, 793–814. https://doi.org/10.1017/S0954579409000431
Bolton, B., & Brookings, J. (1998). Development of a measure of intrapersonal empowerment. Rehabilitation Psychology, 43, 131–142. https://doi.org/10.1037/0090-5550.43.2.131
Bramston, P., Bruggerman, K., & Pretty, G. (2002). Community perspectives and subjective quality of life. International Journal of Disability, Development, and Education, 49, 385–397. https://doi.org/10.1080/036051202102028358
Chalk, H. M. (2016). Disability self-categorization in emerging adults: Relationship with self-esteem, perceived esteem, mindfulness, and markers of adulthood. Emerging Adulthood, 4, 200–206. https://doi.org/10.1177/2167696815584540
Chen, C., & Shu, B. (2012). The process of perceiving stigmatization: Perspectives from Taiwanese young people with intellectual disability. Journal of Applied Research in Intellectual Disabilities, 25, 240–251. https://doi.org/10.1111/j.1468-3140.2011.00616.x
Cherlin, A. J. (2009). The marriage-go-round. NY: Alfred A. Knopf.
Cuijpers, P., Fick, W., & Kuyken, W. (2009). Cognitive behavioral therapy skills to aid in establishing and maintaining social interpersonal attachments as a fundamental human motivation. Psychological Bulletin, 117, 493–525. https://doi.org/10.1037/0033-2909.117.3.497
Doubt, L., & McColl, M. A. (2003). A secondary guy: Physically disabled adolescents and romantic relationships in emerging adulthood. pp. 123–141. New York, NY: Cambridge University Press.
Dykens, E. M., Shah, B. B., Saigun, J. J., Beck, T. T., & King, B. H. (2002). Maladaptive behaviour in children and adolescents with Down’s syndrome. Journal of Intellectual Disability Research, 46, 484–492. https://doi.org/10.1046/j.1365-2788.2002.00431.x
Erikson, E. H., Paul, I. H., Heider, F., & Gardner, R. W. (1959). Psychological Issues (Vol. 1.). New York, NY: International Universities Press.
Freeman, T. M., Anderman, L. H., & Jensen, J. M. (2007). Sense of belonging in college freshmen at the classroom and campus levels. Journal of Experimental Education, 75, 203–220. https://doi.org/10.3200/JEXE.75.3.203-220
Goodall, J., Salem, S., Walker, R. W., Gray, W. K., Burton, K., Hunter, E., . . . Owens, S. (2018). Stigma and functional disability in relation to marriage and employment in young people with epilepsy in rural Tanzania. Seizure, 54, 27–32. https://doi.org/10.1016/j.seizure.2017.01.016
Graae, J., Chalk, H. M., Cramb-Alvarez, L. D., Fass, C. S., Hermann, A. D., & McFall, J. P. (2018). Emerging adulthood measured at multiple institutions 2: The data. Journal of Open Psychology Data, 6. https://doi.org/10.5334/jopd.38
Hall, E. (2004). Social geographies of learning disability: Narratives of exclusion and inclusion. Area, 36, 298–306. https://doi.org/10.1111/j.0004-0894.2004.00227x
Hall, S. S., & Willoughby, B. J. (2016). Relative work and family role centralities: Beliefs and behaviors related to the transition to adulthood. Journal of Family and Economic Issues, 37, 75–88. https://doi.org/10.1007/s10834-014-9436-x
Holmbeck, G. N., & Devine, K. A. (2010). Psychosocial and family functioning in spina bida. Developmental Disabilities Research Reviews, 16, 40–46. https://doi.org/10.1120/ddr/30
Jones, N., Brown, R. L., Keys, C. B., & Salzer, M. S. (2015). Beyond symptoms? Investigating predictors of sense of campus belonging among postsecondary students with psychiatric disabilities. Journal of Community Psychology, 43, 594–610. https://doi.org/10.1002/jcop.21704
Leary, M. R., Kelly, K. M., Cottrell, C. A., & Schreindorfer, L. S. (2013). Construct validity of the need to belong scale: Mapping the nomological network. Journal of Personality Assessment, 95, 610–624. https://doi.org/10.1080/00223891.2013.819511
Li, X. (2014). What influences the attitudes of people in the United States toward marriage? A critical review. The Family Journal: Counseling and Therapy for Couples and Families, 22, 292–297. https://doi.org/10.1111/j.1066-4807/14529743
Lindstrom, L., Kahn, L. G., & Lindsey, H. (2013). Navigating the early career years: Barriers and strategies for young adults with disabilities. Journal of Vocational Rehabilitation, 39, 1–12. https://doi.org/10.3233/JVR-130637
McManus, S. M., Parmelee, A. J., Keys, C. B., & Viola, J. I. (2008). School belonging...
among low-income urban youth with disabilities: Testing a theoretical model. *Psychology in the Schools, 45,* 387–401. https://doi.org/10.1002/ps.20304

Mellor, D., Stokes, M., Firth, L., Hayashi, Y., & Cummins, R. (2008). Need for belonging, relationship satisfaction, loneliness, and life satisfaction. *Personality and Individual Differences, 45,* 213–218. http://dx.doi.org/10.1016/j.paid.2008.03.020

Montgomery, M. J. (2005). Psychosocial intimacy and identity from early adolescence to emerging adulthood. *Journal of Adolescent Research, 20,* 346–374. https://doi.org/10.1177/074355840427398

Muraco, I. A., & Curran, M. A. (2012). Associations between marital meaning and reasons to delay marriage for young adults in romantic relationships. *Marriage and Family Review, 48,* 227–247. http://dx.doi.org/10.1080/01494929.2012.665013

Nario-Redmond, M. R., Noel, I. G., & Fern, E. (2013). Redefining disability, reimagining the self: Disability identification predicts self-esteem and strategic responses to stigma. *Self and Identity, 12,* 468–486. http://dx.doi.org/10.1080/15298868.2012.681118

Olkin, R., & Pledger, C. (2003). Can disability studies and psychology join hands? *American Psychologist, 58,* 296–304. http://dx.doi.org/10.1037/0003-066X.58.4.296

Pillow, D. R., Malone, G. P., & Hale, W. J. (2015). The need to belong and its association with fully satisfying relationships: A tale of two measures. *Personality and Individual Differences, 74,* 468–488. https://doi.org/10.1016/j.paid.2014.10.031

Plotnick, R. D. (2007). Adolescent expectations and desires about marriage and parenthood. *Journal of Adolescence, 30,* 943–967. http://dx.doi.org/10.1016/j.jadolescence.2007.01.003

Raver A., Murchake, H., & Chalk, H. M. (2018). Positive disability identity predicts sense of belonging in emerging adults with a disability. *Psi Chi Journal of Psychological Research, 23,* 157–165. http://dx.doi.org/10.24833/2325-7342.IN23.2157

Salmon, N. (2013). ‘We just stick together’: How disabled teens negotiate stigma to create lasting friendship. *Journal of Intellectual Disability Research, 57,* 347–358. http://dx.doi.org/10.1111/j.1365-2788.2012.01541.x

Schwartz, S. J., Côté, J. E., & Arnett, J. J. (2005). Identity and agency in emerging adulthood: Two developmental routes in the individualization process. *Youth & Society, 37,* 201–229. https://doi.org/10.1177/0044118205276965

Shakespeare, T. (1996). Disability identity and difference. In C. Barnes & G. Mercer (Eds.), *Exploring the divide* (pp. 94–113). Leeds, Yorkshire: Disability Press.

Stebleton, M. I., Soria, K. M., & Huesman, R. J. (2014). First-generation students’ sense of belonging, mental health, and use of counseling services at public research universities. *Journal of College Counseling, 17,* 7–20. https://doi.org/10.1002/jcc.20882.201400044.x

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *Intergroup relations* (pp. 33–48). Monterey, CA: Brooks/Cole.

U.S. Census Bureau. (March, 2017). Estimated median age at first marriage. Retrieved from https://www.thеспirce.com/estimated-median-age-marriage-2303878

Van Naarden Braun, K., Yeagin-Allsopp, M., & Lollar, D. (2008). A multidimensional approach to the transition of children with developmental disabilities into young adulthood: The acquisition of adult social roles. *Disability & Rehabilitation, 28,* 915–928. https://doi.org/10.1080/09638280802034919

Verhoef, E., Maurice-Stam, H., Heymans, H., & Grootenhuis, M. (2012). Growing into disability benefits? Psychosocial course of life of young adults with a chronic somatic disease or disability. *Acta Paediatrica, 101,* e19–e26. https://doi.org/10.1111/j.1651-2227.2011.02418.x

Willoughby, B. J. (2010). Marital attitude trajectories across adolescence. *Journal of Youth and Adolescence, 39,* 1305–1317. http://dx.doi.org/10.1007/s10964-009-9477-x

Willoughby, B. J., Carroll, J. S., Vitas, J. M., & Hill, L. M. (2012). ‘When are you getting married?’ The intergenerational transmission of attitudes regarding marital timing and marital importance. *Journal of Family Issues, 33,* 223–245. https://doi.org/10.1177/0192513X1408695

Willoughby, B. J., Hall, S. S., & Goff, S. (2015). Marriage matters but how much? Marital centrality among young adults. *The Journal of Psychology, 149.* https://doi.org/10.1080/00223980.2014.979126

Willoughby, B. J., Olson, C. D., Carroll, J. S., Nelson, L. L., & Miller, R. B. (2012). Sooner or later? The marital horizons of parents and their emerging adult children. *Journal of Social and Personal Relationships, 29,* 967–981. https://doi.org/10.1177/0265407512433637

World Health Organization. (2011). *World Report on disability.* Retrieved from http://apps.who.int/iris/bitstream/10665/70670/1/WHO_NMH_VIP_11.01_eng.pdf

Yurkevitch, O., Berslav, S., & Araten-Bergman, T. (2015). Erratum to: The subjective well-being of individuals diagnosed with comorbid intellectual disability and attention deficit hyperactivity disorders. *Quality of Life Research, 24*(12), 3037. https://doi.org/10.1007/s11136-015-1036-1

Zadro, L., Williams, K.D., & Richardson, R. (2004). How long can you go? Ostracism by a computer is sufficient to lower self-reported levels of belonging control, self-esteem, and meaningful existence. *Journal of Experimental Social Psychology, 40,* 560–567. http://dx.doi.org/10.1016/j.jesp.2003.11.00

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