

The Effects of Early Relationship Stages and the
Effects of Time on Homosexual Couples

Hannah Cook

Longwood University

Introduction

Homosexuality, the “condition of same-sex attraction,” is a topic that has been increasingly shown in media, but not as much in research (Gokin, 2015, pp. 446). Because research of human relationships is being limited by not examining the sexual minority group of homosexuals, this topic deserves to be scientifically recognized. To further understand the concept of human relationships, and the hormone changes that accompany the beginning of a new relationship, homosexual relationships must be viewed. Studying hormonal changes throughout the start of a relationship are vital to understanding the way the brain works and reacts to close emotional and physical connections with other human beings; therefore, hormones levels of homosexual relationships should be tested and collected every month within the first six months of the relationship.

Previously, a study was conducted showing the changes in hormones when a heterosexual couple falls in love (Canale and Mazzariti, 2004, pp. 391-397). It was shown that the men in new heterosexual relationships had testosterone levels that “were significantly lower than in singles or individuals with a long-lasting relationship” and “the results in women were the opposite, that is, higher levels in the women in the first group, as compared with those from the second (Canale and Mazzariti, 2004, pp. 394). A gap in this study is that it was only conducted once, instead of multiple times over the course of six months, so the couples it consisted of had started their relationship within the past six months of the time of the study (Canale and Mazzariti, 2004, pp. 393). Another gap was that it only looked at heterosexual couples. No study of the same procedures has been done on couples of homosexual orientation.

Continuing, there has not been much research on homosexual individuals, and of those that have been done: “[i]t has been shown that both clinical and nonclinical research populations are extremely biased” because the studies have not used a variety of test subjects, limiting themselves to “unspecified populations” (Bracy, 1976, pp. 2). Along with the skewed studies, there is a serious lack of recent research, and it is imperative that we continue to ask research questions relating to homosexual relationships. We must broaden the research field to bring representation to homosexual individuals. Based on a literature search, it was found that most studies done related to homosexuality were completed by observing animals. While looking at humans, we must not let who a person has a relationship with interfere with scientific investigation. If anything, this inclusion will expand the knowledge of hormones within a relationship and will lead to a better understanding of human interaction. All of this together, will bring awareness to these minority communities and cause further education amongst those studying hormonal changes.

Looking more in depth into this hormone phenomenon, my hypothesis is that in same-sex relationships that have just begun, both partners will have an increase of their predominant sex hormone. This hypothesis is based from the results mentioned above in the Canale and Mazzariti study; heterosexual male partners had an decrease in testosterone, and female heterosexual partners had an increase in testosterone within the first six months of their relationship (2004, pp. 394). Therefore, partners in a new gay relationship will each have an increase in testosterone, and partners in a new lesbian relationship will each have an increase in estrogen. Outcomes of this study will be advancement of relative and recent research. This will be an unbiased study, contradictory of those before it, and composed of methods that have not been used for a study on

hormones in homosexuality. After the study, we will better understand how hormones are affected by stages of a same-sex relationship. This study will bring more awareness and acceptance to the sexual minority group, and therefore, to others. Furthermore, this study will show the correlations between hormone changes throughout the first six months of homosexual and heterosexual relationships.

Methods

To begin, I will display advertisements to find participants for the study. The advertisements will ask for gay and lesbian couples that have just begun a relationship. It will also ask for a heterosexual couple that has just begun a relationship. Then, it will ask for a single homosexual man, a single homosexual woman, a single heterosexual man, and a single heterosexual woman. The advertisement will state that the participants will be involved in an experiment testing hormone levels once a month for six months for compensation of fifty dollars per participant.

In this study, methods to test hormones will be the same as those used in the Canale and Marazziti experiment (2004, pp. 393). Participants will fast overnight and blood samples will be taken from each between the hours of 8:00 and 9:00 a.m. (Canale and Marazziti, 2004, pp. 393). Then, all blood samples will be centrifuged at “200 X g, for 20 min, at 22°C” (Canale and Marazziti, 2004, pp. 393). This will create a serum to be kept at -20°C until the assays are completed (Canale and Marazziti, 2004, pp. 393). Afterwards, the levels of testosterone and estrogen in every male and every female will be tested. The purpose of testing testosterone and estrogen in every subject is to compare the levels to determine if there are positive or negative correlations of the standard levels, found in the single-status participants, over the course of six

months. These methods will be performed each month for six months. They will be used because they were used in the study on heterosexuals done by Canale and Marazziti (2004, pp. 391-397). The methods of the study will be completed in the same manner on homosexuals.

Using the methods described above, hormone levels of each partner in each same-sex relationship will be tested each month over the course of six months. This will be the main set of data. Then, each partner in the heterosexual relationship will have their hormone levels tested once a month for six months. This will be the set of data for comparisons. Following, each single subject, homosexual and heterosexual, will have their hormone levels tested. This will be the control group. These data sets will be viewed as the standard levels of hormones.

After six months of testing, all data will be collected. Then, the levels will be analyzed for correlations of hormone levels between partners, the results will be compared to levels of other subjects, and changes will be recorded. Hormone levels of homosexual partners will be examined to determine if there is an increase of testosterone for gay men, and an increase of estrogen for lesbian women, when compared to hormone levels of single homosexual subjects. In the heterosexual relationship, hormone levels will be examined to determine if there is a testosterone increase in the woman partner, and a testosterone decrease in the man partner, as were the results from a previous study (Canale and Marazziti, 2004, pp. 394). Each partner's levels will be looked at compared to testosterone or estrogen levels in the homosexual and heterosexual single individuals. Then, it will be determined if there is a larger or slighter change in hormone levels within homosexual couples or heterosexual couples when compared to the corresponding sexual orientation of single participants. Results of the sixth month will be compared to those from the first month for all test subjects to see if there is a difference in levels

over time. This research will answer the question: how do hormone levels in the first six months of a homosexual couple compare to those in the first six months of a heterosexual couple, and how do they change over time?

Conclusion

In summation, this research study is worthy of scientific investigation. It establishes data analysis and conclusions that will be published. It takes part in furthering present research by delving into the scientific concept of hormones, but takes a new insight on homosexuality. Furthermore, by looking in depth at homosexuality, this study brings valid awareness to a group that is not receiving as much attention as it should. It expands the social constructs of research. Funding is essential in providing ways of hormone testing, but doing so it opens an entire new world of opportunities.

References

- Bracy, Craig, "Homosexuality Among Women: Historical and Current Views in Psychology" (1976). Dissertations and Theses. Paper 2292.
- Canale, D., & Marazziti, D. (2004). Hormonal Changes When Falling in Love. S. Cochran & S. Miller-Cochran & R. Stamper (Eds.), *An Insider's Guide to Academic Writing A Rhetoric and Reader* (pp. 391-397). Boston, MA: Bedford/St. Martin's.
- Gotkin, K. (2015). Openings: On the Journal of Homosexuality, Volume 1, Issue 1. *Journal of Homosexuality*, 63(3), 446–451. doi: 10.1080/00918369.2016.1124709