
Looking More Deeply at a Study on GLB Substance Use

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Rarely do contemporary studies of homosexual behavior include variables such as childhood sexual abuse that might give credence to causal attributions of a more developmental or intrapsychic nature. For this reason I was particularly intrigued by a recent study that longitudinally examined the use of cigarettes, alcohol and marijuana use by 156 GLB youths (Rosario, Schrimshaw & Hunter, 2004).

The authors sought to test three hypothesized predictors of substance use by these youth: 1) childhood sexual abuse; 2) the experience of gay-related stress; and 3) aspects of the "coming out" process. Analyses of baseline, 6-month and 12-month usage levels were described as providing no support for the childhood sexual abuse or gay-related stress hypotheses. A significant curvilinear relationship was identified for one proposed aspect of the coming out process, with increasing involvement in gay-related activities associated initially with increasing alcohol and marijuana use and then with declining use as involvement continued to increase.

While this study was touted uncritically in the popular press, a closer methodological and interpretive examina-

tion can yield a different perspective on the findings.

Methodological Limitations

Several methodological limitations must qualify the conclusions of this study, and only two were mentioned by the authors. They acknowledged that the findings may not generalize due to a sample that was relatively small and recruited from gay-focused organizations. The authors provided a less than helpful operationalization of sexual abuse. The sexual abuse variable simply asked if sexual abuse had ever occurred and thus was unable to identify frequency of abusive experiences in childhood. They also provided no descriptive information, such as prevalence rates of childhood abuse for the sample.

Assessment of marijuana and alcohol use was made by asking participants how many drinks or joints they have when they drink or use marijuana. I found this an odd way of measuring these variables. By this calibration, a participant who had three joints on one occasion during the year would score higher than the youth who had two joints every day for the same period. However, the authors

do acknowledge that, "The use and quantity of tobacco, alcohol, and marijuana were widespread and substantial." Frequency of tobacco use for some reason was calculated differently, using a 7-point scale more sensitive to actual frequencies of cigarettes smoked.

It is impossible to tell if the differential manner in which the substance use variables were calculated could have confounded the results, but it is intriguing to note that only cigarette use was found to be unchanged over time. Conceivably, participants' use of marijuana and alcohol could have evolved from rare binges to regular moderate use and yet be considered as supporting a decrease in overall usage levels.

It is also worth noting that the curvilinear relationship between use of alcohol and marijuana and involvement in gay-related activities occurred at the lowest criterion of acceptable significance ($p < .05$).

Interpretive Questions

All researchers bring to their craft a values framework that at least partially determines the relative salience of the various findings discovered. This phenomenon may be present in the authors' focus in the discussion section on the salutatory value of the coming out process for GLB youth substance use. This conclusion was made in spite of only one of the four measures of "coming out" correlating significantly. Briefly mentioned and not discussed at all was a result I found at least as, if not more, theoretically salient: The experience of stressful events related to homosexuality within the past three months was unrelated to substance use in this sample.

The authors' failure to discuss this finding is made all the more surprising by their earlier admission that the experience of gay-related stigmatization is the most widely hypothesized reason for higher rates of substance use among GLB populations. They do not even allude to an earlier analysis of the same database that revealed a similar absence of relationship (Rosario, Schrimshaw, Hunter & Gwadz, 2002). In the 2002 article, the authors do discuss the lack of findings but only offer explanations involving potential mediating variables and assessment restrictions. While these are important considerations, it does appear incomprehensible to the authors that gay-related stress might not play a dominant role in these youth's substance use.

The 2002 article's restricted range of explanatory options for the lack of relationship and the 2004 study's complete lack of attention to the non-significant result may be due to its potential to suggest that the destructive behavior of GLB youth might not be monolithically attributable to societal stigmatization of homosexuality.

Another interpretive divergence I have with the authors' presentation flows from a comparison of the degrees of significance among the study's hierarchical regression findings. The strongest associations ($p < .001$) were between initial and subsequent substance use levels, especially for marijuana. Consider that the most significant result among the coming out factors was a correlation of $r = -.20$ between the involvement in gay-related activities and changes in marijuana use at the 6-month period.

In practical terms, this means that a mere 4% of the variance in GLB youths' marijuana use at this time period was accounted for by their involvement in gay-related activities. Compare this with the earlier regression of baseline marijuana use with marijuana use at 6-months, which correlated at $r = .47$. Thus, 22.1% of the variance in the 6-month use of marijuana was accounted for by the high baseline usage level. Therefore, it appears probably that the most robust finding from this study is that GLB youth who present at baseline with high levels of substance use are likely to continue with high use levels at 6-month and 12-month follow ups.

Conclusion

This study can be commended for a willingness to take seriously possible developmental influences on GLB behavior such as childhood sexual abuse. In doing so, it may also have revealed how the gay-affirmative climate surrounding such research combined with methodological limitations may subtly influence the presentation of findings.

Rather than championing the coming out process as a solution for GLB substance use, a more conservative approach to the data might emphasize the lack of support for the gay-related stress theory and most dimensions of the coming out process, the fairly negligible support for the value of gay-related activities, and the apparently high use of substances by GLB youth throughout the study period. Generally, it appears that these troubled youth, as evidenced by their substance use levels, remained troubled over time in a manner that was unlikely to be impacted noticeably by a variety of dependent variables.

References

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