

# The Temporal Stability of Lack of Sexual Attraction Across Young Adulthood

Stephen Cranney<sup>1</sup>

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**Abstract** There is a large and growing literature on the stability of sexual orientation across the lifespan. However, virtually no studies have been conducted on the longitudinal stability of any dimension of asexuality. Here I utilized Kinsey scale-type data from Wave III and Wave IV of the Add Health survey to measure the stability of indicating “not sexually attracted to either males or females” in a forced-choice, Kinsey-type scale and during the time participants were moving through early adulthood (18–26 years in Wave III and 24–32 years in Wave IV). I found that, for the most part, individuals who reported no sexual attraction in Wave III were not the same individuals who reported no sexual attraction in Wave IV, with only three out of the 25 in Wave III who indicated no sexual attraction going on to do the same in Wave IV. This inter-wave consistency was lower than it was for other sexual minorities. However, indicating no sexual attraction in one wave was still a statistically significant predictor of indicating no sexual attraction in the other wave, as was refusing to answer or indicating the “don’t know” option in the other wave. These findings do not necessarily denote change in sexual attraction across waves; the fact that not answering the question in one wave was a significant predictor of indicating no sexual attraction in the other wave provides quantitative evidence for the ambiguities involved in sexual identities when sexuality is taken for granted in the broader culture. This ambiguity affects the operationalization and quantification of asexuality.

**Keywords** Asexuality · Sexual interest · Sexual orientation

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✉ Stephen Cranney  
scranny@sas.upenn.edu

<sup>1</sup> Graduate Group in Demography, University of Pennsylvania, 239 McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6298, USA

## Introduction

The concept of asexuality, while recognized by Kinsey, Pomeroy, and Martin (1948), lay dormant as a subject of research until relatively recently when Bogaert (2004) investigated associations between various variables and a self-reported, lifelong lack of sexual attraction (for a few early exceptions, see Przybylo [2012]). Subsequently, a burgeoning literature around asexuality has developed. At around the same time, the formal asexual community has grown, most prominently with the establishment in 2001 of the Asexuality Visibility and Education Network ([www.asexuality.org](http://www.asexuality.org)).

However, research has increasingly revealed asexuality as complex and multifaceted, and is still not very well understood. Here I examine the temporal stability of one dimension of asexuality—the attraction dimension—that was presented as one option in a forced-choice multiple choice question in Waves III and IV of the National Longitudinal Study of Adolescent Health (hereafter “Add Health”). While there is a large and growing literature on the stability of sexual orientation across the lifespan, and while prior asexuality research has drawn some preliminary conclusions about the stability of lack of sexual attraction across time, the temporal stability of absence of sexual attraction has not yet been directly tested using longitudinal data. It is worth noting at the outset that, given the inherent complications involved in measuring components of asexuality, it is not clear whether fluidity in this sense represents an actual change in sexual attraction, a personal identity change away from an allosexual category,<sup>1</sup> or a growing awareness of one’s own lack of sexual attraction in a culture where sexuality is assumed. Additionally, some of the

<sup>1</sup> The term “allosexual” is often used to refer to people who do not fall on the asexual spectrum, and who fit in a sexual category (gay, lesbian, straight, etc.). There is an ongoing discussion about its appropriateness; here I use it to clearly distinguish traditional sexual categories from asexual categories.

temporal variation may be due to across life sexual dynamics exhibited by gray-asexuals (or individuals who may rarely experience sexual attraction in particular cases, but not enough that they feel that an allosexual label fits them) or demisexuals (people who do not experience sexual attraction until after they establish an emotional connection with an individual), rather than a full-fledged, long-lasting change into an alternative sexual category, and the change in categorization may be the participant's attempt to map their own experiences onto the categories provided as accurately as possible.

There is an analogous concern in the literature on change in same-sex orientation across time, for which there is simply no way with extant data to be able to parse out the differing effects of the increasing acceptance of homosexuality across time, changes in awareness, and actual changes in attraction (Mustanski, Kuper, & Greene, 2014). Consequently, firm answers on the causes of these changes will have to wait for better data. While I speculate about plausible explanations that fit the patterns in the data, I ultimately make no hard claims about the specific mechanisms involved.

## Method

While prior studies have heavily relied on convenience samples of undergraduate students drawn from a single institution, or of members of asexuality organizations, the Add Health data were drawn from a representative set of high schools in the United States. In short, the advantages of this dataset allow for a relatively representative examination of people who indicated in a specific context that they lack sexual attraction, and it allows a longitudinal examination of consistency in response across time.

However, there are several limitations of this dataset that should be noted. First, it is likely that non-cisgender identities are relatively frequent among those who do not indicate any sexual attraction, yet Add Health forces a male/female binary choice. This may mask underlying gender identity heterogeneity in the sample. While I am unaware of any study that has specifically looked at the prevalence of non-cisgender identification along the attraction dimension of asexuality, in 2008, a survey disseminated by AVEN among its members showed that only 80 % of those assigned the female gender at birth continued to identify as female, with a similar pattern for males (Hinderliter, 2009b). Various in-house AVEN surveys have indicated that a relatively large percentage of participants are non-binary gender identified: 40 % in 2011 (AVEN, 2011;  $N = 3430$ ) and 25 % in 2014 (AVEN, 2014;  $N = 14,210$ ). In their qualitative study, 18 of MacNeela and Murphy's (2015) participants were explicitly identified as a non-binary gender. It is clear that asexuals drawn from asexual community convenience samples are disproportionately identified as non-binary gender compared to the baseline population that the Add Health Survey is trying to represent.

It is unclear to what extent this pattern would hold for those indicating no sexual attraction; however, the forced binary nature of this category makes this possibility problematic for investigating. One of the people who reported no sexual attraction switched from male in Wave I to female in Wave III and Wave IV (she was missed in Wave II). While Add Health has noted some switching of gender between waves in a very few cases (e.g., 20 switched between Wave I and Wave III), they implied that these differences were due to participant error (Add Health, 2015).

Second, serious concerns have recently been raised about the validity of some of the sexual orientation data in Add Health (Savin-Williams & Joyner, 2014). Specifically, there is some evidence that teenage "jokesters" skewed the findings of Wave I's orientation data by self-identifying as a sexual minority when they were not, and it is likely that the "no attraction" option could also be disproportionately selected by participants not taking the survey seriously, but this possibility has not been investigated. However, the specific question I used was only asked in Waves III and IV, so the jokester effect that has potentially compromised much of the prior literature that relied on Wave I Add Health sexual orientation data should not be an issue here. It is likely that the older participants may have taken the survey more seriously and there is no direct evidence that there was a significant jokester problem in Waves III and IV.

Third, the Add Health dataset has a very limited age range. Ideally, data about changes in sexuality or lack of sexual attraction across the life course would have a longer range. However, until such data are forthcoming, for the time being researchers are limited to addressing longitudinal changes in segments of the lifespan. It is likely that changes in self-reported lack of sexual attraction may be more frequent during the specific, young ages observed here, whereas at older ages people may have less vague ideas about lack of sexual attraction and what it entails.

## Statistical Analyses

I used a number of different empirical approaches to empirically investigate temporal stability in lack of sexual attraction across time. First, the number of individuals who indicated no sexual attraction was low enough that a simple cross-tabulation is substantively informative (Table 2). Second, Cohen's kappas were calculated to measure the relative inter-wave consistency for each respective category (Table 3). Finally, standard multivariate logit analysis was used to test other wave category as a predictor for respective wave lack of sexual attraction. Given the obvious complications and diversity in the asexual experience, some have questioned the usefulness of establishing definitional boundaries and quantifying different dimensions of asexuality (Chasin, 2011). In this regard, there are useful analogs to be drawn between the complexities inherent in categorizing sexual orientation and those involved in parameterizing asexuality (Scherrer, 2008). By operationalizing and categorizing a group such as those who do not feel sexual attraction, researchers

are explicitly delineating certain boundaries of inclusion and exclusion, and may lump people and experiences together that vary significantly from each other. It is worth noting that this has been done by both academics and the asexuality community; for a history of AVEN's decision to make lack of sexual attraction as the central feature of asexuality, see Hinderliter (2009a).

An argument can be made that doing so just reinforces inaccurate characterizations and categorizations. More qualitative approaches allow researchers to better capture the experiences of their subjects, and can capture variation along the different dimensions of asexuality. However, quantitative approaches that rely on an operationalized definition may have the advantage of objectivity if done correctly, essentially representing a “tradeoff in objectivity for phenomenological detail” (Prause & Graham, 2007). It is again worth noting that the asexual community's own definition focusing on lack of sexual attraction also runs into the same problem when dealing with gray-asexuals, although it is difficult to come up with any concrete definition that does not run into similar concerns (Hinderliter, 2009a).

Also, quantitative approaches that allow for parsimonious, single-item measurement are more feasible in large sample, random surveys which normally do not have the room necessary to capture the full variety of asexual manifestations, and for which smaller categories associated with lack of sexual attraction can not be meaningfully measured nor relationships tested due to sample size and power constraints when using a random, non-convenience sample (Aicken, Mercer, & Cassell, 2013). However, the alternative, convenience sampling from asexuality organizations, sacrifices representativeness. Here lack of sexual attraction is approached categorically, but “this is strictly instrumental, and [the] results must therefore be interpreted provisionally” (Chasin, 2011, p. 718).

There is still not a clear scholarly consensus on the definition of asexuality, and various operationalizations have been conducted and definitions proffered. Sexuality in general is often seen through the dimensions of behavior, desire, and identity (Lauermann, Gagnon, Michael, & Michaels, 1995), and the use of this tripartite scheme is common in the academic asexuality literature (e.g., Haydon, Cheng, Herring, McRee, & Halpern, 2014; Poston & Baumle, 2010; Scherrer, 2008), although asexuality as a behavior has largely been rejected by the asexual community (AVEN, 2010). It is important to note that these distinctions are not merely technical and that the overlap between them is not as great as some may think. Perhaps most obviously, asexuality as lack of sexual behavior can be caused by a number of non-attraction or identity-related factors such as lack of a companion or medical problems (Van Houdenhove, Gijs, T'Sjoen, & Enzlin, 2014a). Conversely, many who self-identify as asexuals are still sexually involved with partners (Brotto, Knudson, Inskip, Rhodes, & Erskine, 2010), as are many who indicate lack of sexual attraction (Höglund, Jern, Sandnabba, & Santtila, 2014). Asexuality as a lack of sexual attraction and asexuality as an identity also demonstrate empirical distinctiveness (perhaps in large part due to the

existence of gray-asexuals or demisexuals, who may exhibit sexual attraction in particular contexts, but who may or may not adopt the asexual label). For example, Prause and Graham (2007) found that only 41.5 % (17 of the 41) self-identified asexuals in their undergraduate sample reported no sexual attraction to either men or women, and that 89.5 % (17 of the 19) participants who reported no attraction to men or women were self-identified as asexuals.

Further differences are caused by the characteristics of the survey method used. In the Prause and Graham study, only 53.7 % of the participants who self-identified as asexual on a forced-choice sexual orientation were identified as asexual in an open-ended question, while Brotto et al. found that 75 % of their pre-selected asexual sample chose “asexual” on a forced-choice sexual orientation question, with 11 % choosing “other.” These differences also appear to substantively affect interrelations among “asexuality” and sociodemographic variables. For example, Prause and Graham's self-identified asexual sample showed differing gender, education, and sexual history characteristics than Bogaert's (2004) study that employed a single-item measure. The ongoing theoretical attempt to appropriately parse out and address different dimensions of sexuality parallels the ongoing attempt to do so in the allosexual sexual orientation literature (e.g., Bauer & Jairam, 2008). In both cases, it is clear that how the sexual or asexual construct is measured substantively affects the composition of the population and interrelations with other variables, yet in both cases the respective literatures have not definitively settled on a measure that is parsimonious enough to include in large-N surveys, yet precise enough to capture the varying dimensions involved.

For this study, I used the “sexual self-definition” question used in Waves III and IV of the Add Health survey. This question, originally designed for and with an emphasis on sexual orientation on the homosexual/heterosexual continuum, is structurally similar to the classic Kinsey scale that operationalized asexuality for the first time. Specifically, the Add Health sexual definition scale asked the participant to, “Please choose the description that best fits how you think about yourself,” with options ranging from 1 (“100 % heterosexual”) through various degrees until 5 (“100 % homosexual”) with 6 being the option “not sexually attracted to either males or females.”

In a sense, this forced-choice, multiple choice measure implies asexuality as an identity as well as a lack of sexual attraction, as it was presented as an alternative to the allosexual sexual identities of homosexuality and heterosexuality that may have cued them toward viewing the “no sexual attraction” as an orientation-type identity as well. Furthermore, the forced-choice nature of the question implies that those who indicated lack of sexual attraction were doing so relative to some other allosexual orientation on the homosexual/heterosexual continuum. This may cause some participants to be included in the “no sexual attraction” box that would not be if presented with a dichotomous or open-ended

option (as was the case with Prause and Graham's [2007] sample); for example, a significant portion of those who indicated "no sexual attraction" may have been gray-sexuals or demisexuals for whom the simple lack of sexual attraction does not tell the whole story.

The manner in which the complexities of identity and attraction interact with survey instrumentation is poorly understood, but throughout this article the working assumption is that indicating "no sexual attraction" in the context of a forced-choice scale is a useful indicator of lack of sexual attraction, whether by an lifelong asexual who has never felt sexual attraction or a demisexual who is currently not emotionally invested enough in a relationship to have developed a sexual attraction. However, it is worth noting that such a measure may still not include people who are not quite sure about their status. Indeed, in the results I will discuss how the empirical patterns could be interpreted as evidence for the ambiguities and complexities involved in sexual identification when one is not sure about one's own sexual attraction. However, future research should explore ways in which the survey structure affects the stability of the dimension of asexuality being measured, and should investigate heterogeneity within the "no sexual attraction" population.

In the prior literature, temporal stability of absent sexual attraction has either been gaged or incorporated into the operationalization of the concept via self-report. For example, Bogaert (2004) defined asexuals as those who reported a complete, lifelong lack of sexual attraction. More recently Höglund et al. (2014) identified asexuals as people who reported no sexual attraction in the past 12 months, and their finding of a strong relationship between self-reported lack of sexual interest and early life lack of sexual experiences was interpreted as evidence of overall temporal stability. This study is the first of which I am aware that the lack of sexual attraction (or any dimension of asexuality) was examined using longitudinal data, and did not rely on self-reported, recalled information.

## Results

### Descriptives

While the dataset itself is large, those who report no sexual attraction made up a small fraction of the total participants: a total of 25, or .52 % of participants in Wave III, and 26, or

.51 % of the sample in Wave IV. Because prior estimates are derived from recalled lifelong asexuality, whereas this measure uses longitudinal data, it is possible that recall bias is a methodological concern in some studies. Ultimately, the Add Health prevalence rates are drawn from a very specific demographic of U.S. society, are not whole population-based estimates as others are, and are therefore somewhat incommensurable with other published rates.

For both waves, those who lack sexual attraction were not significantly more likely to be either male or female (Table 1). The prior literature has not demonstrated a strong age effect (Van Houdenhove, Gijs, T'Sjoen, & Enzlin, 2014b); however, some studies have found a gendered age effect along the attraction dimension, with only women who report no sexual attraction showing a positive effect (Bogaert, 2004; Höglund et al., 2014). In this sample, Wave IV participants who reported no sexual attraction were slightly older. However, due to the nature of the Add Health sample, variation on age is limited. Those who lacked sexual attractions in Wave IV were significantly less likely to be married (23 %) than their sexual counterparts (43 %), supporting prior findings that those who report no sexual attraction are less likely to be married (Bogaert, 2004).

### Multivariate Analysis

For the most part, the individuals who reported no sexual attraction in Wave III were not the same individuals who reported no sexual attraction in Wave IV. Specifically, of those who indicated no sexual attraction in Wave III, eight of them went on to self-identify as exclusively heterosexual, one as primarily heterosexual, one as homosexual, and one refused altogether. Of those who indicated no sexual attraction in Wave IV, 15 self-identified as exclusively heterosexual in Wave III, one refused, one did not know, and one indicated "not applicable." Only three participants who indicated that they had no sexual attraction one way or the other in Wave III went on to indicate the same in Wave IV (Table 2).

Ultimately, how stable or fluid this makes the lack of sexual attraction in this sample depends on what it is being compared to. A natural point of comparison is the stability of allosexual orientations across time. When the categories are dichotomized and Cohen's kappas for inter-wave agreement are calculated, lack of sexual attraction has relatively weak agreement across waves, with a kappa of .17, while other sexual minority categories have

**Table 1** Descriptive statistics

	Wave III no sexual attraction	Wave III sexual	Diff.	Wave IV no sexual attraction	Wave IV sexual	Diff.
Male (%)	48.0	46.1	−1.9	30.8	46.1	15.3
Married (%)	8	16.9	8.9	23.1	42.6	20.5*
Age (years)	22.0	21.8	−.2	29.3	28.4	−.9**

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

**Table 2** Transitions between waves

Wave III or Wave IV categories of people who indicated “no sexual attraction” in other wave	Wave III—no sexual attraction		Wave IV—no sexual attraction	
	<i>N</i>	%	<i>N</i>	%
	Heterosexual	8	57.1	15
Mostly heterosexual	1	7.1	0	0
Bisexual	0	0	0	0
Mostly homosexual	0	0	0	0
Homosexual	1	7.1	0	0
No sexual attraction	3	21.43	3	14.3
Refused	1	7.1	1	4.8
Don’t know	0	0	1	4.8
Not applicable	0	0	1	4.8

kappas of .2–.4, and exclusive heterosexuality has a kappa of .51 (Table 3). The difference between the lack of sexual attraction kappa and that of the other allosexual options is statistically significant. Additionally, the nonresponse kappa is statistically significantly lower than the no sexual attraction kappa.

Because Wave III had a “not applicable” option that participants could select that Wave IV did not have, all of the nonresponses were merged into the same category to derive a “nonresponse” kappa statistic. It should be noted that very few participants selected the “not applicable” option (16, total out of the whole sample), so the additional category in one of the waves should not significantly bias cross-wave comparisons.

While the numbers involved are small, indicating a lack of sexual attraction in Wave III still significantly predicted whether one goes on to do so in Wave IV (Table 4). Specifically, the odds of indicating “no sexual attraction” were 68 times higher if participants did so in Wave III. Additionally, a relatively high number of individuals who indicated no sexual attraction in one wave either refused to answer the orientation question or indicated that they did not know. The odds of indicating “no sexual attraction” in Wave IV were 19 times higher if participants refused in the previous wave, 42 times higher if they did not know, and 31 times higher if they marked “not applicable.” Again, the raw number doing so was

small (Table 2), but given the small number of individuals overall who selected the refused, don’t know, or not applicable options, the relationship between doing so in Wave IV when one self-identified as not having sexual attraction in Wave III was statistically significant, as was the relationship between refusing to answer the question in Wave III and going on to indicate no sexual attraction in Wave IV (Table 4).

## Discussion

This article has, for the first time, directly examined the temporal stability of a dimension of asexuality using longitudinal data. I found that in this sample most people who indicated that they had no sexual attraction either would change their preference in the future, or reported some allosexual identification in the past, and that the inter-wave consistency for those selecting the no sexual attraction option was lower than it was for those on the homosexual/heterosexual continuum. However, indicating no sexual attraction in Wave III was statistically significantly related to doing so in Wave IV, suggesting some degree of permanence for some individuals.

Also very important was the finding that the alternative categories that lay off of the conventional homosexual/heterosexual continuum (the no sexual attraction option and the nonresponse options) predicted each other. These findings provide quantitative evidence for a process uncovered in other qualitative, convenience sample studies (e.g., Prause & Graham 2007): figuring out which sexual box one fits into when sexuality is assumed is difficult, and there may be a significant overlap between indicating no sexual attraction and simply not being sure. There are a number of plausible reasons for why this might be. As Hinderliter (2009b) pointed out, “people who have never felt sexual attraction do not know what sexual attraction feels like, and knowing whether or not they have ever felt it can be difficult” (p. 620). The change in which category the individuals place themselves in may reflect this process of trying to figure out how their experiences comport with the societal expectation of sexuality. One of the participants in Prause and Graham’s (2007) study spoke simply of not knowing whether or not the feelings they experienced were “pleasurable” in the sense that it seemed to be for others. As one

**Table 3** Cohen’s kappas for sexual and nonsexual categories across Wave III and Wave IV

	Agreement (%)	Expected agreement (%)	Kappa	SE	Z	Prob > Z
Exclusively heterosexual	89.23	77.92	.5124	.0152	33.77	.0001
Mostly heterosexual	90.35	84.34	.3840	.0151	25.49	.0001
Bisexual	97.93	96.98	.3151	.0154	20.45	.0001
Mostly homosexual	98.86	98.54	.2201	.0154	14.31	.0001
Exclusively homosexual	99	98.35	.3957	.0143	27.68	.0001
No sexual attraction	99.31	99.17	.1681	.0151	11.13	.0001
Nonresponse	98.98	98.94	.0399	.0145	2.75	.0030



**Table 4** Transitions between waves (odds ratios)

	(1) No sexual attraction—Wave III	(2) No sexual attraction—Wave IV
Ref-completely heterosexual		
Mostly heterosexual	Omitted <sup>a</sup>	Omitted <sup>a</sup>
Other wave		
Bisexual	Omitted <sup>a</sup>	Omitted <sup>a</sup>
Other wave		
Mostly homosexual	Omitted <sup>a</sup>	Omitted <sup>a</sup>
Other wave		
Homosexual	9.543* (2.11)	Omitted <sup>a</sup>
Other wave		
No sexual attraction	74.75*** (6.02)	68.11*** (6.02)
Other wave		
Refused	56.06*** (3.60)	19.21** (2.76)
Other wave		
Don't know	Omitted <sup>a</sup>	41.62*** (3.36)
Other wave		
Not applicable	Omitted <sup>a</sup>	31.22** (3.15)
Other wave		
Observations	4103	3805
<i>BIC</i>	202.7	270.7

Exponentiated coefficients; *t* statistics in parentheses

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

<sup>a</sup> Omitted from model due to the variable perfectly predicting the dependent variable

participant in Scherrer's (2008) study put it, asexuals may feel that there is something different about their way of perceiving sexuality, but they do not "have a handy label to stick it on." This complication may be especially compounded for gray-asexuals or demisexuals, whose can not simply anchor to a "no sexual attraction" reference point.

The relationship between indecision or simply opting out of answering the survey and indicating no sexual attraction in this sample provides quantitative evidence for the process of navigation across time. This may be especially the case for gray-asexuals. Feeling that the survey does not adequately capture their identity or lived experience, not being sure if their on and off again sexual desire counts enough to make them gay or straight, or lack of surety about whether the feelings they have qualify as sexual are all plausible possibilities for why someone may switch away or into the "no sexual attraction" option.

The conflation between sexual and romantic attraction is another plausible reason for switching between waves that does not necessarily entail a change in sexual attraction. While the romantic/sexual distinction is well known in asexual communities, "in asexuals not recruited from asexual communities, it

is likely that many do not realize that the attractions they do feel are not sexual attraction" (Hinderliter, 2009b, p. 620). Interestingly, in Wave IV separate "romantic attraction" questions were asked the participants: "Are you romantically attracted to [females/males]," with a yes/no response (While this question was asked before the sexual orientation question, a similar question, albeit with different wording ["Have you ever had a romantic attraction to a..."] was asked in Wave III, so question ordering effects—possibly cuing participants toward the romantic/sexual distinction based on the distinctiveness of the questions—should not significantly affect cross-wave comparability—although it may have affected who indicated "no sexual attraction," but again question ordering effects, as well as overall survey structure effects, are still largely speculative).

Of the males who felt no sexual attraction, one of them was romantically attracted to males and five of them were romantically attracted to females. Of the females, three were romantically attracted to females, while 10 of them were romantically attracted to males. Two participants, one male and one female, were romantically attracted to both males and females. Overall, a majority of participants indicated some romantic attraction despite their lack of sexual attraction. These numbers comport with the findings in the asexuality literature that many who do not feel sexual attraction feel romantic attraction (Scherrer, 2008), as well as the findings of brain imaging studies suggest neurological distinctiveness between romantic and sexual feelings (Fisher, Aron, & Brown, 2005). It is worth noting as a point of comparison that the two aforementioned AVEN surveys found that only 16% (2011) and 19% (2015) of their sample were identified as aromantic, although without further information it is impossible to tell what the differences between the asexuality convenience samples and the Add Health sample is attributable to.

The Add Health numbers suggest that those who self-identify as not having sexual attraction on a Kinsey scale-type measure are largely able to distinguish between sexual and romantic attraction, even if they are not involved in a formal asexuality organization where the distinction is better known. Of course, those who are unable to make a distinction would likely adopt their romantic orientation as their sexual one and therefore would not show up in the no sexual attraction category. Romantic attraction may also directly affect the longitudinal stability of reporting sexual attraction for demisexuals. Some of the participants who indicated a romantic, but not a sexual, attraction in Wave IV but who did indicate one in Wave III may have been following this pattern, with a sexual attraction causally developing from a romantic relationship.

If the patterns of change shown here were simply a matter of developing or losing sexual attraction across waves, it would not be unreasonable to expect more clean-cut transitions between categories, but the definitional ambiguity is evidenced by the fact that those who indicated no sexual attraction were much more likely to opt out of responding altogether in the other wave, either because they felt the measure did not apply to them, they refused, or they simply did not know.

As previously noted, prior research has found complicated sexual identification patterns when members of asexuality organizations were surveyed. A large number do not finish the surveys after they have started (Van Houdenhove et al., 2014a), perhaps suggesting that the surveys are poorly designed to capture the lived experiences of the participants, and people questioning whether or not they are asexual can take a long time trying to answer the survey questions (Hinderliter, 2009b). While addressing a distinct, albeit related dimension of asexuality, my findings suggest that this complexity extends to non-convenience samples, at least among young adults.

It is likely that the complex navigation of sexual identities that I find evidence for occurs more often during the younger ages observed here, whereas at older ages people may be less vague about the lack of sexual attraction as a concept, and may have a more concrete sense of their sexuality or lack thereof.

To expand on these findings (and to advance asexuality studies more generally), asexuality researchers should strive to include standardized measures of different dimensions of asexuality on large-N, general social or sex-related population and/or longitudinal surveys. The measure used here focuses on one of the central pillars of asexuality: lack of sexual attraction. Some have argued that this should be the primary criterion for defining asexuality (e.g., Van Houdenhove et al., 2014a), while here I do not take a position on this broader debate, it is clear from conceptual self-definitions from within the asexual community ([www.asexuality.org](http://www.asexuality.org)), as well as findings from qualitative studies (Brotto et al., 2010; Prause & Graham, 2007), that lack of sexual attraction is central to the concept of asexuality, although it does not comprehensively cover the concept. Future research should also address the aforementioned limitation of this study by addressing the stability of different components of asexuality from a longer, life course perspective, as is starting to be done in sexual orientation research (Mustanski et al., 2014). Furthermore, categorization schemes should also incorporate smaller sexual minority groups such as gray-sexuals and demisexuals.

## References

- Add Health. (2015). *Questions about data*. Retrieved from <http://www.cpc.unc.edu/projects/addhealth/faqs/aboutdata/index.html#when-there-are-gender>. Accessed 3 Jan 2015.
- Aicken, C. R. H., Mercer, C. H., & Cassell, J. A. (2013). Who reports absence of sexual attraction in Britain? Evidence from national probability surveys. *Psychology and Sexuality*, 4, 121–135.
- AVEN. (2010). *What is 'asexual elitism' and why does AVEN discourage it?* Retrieved from <http://www.asexuality.org/en/topic/51411-what-is-asexual-elitism-and-why-does-aven-discourage-it/>. Accessed 3 Jan 2015.
- AVEN. (2011). *Asexual Awareness Week Community Survey*. Retrieved from <http://www.asexualawarenessweek.com/docs/SiggyAnalysis-AAWCensus.pdf>. Accessed 3 Jan 2015.
- AVEN. (2014). *AVEN 2014 Community Survey*. Retrieved from <https://asexualcensus.files.wordpress.com/2014/11/2014censuspreliminaryreport.pdf>. Accessed 3 Jan 2015.
- Bauer, G. R., & Jairam, J. A. (2008). Are lesbians really women who have sex with women (WSW)? Methodological concerns in measuring sexual orientation in health research. *Women and Health*, 48, 383–408.
- Bogaert, A. F. (2004). Asexuality: Prevalence and associated factors in a national probability sample. *Journal of Sex Research*, 41, 279–287.
- Brotto, L. A., Knudson, G., Inskip, J., Rhodes, K., & Erskine, Y. (2010). Asexuality: A mixed-methods approach. *Archives of Sexual Behavior*, 39, 599–618.
- Chasin, C. D. (2011). Theoretical issues in the study of asexuality. *Archives of Sexual Behavior*, 40, 713–723.
- Fisher, H., Aron, A., & Brown, L. L. (2005). Romantic love: An fMRI study of a neural mechanism for mate choice. *Journal of Comparative Neurology*, 493, 58–62.
- Haydon, A. A., Cheng, M. M., Herring, A. H., McRee, A. L., & Halpern, C. T. (2014). Prevalence and predictors of sexual inexperience in adulthood. *Archives of Sexual Behavior*, 43, 221–230.
- Hinderliter, A. C. (2009a). *Asexuality: A history of a definition*. Unpublished manuscript. Retrieved from [http://www.asexualexplorations.net/home/history\\_of\\_definition.html](http://www.asexualexplorations.net/home/history_of_definition.html). Accessed 3 Jan 2015.
- Hinderliter, A. C. (2009b). Methodological issues for studying asexuality [Letter to the Editor]. *Archives of Sexual Behavior*, 38, 619–621.
- Höglund, J., Jern, P., Sandnabba, N. K., & Santtila, P. (2014). Finnish women and men who self-report no sexual attraction in the past 12 months: Prevalence, relationship status, and sexual behavior history. *Archives of Sexual Behavior*, 43, 879–889.
- Kinsey, A. C., Pomeroy, W. B., & Martin, C. E. (1948). *Sexual behavior in the human male*. Philadelphia: W. B. Saunders.
- Laumann, E. O., Gagnon, J. H., Michael, R. T., & Michaels, S. (1995). *The social organization of sexuality: Sexual practices in the United States*. Chicago: University of Chicago Press.
- MacNeela, P., & Murphy, A. (2015). Freedom, invisibility, and community: A qualitative study of self-identification with asexuality. *Archives of Sexual Behavior*, 44, 799–812.
- Mustanski, B., Kuper, L., & Greene, G. J. (2014). Development of sexual orientation and identity. In D. L. Tolman & L. Diamond (Eds.), *Handbook of sexuality and psychology, Vol. 1. Person-based approaches* (pp. 597–628). Washington, DC: American Psychological Association.
- Poston, D. L., & Baumle, A. K. (2010). Patterns of asexuality in the United States. *Demographic Research*, 23, 509–530.
- Prause, N., & Graham, C. A. (2007). Asexuality: Classification and characterization. *Archives of Sexual Behavior*, 36, 341–356.
- Przybylo, E. (2012). Producing facts: Empirical asexuality and the scientific study of sex. *Feminism & Psychology*, 23, 224–242.
- Savin-Williams, R. C., & Joyner, K. (2014). The dubious assessment of gay, lesbian, and bisexual adolescents of Add Health. *Archives of Sexual Behavior*, 43, 413–422.
- Scherrer, K. S. (2008). Coming to an asexual identity: Negotiating identity, negotiating desire. *Sexualities*, 11, 621–641.
- Van Houdenhove, E., Gijs, L., T'sjoen, G., & Enzlin, P. (2014a). Asexuality: A multidimensional approach. *Journal of Sex Research*. doi:10.1080/00224499.2014.898015.
- Van Houdenhove, E., Gijs, L., T'sjoen, G., & Enzlin, P. (2014b). Asexuality: Few facts, many questions. *Journal of Sex and Marital Therapy*, 40, 175–192.