

Adolescent Sexual Orientation: Surprising amounts of change

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Summary:

The idea that adolescent same-sex attraction will always become adult same sex attraction is quite incorrect. Data from the large USA ADD-Health survey (Savin-Williams and Ream, 2007) confirm that adolescent homosexuality/bisexuality both in attraction and behaviour undergoes extraordinary change from year to year. Much of this could be experimentation. The changes are overwhelmingly in the direction of heterosexuality, which even at age 16-17 is at least 25 times as stable as bisexuality or homosexuality, whether for men and women. That is, 16 year olds saying they have an SSA or Bi- orientation are 25 times more likely to change towards heterosexuality at the age of 17 than those with a heterosexual orientation are likely to change towards bi-sexuality or homosexuality. Under the most extreme conservative assumptions heterosexuality is still 3x more stable for men and 4x for women.

The Savin-William and Ream (2007) paper

In the following, SSA is used for “Same-sex attraction” and OSA for “Opposite-sex attraction”. “Bisexual” or “Bi” is used for those with an attraction to both sexes.

Adolescents are notoriously changeable. Does this extend to their sexual orientation? The current popular belief about sexual orientation is that it is innate, probably originating prenatally and will inevitably emerge in a stable form in an individual. Few believe that one attraction can decrease and be replaced by another. The data in this paper however, show that in adolescence attractions both emerge and disappear on a short time scale.

The term “sexual orientation” equates to “sexual attraction”. Sexual orientation should be distinguished from “sexual orientation identity” a largely political concept, and from sexual behaviour, because in principle a person may experience sexual attraction but not act on it. This article will concentrate on “attraction” as the basic status.

The ADD-Health survey in the USA interviewed very large numbers of teens on a number of subjects including sexual attraction and behaviour, and the results have been published in many papers already. The first interview wave (1994-1995) contained people with a mean age of about 16. In the second wave as many as possible of the same people were interviewed at about age 17. After a five year gap as many as possible of the same people were interviewed (at about age 22) in a third wave and this gave a total of 5-7000 interviewees in waves 2 and 3. (See Figures

below.) These are large numbers for a survey and errors should be much smaller than previous surveys. *

The data are the best we have at present, and it will be several years before they are surpassed, though these longitudinal studies are increasingly frequent. The results are very surprising.

Results

The results relevant to this paper were reported by Savin-Williams and Ream (2007). The former has published many papers on SSA, particularly of young people .

Attraction

The Savin-Williams paper gives several tables, but I am presenting them in visual form to make them easier to follow. In the Figures that follow, red represents attraction to the opposite sex only, lilac represents those who were attracted to both sexes, and blue represents those attracted to the same sex only - in the year of interview. The diagram shows the changes in attraction in those three classes between ages 16 and 17. **

The survey used the term “romantic attraction” in its questions about attraction to one sex or the other, but I shall shorten it to “attraction”.

In the first diagram below the bars on the left represent 100% i.e. all those in one particular class at the age of 16. The bars to the right show the percentage of those people ending up in the three attraction classes a year later at age 17. The answers do not always add up to the height of the left-hand bar, because 15% of respondents who had romantic attraction in the first year, said they had none towards either sex in the second. Sometimes they did not answer the question at all.

ROMANTIC ATTRACTION CHANGES AGES 16 - 17 USA ADD-Health Survey



Taking those attracted towards the opposite sex only (the top row) we see that a very, very small percentage said in the second year they had attractions towards only the same sex or both sexes. A vast majority continued to have attractions only towards the opposite sex, both for men and women.

For those (much fewer) who had attractions towards both sexes (“bisex only” row) we see something interesting. The number attracted to both sexes at age 17 drops very dramatically. A very small percentage lose their attraction to the opposite sex and become attracted exclusively to the same sex, but the greatest proportion by far has no longer any attraction to the same sex but experiences only attraction to the opposite sex. This is a decrease in same-sex attraction.

For the “same sex only” row (also interesting) only a small proportion stay exclusively attracted to the same sex from one year to the next. Some switch to bisexual and experience both attractions, but most experience a large change and become attracted only to the opposite sex.

There was no intervention to bring about any changes between ages 16 and 17. It seems life-experiences were mainly responsible.

I now show the same results between mean ages 17 and 22, a five year gap rather than a one year gap.

ROMANTIC ATTRACTION CHANGES AGES 17 - 22

USA ADD-Health Survey



This pattern looks broadly similar. However we have to be a little careful with the interpretation because this is a set of data comparing responses at dates 5 years apart, and we don't know what happened in between. Probably there have been further changes from year to year, decreasing in frequency towards age 22. In other words greater stability with age seems likely.

Most of those exclusively opposite-sex attracted stay that way for the second interview. However the bisexual pattern is not quite the same as for the 16-17 year-olds, particularly for women. A significant number again report bisexual attraction.

About 75% of men with initial same-sex attraction say they are now exclusively opposite-sex attracted; 25% again report same sex attraction. For those women initially exclusively same-sex attracted, very few report exclusive same-sex attraction at the time of the second interview. Almost all the women moved from SSA to Bi/OSA at some stage.

The conclusion of this is that there is a huge amount of experienced change in attraction with time, certainly over five years, but even over as short a period as a year.

Discussion

What does this mean? At the most basic level it means feelings/attractions change. This would mean sexual feelings are on about the same basis as so many other changeable feelings experienced by adolescents. But what caveats could be placed on this finding?

First, there could be a problem with forcing respondents into inappropriate categories. We should note the findings of those researchers who find that many women particularly, are uncomfortable

with the categorizations forced on them by researchers, and prefer to describe themselves as “unlabelled” in terms of sexual orientation, an option not offered in this ADD-Health survey. Perhaps this means they reserve the right to react as the fancy takes them, in different circumstances. This itself suggests the idea of innate “sexual orientation” may be a wrong concept, and that change is happening over a very short time frame.

Perhaps the adolescents were lying to the interviewers, or rather the anonymous laptop? That is always hard to eliminate as a possibility, but there seems little motive for dishonesty. It’s just possible that SSA people falsely stated that they were OSA second time round. It is also possible those who said OSA the first time may have been reluctant to admit to SSA in the second interview. However given the anonymity this was probably a quite minor problem.

Perhaps what adolescents understand by “romantic attraction” is not what we understand? However it is hard to see what else it could mean, given the media attention it gets. A slight possibility is that what was really experienced was a kind of non-erotic hero-worship or adolescent crush which was confused with the erotic.

Perhaps these claims to be OSA , SSA or bi- are puppy love? Not really the depth of feeling that an adult would have, and not really an expression of sexual orientation? Perhaps it is similar to play? There is some evidence for this – certainly adult relationships become a hugely more serious affair with a lot more at stake. However the feelings are experienced as real, real enough to trigger suicide when the person is rejected by their special friend, particularly if the attraction is SSA or bisexual.

Perhaps this “attraction” is merely fantasy? Many would entertain the idea of sex with the same or opposite sex, but would never follow it through in reality. It could easily be that fantasy is confused with real feeling. However if we accept that , we should not take seriously any feelings adolescents have,

But none of these caveats seems serious enough to derail the survey. If they are to be taken seriously then the same caveats derail virtually all similar surveys of adults for the last twenty years.

Behaviour

Some test on how far these feelings correspond to reality is to create similar diagrams for sexual behaviours which presumably express these feelings. The next diagram is for changes between 16 and 17 in sexual behaviour. It shows behaviour mostly follows the same pattern seen for attraction/feelings. For this set of data, there had to be sexual activity prior to age 16 and between ages 16 and 17 for comparison. The numbers are less than for attractions alone, but basically, if there are attractions, most of these teens act on them.

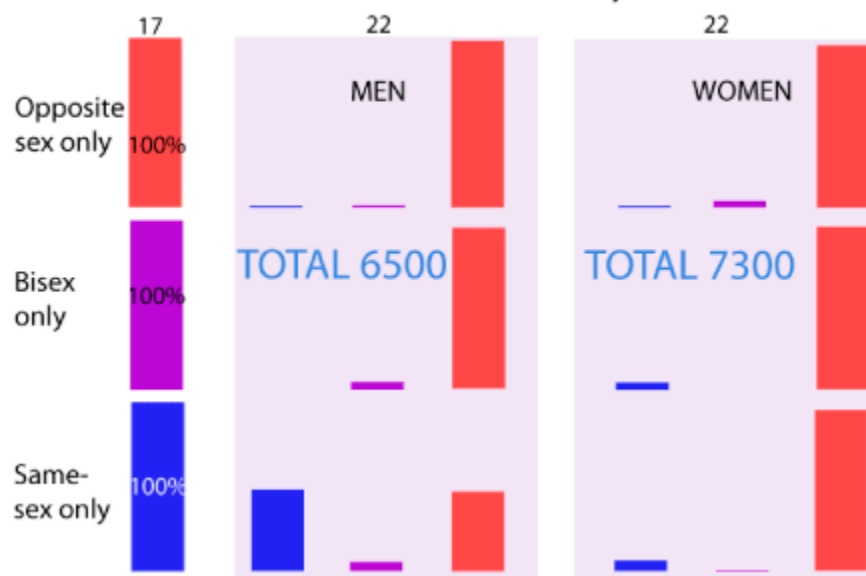
SEXUAL BEHAVIOUR CHANGES AGES 16 - 17 USA ADD-Health Survey



We see immediately the behaviour patterns are overall rather similar – most changes are towards heterosexual, and the changes are mostly rather large even in one year. We notice that there is much change in bisexual and same-sex behaviour in a year.

For ages 17 to 22 we get the following:

SEXUAL BEHAVIOUR CHANGES AGES 17 - 22 USA ADD-Health Survey

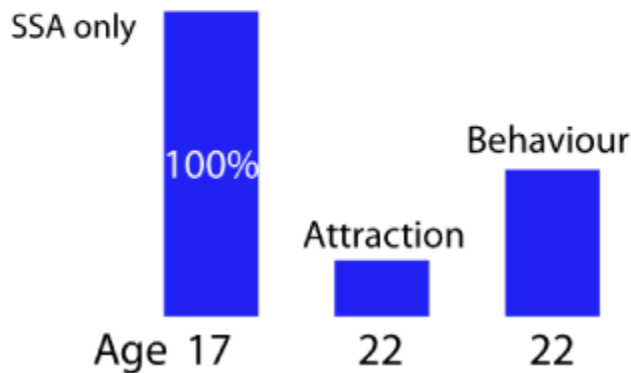


We see again large changes towards exclusive heterosexuality, though nearly half of males with same-sex behaviour report the same behaviour at year 22. That is, the behaviour continues for about half the male group, but attraction for only one fifth (see next diagram).

Change in attraction greater than change in behaviour

Curiously there is more change in attraction in same-sex males aged 17 to 22 than in behaviour.

ATTRACTION/ BEHAVIOUR CHANGES AGES 17 - 22
USA ADD-Health Survey



There seems to be a significant amount of sexual behaviour without corresponding attraction. This could reflect superficial experimentation, or focus on orgasm in and of itself regardless of how it is achieved. There seems a much greater discordance between attraction and behaviour among the exclusively same-sex attracted males than other groups. This could point to a psychological conflict. However in general the change of feelings towards the opposite sex is mirrored in behaviour.

Stability of attraction

Looking at romantic attractions, the following table shows the percentage of change (ages 16-17) away from the initial attraction):

	MALE	FEMALE
Initially exclusively OSA	1.6%	2.8%

Initially exclusively SSA	61%	81.1%
Initially Bi	91.2%	83.5%

From this table we can estimate the degree of change from bi or SSA, compared with degree of change from OSA. Making the assumption that those with missing data will not affect the results, we get the following ratios of changes:

SSA/OSA(men) $61/1.6=38x$,

Bi/OSA(men) $57x$,

SSA/OSA(women) $81.1/2.8=28.9x$,

Bi/OSA(women) $29.8x$.

So SSA/Bi is at least 25x as changeable for that period as OSA. (That is, 16 year olds saying they have an SSA or Bi- orientation are 25 times more likely to change towards heterosexuality at the age of 17 than those with a heterosexual orientation are likely to change towards bi-sexuality or homosexuality.) A good rule of thumb would be a figure of at least 25x, though the men are more changeable than the women. Conversely OSA is 25x more stable than SSA/Bi. Even if we use the extreme and improbably conservative principle that all missing data people are SSA, SSA/Bi still proves 3x as changeable as OSA (males) and 4x as changeable for females.

Some will undoubtedly attribute this instability to the difficulty of maintaining a stable orientation in the presence of an overwhelming social model of heterosexuality. However, whatever the causes, this enormous change undermines any notions that homosexuality is innate or fixed at these ages. Change happens.

In their discussion of these data, Savin-Williams and Ream conclude that what evidence there is of stability is mostly due to the people who are opposite-sex attracted. Although the total incidence of SSA and Bisexuality stayed fairly constant over the years there was constant movement of individuals in and out of those groups- as illustrated in the Figures.

If there is change of feelings from year to year at this age, by the usual criteria there is change of orientation. Most teenagers thinking they are gay/lesbian/bi and will be the rest of their life, will in fact probably be different the following year. It is totally irresponsible to counsel affirmation of same-sex feelings in an adolescent on the grounds that the feelings are intrinsic and the child is therefore homosexual.

So the dilemma is: are the feelings of 16 year olds true indicators of attraction? In that case they are capable of radical change. Or are they almost entirely unreliable? In which case no teenagers should ever be told they are gay. Rather, they can with fair reliability be told they are heterosexual, even at age 16.

There will be those who are Bisexual or SSA at age 16 who retain that attraction pattern unchanged the rest of their lives, but from the survey data we would have to say that this is very unusual.

These degrees of change were so great that Savin- Williams and Ream questioned the very concept of sexual orientation and preferred a different interpretative framework. Coming from a well known author with such extensive experience, this is a very significant conclusion.

It is possible to dismiss these results as those of changeable teenagers, but these results are a more extreme example of the similar but much slower and less extreme adult changes recorded by Kinnish et al. (2008) in which most change was also towards heterosexual.

New Zealand longitudinal work on ages 22-26 (Dickson et al. 2003) suggests a lot of change in attractions, but the picture is more complex and atypical. For heterosexual women there was an amount of shift to bisexual which was very high by world standards. The authors wonder if this reflected the very heavily feminist influence in New Zealand at the time the survey respondents were in their early 20's. The bisexuality may have been culturally influenced experimentation; New Zealand is legislatively very permissive towards non-heterosexuality, opinion polls concur, and there is bureaucratic enforcement.

For men equal numbers moved into and out of same sex attraction. So in New Zealand there was a lot of change but not predominantly to OSA from SSA and bisexual categories at these ages. However, again, OSA was vastly more stable than bisexuality or SSA.

The Savin-Williams results are consistent with previous literature summarized in Whitehead and Whitehead (1999), which derived a stability for OSA 20x that of SSA. On the basis of the adolescent data only, one would have to echo the late '90s folk wisdom which opined rather simplistically that "former gays outnumber gays". The amount of change going on is so remarkable that we must ask why people who have changed from SSA are so invisible? Four reasons at least: they are embarrassed about their previous attraction and don't want to talk about it; any disclosure could wreck a current heterosexual relationship; disclosure would subject them to pressure from and interrogation by those who insist change cannot occur; they hope and believe their current heterosexual orientation is now stable – and, according to the data it probably is. There is therefore a vast hidden reservoir of changed orientation in society, only revealed by surveys such as that of Savin-Williams and Ream.

One inescapable conclusion is that *clinical* samples of homosexual/bisexual people who find change nearly impossible, may well be expressing what is valid for them, but their experience does not at all reflect the norm in society.

Reference List

Dickson, N., Paul, C. and Herbison, P. (2003) Same-sex attraction in a birth cohort: prevalence and persistence in early adulthood. *Social Science and Medicine* **56** 1607-1615.

Kinnish, K.K., Strassberg, D.S. and Turner, C.W. (2005) Sex differences in the flexibility of

sexual orientation: a multidimensional retrospective assessment. *Archives of Sexual Behavior* **34** 175-183.

Savin-Williams, R.C. and Ream, G.L. (2007) Prevalence and Stability of Sexual Orientation Components During Adolescence and Young Adulthood. *Archives of Sexual Behavior* **36**, 385-394.

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Footnotes:

* However there are inevitable problems – frequently interviewees in the first wave could not be located again, and those who were not available might have been mostly same-sex attracted, for example, and this would skew the statistics significantly. This type of problem always crops up in surveys – for example, what is the sexual orientation of those who refuse to answer? Fortunately it usually turns out the missing are the sexually inexperienced and conservative, reluctant to talk about sexual matters, though these days, as in this survey, the sensitive information is usually put into a lap-top anonymously thus giving an extra layer of confidentiality. Those sexually experienced are relatively happy to talk. ([Return](#) to top)

** The data are derived from Table 2 in the paper, and take account of the known misprinting of that table (personal communication Professor Ream, 2009). Please note they exclude missing data. This does not change conclusions much. ([Return](#) to top)