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Positive Psychology: What Impact has it had on Sex Research Publication Trends?

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Abstract Throughout history, Americans have been bitterly divided as to whether passionate love and sexual desire are positive experiences (that give meaning to life), whether they constitute a political, social, and spiritual danger, or whether sex in itself is not inherently bad, but certain sexual behaviors are wrong or dangerous. As previously noted by H. L. Horowitz, R. L. Rapson, and L. Stone, political and religious authorities-preaching the virtues of social control, chastity, and circumspection-have prevailed over reformers advocating "free love," gender equality, birth control, the elimination of the double standard, sex education, and the like. In this paper we ask: Do we see any bias in the publication of modern-day sexuality research—specifically, do published studies tend to focus primarily on the positive or the negative aspects of sexuality? We attempted to answer this question by conducting a content analysis of articles appearing in four prestigious journals: The Journal of Sex Research, Archives of Sexual Behavior, The New England Journal of Medicine, and Obstetrics and Gynecology, from 1960 to the present. As expected, only a slim minority of articles investigated the delights of love, sex, and intimacy; the vast majority focused on the problems associated with sexual behavior. The positive psychology movement does not appear to have altered this time-tested bias.

Keywords Positive psychology · Sexuality · Positive sexuality · Sexual culture

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American Views of Sexuality

From the earliest Colonial days to the present, Americans have often been bitterly divided as to whether passionate love and sexual desire are two of the delights of life, whether they constitute threats to social order, morality, and personal growth, or whether it is merely specific sexual behaviors (e.g., premarital sex) that are threatening while other behaviors (e.g., heterosexual marital sex) are healthy and rewarding. In the New England colonies, for example, spiritual leaders like Thomas Shephard and Cotton Mather could often be heard preaching thundering sermons, arguing that sexual lust is "uncleane" and a danger to body and soul. They advised their congregations to control the desires that "lie lurking in the heart" (D'Emilio and Freedman 1988). Sinful sex could result in flogging, pillorying, hanging, banishment, having one's ears cut off, or having one's tongue bored through with a hot iron (Maddock 1997). Male masturbation was strongly discouraged, as it was thought to cause ailments ranging from impotence to memory loss or even death (Bullough 2002). At the same time, in 1625, an Englishman, Thomas Morton, established Merrymount, a New England plantation, based on the ideals of personal and sexual freedom. Morton saw himself as an idealist-promoting liberal Christianity, joy, and tolerance. The utopian community was a commercial success. Not surprisingly, William Bradford (2012), governor of the rival Plymouth colony saw things differently.

And Morton became lord of misrule, and maintained (as it were) a schoole of Athisme [Atheism]. And after they had gott some good into their hands, and gott much by trading with ye Indeans, they spent it as vainly, in quaffing & drinking both wine & strong waters in great exsess, and, as some reported, £10 worth in a morning. They allso set up a May-pole, drinking and dancing aboute it many days togeather, inviting the Indean women, for their consorts, dancing and frisking togither, (like so many fairies, or furies rather,) and worse practices. As if they had anew revived & celebrated the feasts of ye Roman Goddes Flora, or ye beasly practieses of ye madd Bacchinalians. Morton likewise (to shew his poetrie) composed sundry rimes & verses, some tending to lasciviousnes, and others to ye detraction & scandall of some persons, which he affixed to this idle or idoll May-polle. They chainged also the name of their place, and in stead of calling it Mounte Wollaston, they call it Meriemounte, as if this joylity would have lasted ever. But this continued not long, for after Morton was sent for England, (as follows to be declared,) shortly after came over that worthy gentleman, Mr. John Indecott, who brought over a patent under ye broad seall, for ye govermente of ye Massachusets, who visiting those parts caused yt May-polle to be cutt downe, and rebuked them for their profannes, and admonishe them to looke ther should be better walking; so they now, or others, changed ye name of their place againe, and called it Mounte-Dagon (p. 1).

In the end, the power of William Bradford and the values of evangelical Christianity prevailed and Morton was deported back to England. Upon Thomas Morton's return to New England, he was clapped in irons and denied adequate food, water, and clothing for a year. He died soon after his release (Bradford 2012; D'Emilio and Freedman 1988).

In the late eighteenth to early nineteenth century a quartet of small groups formed to challenge the Protestant hegemony. These were not all pro-sex. The Shakers refused to recognize marriage, requiring the celibacy of community members. (Not surprisingly, they failed to prosper.) The Mormons rejected romantic love, courtship, and contraception. The Oneidans promoted "complex marriage." Here the community had the power to regulate sex and reproduction. In 1827, Fanny Wright, a reformer, insisted that sexual passion is "the strongest... and the noblest of the human passions. It is the best joys of our existence" and "the best source of human happiness." She argued that sexual passion was as much a part of women's nature as men's (Horowitz 2002, p. 54). Evangelical Christian ministers denounced Wright from the pulpit as the Antichrist. The Press ridiculed her as the "priestess of Beelzebub" and in 1829, one major paper proclaimed:

That "Fanny Wright" condemns and discards altogether the marriage contract and in effect recommends transforming this glorious world... into one vast immeasurable Brothel; and concludes by anticipating the blending of the black and white population, as the social millennium (D'Emilio and Freedman 1988, p. 114).

Again, the traditional Christians prevailed. Wright died in poverty, having become a figure of fun.

Later attacks on sexuality, sexual behaviors, and sexual information occurred during the 1900s. In 1915, Anthony Comstock was searching the US mails for information that he considered to be obscene, lewd, or lascivious—including political tracts, anatomy textbooks, information about birth control, and the like. Most American churches and churchgoers applauded his efforts. At the same time, Margaret Sanger's husband, Dr. William Sanger, was languishing in jail for handing out pamphlets advertising birth control methods (D'Emilio and Freedman 1988).

As illustrated above, American sexual culture, or "the institutions, practices, norms, and modes of representation that orchestrate and establish meanings for sexuality," according to the Center for the Study of Sexual Cultures at the University of California, Berkeley (2011), is complex and pluralistic. It is comprised of vastly diverse sexual communities, behaviors, identities, and politics, as well as greatly differing opinions on sexual legal issues. (See also D'Emilio and Freedman 1988; Horowitz 2002.)

Though American sexual culture is greatly varied, there are commonalities that affect nearly all of us. In accordance with our history of sexual repression and sexual shame, combined with the lack of appropriate sexual education and communication, American sexual attitudes have often tended to be steeped in the tradition of response-to-the-negative.

When surveying revolutionary changes that have occurred in America from the Colonial period to the present, Hatfield and Rapson (2005) highlighted a trio of changes: (1) a growing rejection of the tradition of life as "a veil of tears," and an increase in the conviction that the pursuit of happiness and the avoidance of pain are desirable goals. There has been a revolution in history: today, history is no longer

history from the top down—the story of kings and wars. It is history from the bottom up—the story of love, emotion, and family life among the common man and woman. Their work makes it clear that from the 1500s until very recently people had every reason to think of life as a "vale of tears" (see Bryson 2011; Stone 2009, for example). Imagine you were to take a time machine into England in 1500. As you land, you might see a few people running toward you. The first thing you would notice is how short they are. Next, as they approach, you will see how young they are, (the life span was only 25–30 years in that period). Still closer you would sense this terrible smell. They would have rashes and oozing sores all over their bodies; they would be filthy. They would be in poor health. They work too hard and get too little food. The women would have genital diseases; this makes intercourse painful. Talk to them and you would discover that sex had real hazards. Birth control was nonexistent or unreliable. Childbirth was much more dangerous than today. Children without fathers could be abandoned or starved.

Hatfield and Rapson (2005) point to two more major changes from the Colonial period to the present: (2) a belief that things can change for the better and that action dedicated to social improvements may be preferable to passive acceptance of ageold traditions, whatever their value; and (3) a profound and slow shift from male supremacy to gender and minority group equality (See Bryson 2011).

Rapson (2003) pointed out that over the centuries these changes have sparked increasingly positive attitudes toward love, sex, and intimacy. Sex is now seen as not simply necessary for procreation, but as valuable in promoting pleasure, intimacy, and mental health as well as a host of other values (Hatfield et al. 2010). Unfortunately, although we have made progress (e.g., we no longer suspect that masturbation leads to death), American sexual culture retains strong negative and unrealistic tendencies. Rapson (2003) observes:

America is still backward compared to Europe: it resists sex education; it focuses on the flamboyant in talk shows, movies, ads, and sitcoms; and it dumbly continues to exalt pectorals, large breasts, impossible bodies, chemistry, and love-at-first-sight as prerequisites for real love. It also insists that extramarital sex, in all circumstances, is wrong and sinful. Mix the titillation with the deeply anti-sexual Puritanical ideology of millions of Americans plus their hypocritical politicians and you have a recipe for sexual pathology (p. 53).

What is lacking, Rapson claims, is a celebration of the vast area between the extremes: an acknowledgment of the simple and sweet pleasures of love, sex, and intimacy in relationships. (For an exegesis on the changing attitudes toward passionate love and sexual desire, see Bailey 1989; D'Emilio and Freedman 1988; Freedman 1982; Gay 1999; Stone 1990).

What is Positive Psychology?

In 1998, Seligman, then-president of the American Psychological Association (APA), called on psychology to move beyond its traditional goal of understanding

dysfunction and relieving misery (Casey 2011; Seligman 2002a). Seligman observed that since World War II, the discipline of psychology had concentrated almost exclusively on pathology and repairing damage within a disease model of human functioning (Seligman and Csikszentmihalyi 2000). In the past 50 years, positive psychologists argue, research based on the disease model has had little success in preventing or ameliorating serious psychological problems. In truth, it is human strengths such as courage, optimism, faith, a work ethic, and perseverance that act as buffers against mental illness (Seligman 2002b). Seligman and Csikzentmihalyi (2000) contend that major strides in prevention have come largely from a change in perspective—a change from correcting weakness to building strength and competency.

Recognizing that within psychology, the fulfilled individual and thriving communities were taken for granted (and left unstudied), Seligman called on scholars to begin to explore the factors that make life worth living and to build the conditions that promote a good life. Thirteen years later, the wealth of findings emerging from Seligman's initial call have shown us that understanding well-being can be just as important as understanding dysfunction, and that building the conditions that enable a good life can be just as effective as undoing those disabilities (Hefferon and Boniwell 2011; Peterson 2006).

The field of positive psychology has grown tremendously since its founding. As an academic discipline, it is now the focus of a doctoral program at Claremont Graduate University, a master's program at the University of Pennsylvania, the subject of several textbooks, dozens of classes throughout the world, hundreds of scholarly articles, and well-attended academic conferences, to name a few (Diener 2009; Linley et al. 2009; Seligman et al. 2005). The impact of positive psychology has also been felt in the popular press, as seen in the plethora of books published on positive psychology for the non-scientific audience. For example, Seligman has published two popular books, *Authentic Happiness* (2002a) and *Flourish* (2011), which discuss the tenets of positive psychological research and how to incorporate them usefully into one's life to enhance well-being. Other crossover publications from positive psychology researchers writing for popular audiences include Ben-Shahar (2007, 2009); Diener and Biswas-Diener (2011); Fredrickson (2009); Haidt (2006); Lyubomirsky (2007); and Schwartz (2005), to name a few.

Although the Seligman's call for more research on the positive aspects of life has returned a strong general response from the field of psychology, we questioned whether the positive psychology movement has affected sex research in particular. In this paper, we ask: What impact, if any, has the positive psychology movement had on sex research? Specifically, we pose three questions:

Question 1. Overall, do scholarly journals publish a higher percentage of articles that focus on the positive, neutral, or the negative aspects of sexuality?

Question 2. Do the sex journals differ from medical journals in the ratio of positive versus neutral and negative articles they publish?

Question 3. Over time, are journals focusing more (or less) on the positive aspects of sexuality? There are two reasons why we might expect that in recent years there has been a new emphasis on the positive (over the neutral or negative) aspects of sexuality. Firstly, Seligman's Presidential Address was delivered in 1998.

Do we detect a rise in positive articles after that date? Secondly, many historians argue that American societal attitudes toward sex have become increasingly positive over time. Is that change reflected in the nature of articles published from, say, 1960 to the present?

A Quantitative Review of Modern-Day Sexuality Research

Method

In order to investigate the extent to which modern day sex research publications tend to focus on the positive or the negative aspects of human sexuality, we selected four prestigious journals that publish articles on human sexuality: two leading sexuality journals, *The Journal of Sex Research* and the *Archives of Sexual Behavior* and two premier medical journals, *The New England Journal of Medicine* and *Obstetrics and Gynecology*. See Zucker and Cantor (2009) for a rating of the impact factors for the various journals between 2002 and 2008. Our next step was to select a sampling of years for our content analyses. We decided to select 1 year from each decade from 1960 to 2010, so we could examine every article published in that year and classify whether it focused on a positive or a negative aspect of sexuality or whether it was neutral in content. We began our inquiry in the 1960s, as research in sexuality became more common after the pioneering work of researchers like Alfred Kinsey in the late 1940s and 1950s. Thereafter, we selected 1 year per decade until the most current year that had fully passed. The resulting years selected were 1965, 1973, 1983, 1999, 2004, and 2010.

Our next step was to invite four undergraduate students to participate in our study as research assistants. The raters were all undergraduate psychology majors from the University of Hawaii who ranged from 18 to 24 in age, and, as is typical of Hawaii, they came from a variety of ethnic groups, predominantly Asian-American. The raters were blind to our hypotheses. We then trained them in techniques for classifying articles based on whether the article was focused on the positive, negative, or neutral aspects of passionate love, sexual desire, or sexual behavior (for further discussion of the classification scheme used by the raters, please see the following section). The training process consisted of an initial meeting as a group to go over the positive, neutral, and negative themes that we suspected the coders would come across frequently when reading through articles. We then had the coders practice reading a few articles and classifying them as a group following discussion and subsequently randomly assigned each coder to a journal. As the coders worked through the articles in each year, we met as a group on a weekly basis to discuss any article that a coder had difficulty classifying. After discussing any questionable items as a group, we decided together how to classify the article.

Perspectives on the Classification of Publication Trends in Sexuality Research

To date, we could find no empirical research that measures the valence of sexuality research, that is, whether the subject of the research is primarily focused on a

positive, negative, or neutral aspect of sexuality. Therefore, we set out to create our own evaluation model for the classification of trends in published sex research. With little known about the purposes, nature, and quality of procedures in evaluating such subject matter, we needed to create our own standards of evaluation. As an exploratory study, our choice of criteria pertinent to assessing the valence of the publication may be subject to criticism. We acknowledge that it is possible to adopt several different evaluation perspectives towards the classification of trends in sex research publication. Nevertheless, as an initial foray into the conceptual and empirical work of this type of evaluation, we adopted the following guidelines for our decision-making process.

We agreed that an article would be considered to be addressing a *positive aspect* of sexuality if it focused on such topics as, but not limited to: positive attitudes toward sex, sexual desire, sexual fantasy, sexual excitement, sexual pleasure, sex and happiness, orgasm, sex and intimacy, sexual satisfaction, positive and/or healthy relationships, and the like.

The choice of this evaluation perspective was based on the literature from the sex positive movement—the major current political movement to advocate for positive perspectives of sexuality in the United States—which focuses on embracing the diversity of sexuality and sexual behavior as well as the pleasure sex can create. Queen (2001), one of the leading theorists for sex positive culture, states that it is the movement to not "denigrate, medicalize, or demonize any form of sexual expression except that which is not consensual" (p. 94). An example of sex positive research in action includes a study of how educating college aged women in a positive, feminist manner could increase sexual empowerment, sexual desire, and reduce guilt, among other positive facets (Askew 2007). Thus, prior work by sex researchers on the positive aspects of sexuality provided a strong benchmark in the establishment of evaluation criteria.

Articles were classified as *negative* if they dealt with negative or medial/disease based content, such as mental health problems, sexual dysfunction associated with sex, the dangers of sex, sexual stigma or shame, risky sexual behaviors, STIs, HIV/AIDS, teen pregnancy, homophobia, sexual harassment, trafficking in women, forced prostitution, biphobia, transphobia, negative attitudes, and sexual violence/abuse.

Here, we would like to reiterate that that this study engaged in the highly subjective task of measuring perceptions of valence, and that perceptions are assuredly subjective and idiosyncratic. To set our criteria for evaluating the negative aspects of sexuality, we returned to the premise of positive psychology and its focus on shifting perspective from a disease to a growth-based model. Articles were classified as negative if they appeared to primarily focus on addressing a problem within sexuality; that is, fixing something that is broken, treating a wound, or righting a wrong. The pursuit to ameliorate dysfunction is undoubtedly important and necessary; however, there is a difference between this disease-model perspective and a growth-based perspective that focuses on the aspects of sexuality that are working—and how we can get more of that which is already good.

Finally, articles were classified as *neutral* if they dealt with content that was neither positive nor negative, such as: identity formation, prevalence of various

sexual identities, or sexual behavior, or comprehensive sex education.¹ Initially, we assumed that it might be difficult to classify many articles. In fact, in practice the classification of articles turned out to be far easier than we had supposed. Almost all articles tended to focus on of the advantages or disadvantages of love and sexuality or to be neutral in content. In the few cases where classification proved difficult, due to an inclusion of both positive and negative material, we classified the articles as neutral. It is also important to note that articles from medical journals unrelated to sexuality were excluded from our sample.

Assessing Rater Reliability

In this exploratory study, we employed the aforementioned rudimentary model to classify published articles on sexuality as positive, negative, or neutral in valence. As noted, our particular view of determining valence may be open to criticism. However, we believe that the dimensions of each category are theoretically valid as a constituent of a preliminary study. Beyond the validity of the constructs, we must now consider the reliability with which they were measured.

One useful psychometric model for assessing reliability, among other uses, is referred to as generalizability (G) theory (Cronbach et al. 1972; Marcoulides 1996, 1998). G theory presents multifaceted sources of variability in a measurement, including multiple sources of error variability (Shavelson and Webb 1991). This ability to account for multiple sources of error allows us to identify how individual differences between raters affected the reliability of their evaluations of the valence of published articles on sexuality. The goal of a G study is to separate the variability in the evaluation object, that is, the classification of valence into a variety of different sources, or variance components. Typically, variance components may include variability due to differences among the objects being evaluated, the type of instrumentation being used, the number of occasions on which the objects are assessed, the raters assessing the objects, as well as various interactions between these components (Marcoulides and Heck 1992). A G study usually involves a preliminary study using a subset of information (e.g., like a pilot study) which can strengthen the overall evaluation design by identifying aspects of the assessment procedures that need to changed to reduce error.

In this analysis, it is assumed that an observed score (i.e., a rating of positive, neutral, or negative valence for the topic of a publication in sex research) represents an evaluation of a sample of items made at a given point in time, and if a different set of items were used, the observed score would be somewhat different (Shavelson and Webb 1991). As it is seldom practical or attainable to obtain data on all possible items (Cronbach et al. 1972), the evaluation must be generalized from a limited sample of items to the universe of all possible observations.

G theory allows us to ask how well the raters are performing over occasions when the articles appeared and whether there is any interaction between their scores over

¹ We classified comprehensive sex education as neutral because most of the programming content is directed towards prevention. While students are receiving necessary information, and comprehensive programs depict sexuality in a more positive light than do abstinence-only programs, there is still little focus on positive aspects of sexuality such as sexual satisfaction or pleasure.

occasions. We first decompose the raters' scores into a universe score (i.e., the score over all combinations of facets and conditions) and variance components for any other errors associated with the measurement study (Marcoulides 1998). After identifying major sources of error, a generalizability coefficient (ρ_{Δ}^2) can be estimated to describe the dependability of generalizing from an observed score based on the sample observations to the mean score derived from all acceptable observations (Cronbach et al. 1972; Heck et al. 2000).

Model

In this case, we have a *one-facet* design, which typically includes only the object of measurement (persons) and a primary error facet (Marcoulides 1998). In this case, we will use raters as the object of assessment, decomposing the scores of persons into a component that describes differences in their observed performance (referred to as the universe score) versus any variance in scores due to errors introduced by occasions (years), or the combination of persons by occasions, plus other unknown errors. The total variance, then is equal to the sum of the three variance components we have isolated as relevant to the quality of our data collection—(1) persons, (2) occasions, and (3) persons by occasions, plus remaining error. This can be summarized as follows: $\sigma_{X_{po}}^2 = \sigma_p^2 + \sigma_o^2 + \sigma_{po,e}^2$.

This model facilitates evaluating the quality of the rating information provided by each individual over the six different occasions we selected.

In Table 1, we provide the estimates regarding the variance of the focus of articles published due to persons (raters), occasions, and the interaction of persons x occasions plus other error. We note that occasion variance (σ_o^2) was 0, which suggests that the years selected did not introduce any observable variability into the evaluation of raters' scores. As we hypothesized, variance might be introduced if it were the case that later occasions in the study were associated with a more "positive" set of published articles. As a follow up, we actually draw 20–30 random samples of differing size from the data base of 604 articles but found very little variability due to occasions (i.e., the variation of repeated random samples we drew ranged from 0 % to about 10 %) in each instance. Any unreliability, therefore, comes from possible interactions between raters and how they rated articles over occasions or other possible unexamined sources of error.

Table 1 Variance estimates used to generate reliability coefficients

Component	Estimate
Var(person)	.122
Var(occasion)	$.000^{a}$
Var(error)	.254

Dependent variable: score

Method: restricted maximum likelihood estimation

^a This estimate is set to zero because it is redundant

G theory considers two types of error variance corresponding to two different decisions that are often made (referred to relative and absolute decisions, respectively). Absolute error decisions take in error related to occasions as well as combined sources due to persons x occasions and other remaining error. In this case, however, since there is no real variance due to occasions alone, the absolute error term is reduced to a relative error term, which is estimated as follows:

$$\sigma_{\delta}^2 = \frac{\sigma_{po,e}^2}{n_o} = .254/6 = .042$$

The generalizability (ρ^2) coefficient for a relative decision can then be estimated as

$$E\hat{\rho}^2 = \frac{\hat{\sigma}_p^2}{\hat{\sigma}_p^2 + \hat{\sigma}_\delta^2} = .122/(.122 + .042) = .122/.164 = 0.744$$

The generalizability coefficient can be interpreted as a measure of the expected correlation, or agreement, between the responses of any two randomly selected individuals, which in this case suggests considerable homogeneity between them. This coefficient is within acceptable limits, given the study's design (Marcoulides 1998). Of course, we might expect some variance between individuals, since one pair of raters was evaluating articles in medical journals and one pair was evaluating articles in sexuality journals. Despite this, the result suggests there is considerable agreement across all possible pairs. Hence, we can conclude the ratings of the valence of published articles on sex research were generalizable to the universe of possible individuals we could have used to assess the focus of the published articles, indicating that the raters were acceptably reliable in their evaluation of the articles.

Analyses

In order to examine our research questions we conducted Chi-square tests for independence, as well as examined the descriptive data.

Results

Question 1: Overall, Do Scholarly Journals Publish a Higher Percentage of Articles that Focus on the Positive, Neutral, or the Negative Aspects of Sexuality?

We analyzed the difference in positive, neutral, and negative articles using a goodness-of-fit Chi-square test. As we were unable to find previous data on the ratio of positive and negative published sexuality research, we assumed that there was no known difference in the population. Thus, the null hypothesis proposes that positive, neutral, and negative articles will occur with the same frequency (33.3 %). Our results suggest the null hypothesis should be rejected, $\chi^2(2df) = 233.387$, p < .001, that is, relatively speaking there are more negative articles than neutral or positive

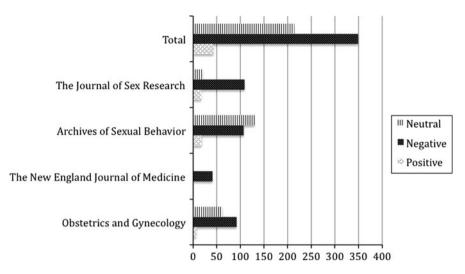


Fig. 1 Number of positive, negative, and neutral articles by journal

articles. More specifically, these results indicate that journals tend to publish less research focusing on the positive aspects of sexuality than articles focusing on the problems, dangers, and negative aspects of sexuality.

In the final count of 606 articles rated from the four journals (*The Journal of Sex Research, Archives of Sexual Behavior, The New England Journal of Medicine* and *Obstetrics and Gynecology*) over the 6 years (1965, 1973, 1983, 1999, 2004, and 2010), we found overwhelming evidence that the majority of published research focused on the negative aspects of love, sex, and intimacy. Of the 606 articles, only 43, or 7 % were rated as positive; 349 or 58 % were rated negative, and 214 or 35 % were rated as neutral (Fig. 1).

Question 2: Do the Sex Journals Differ from Medical Journals in the Ratio of Positive/Negative Articles They Publish?

It seemed reasonable to propose that sexuality researchers might be politically and religiously less conservative than are physicians. They are after all working on a once taboo topic. It also seemed likely that sexologists and the sexuality journals might be less wedded to the problem and "disease model" than are physicians and the medical journals. After all, people generally consult physicians because they are plagued with mental and physical problems. Thus, we thought there was a possibility that sexuality journals might publish a higher proportion of positive articles than did medical journals. Indeed, in our sample we found this hypothesis to be true.

When we performed a cross-tabulation for the type of journal (medical vs. sexuality) and the type of articles (positive, neutral, negative), we found that 349 of the articles were negative (58 % of the total), and of these, 133 articles were published in medical journals (38 % of the total of negative articles). Two hundred

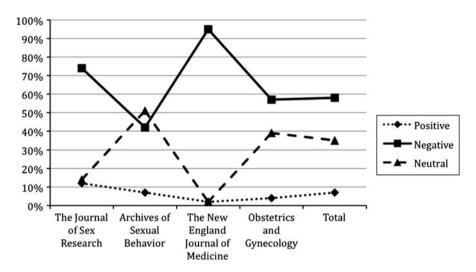


Fig. 2 Percentages of positive, negative, and neutral articles by journal

and fourteen were neutral (35 %), and 43 articles were positive (7 % of the total), but only 8 of those were published in medical journals (18.6 % of the total of positive articles). The Chi-square test for independence was significant, $\chi^2(2 df) = 9.165$, p = .010, suggesting the null hypothesis should be rejected. This finding indicated there is a relationship between the type of research journal and whether a sexuality article had a positive or negative valence. However, as examined in Question 1, in the larger context of publications, the majority of articles on sexuality are still negative. We note in passing that a more thorough test of this hypothesis would require drawing a random sample of both types of journals for comparison (Fig. 2).

In Question 3 we asked: Over time, are journals increasingly focusing on the positive aspects of sexuality? There are two reasons they might do so. First, Seligman's Presidential Address appeared in 1998. Do we detect a rise in positive articles after that date? Second, historians argue that American society's attitudes toward sex have become increasingly positive over time. Is that change reflected in the positive nature of articles that journals published from 1960 to the present?

An examination of Figs. 3 and 4 makes it clear that there is not an increasing trend for articles to focus more on the positive aspects of sexuality, year by year. We conducted a test for independence Chi-square to determine whether the ratio of positive to negative articles published is independent of the year. The null hypothesis is that there is no relationship between year of publication and positive or negative focus of the article. We found there was a significant association, however, between the two variables, $\chi^2(10) = 25.822$, p = .004. Therefore, we can reject the null hypothesis. We can interpret this result as indicating that the passage of time has yielded some change in a higher proportion of published sexuality research that is either neutral or positively valenced. We do note, however, that the total amount of sexuality research articles published has increased over the years, as well as the proportion of neutral articles. Thus, while the proportion of positive articles is still

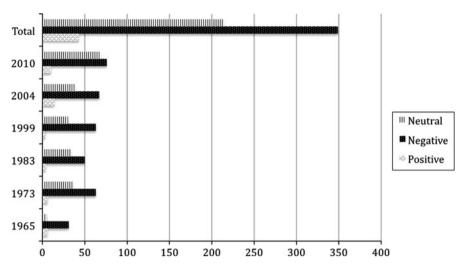


Fig. 3 Number of positive, negative, and neutral articles by year

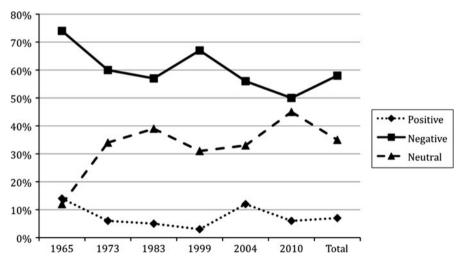


Fig. 4 Percentage of positive, negative, and neutral articles by year

relatively small, it appears that publication trends may be slowly moving toward the proportion of positive and neutral articles combined outweighing the proportion of negative articles. For example, in year 1 the proportion was 78.3 % negative, 11.9 % neutral, and 14.3 % positive. By year 5, however, the trend was 55.4 % negative, 33.1 % neutral, and 11.5 % positive. Similarly, in year 6, the trend was 49.4 % negative, 44.2 % neutral, but only 6.5 % positive.

We conclude, then, that since 1960, publication trends, whether in sexuality or medical journals, have focused less on the positive aspects of sexuality than on the

negative aspects of sexuality (even if we do see less reliance on "negative aspects" more recently in our data). Based on our exploratory analyses, there is little evidence that positive psychology or historical changes in American attitudes toward love, sex, and intimacy have had a profound impact on the content of published research.

What accounts for this continuing lack of balance? We can conceive of many reasons for this asymmetry. First, as we have seen, historically many Americans have always worried about the spiritual, legal, and practical *dangers* associated with passionate love, sexual desire, and sexual behavior—particularity among the young. Second, given the political realities, the National Institute of Health, National Science Foundation and other governmental agencies may feel more comfortable funding research that holds the promise of alleviating social problems, health problems, or other medical problems than on research devoted to improving human happiness. Third, most physicians and many sexuality professionals are in the practice of private therapy and therefore might tend to operate from disease-based model, reacting to what problems are presented by their patients. Finally, without a tradition of positive psychology, scholars might not conceive of how to investigate the positive aspects of sexuality.

Conclusion

Positive psychology has proven to be highly successful in improving both the lives of individuals and the practices of large organizations. Publication trends for the study of sexuality, and consequently the American sexual culture, have long operated from a mindset of reaction and repair. Following the advent of positive psychology, we now have the opportunity to expand the field of sexuality research to incorporate the positive aspects of sex into our academic journals. It is our sincere hope that with this observation of the lack of published sex research from a positive or strengths-based model and an explicit call for a balance in attention to both aspects of sexuality, the content of peer-reviewed journals will begin to include more articles investigating the positive aspects of sexuality. By better understanding what kinds of sexual communities, behaviors, identities, politics, and laws are currently thriving, or those that create a thriving sexual culture, and by examining the more sexually relaxed cultures (of the rest of the developed world), we hope the state of American sexual culture might improve.

Further research could also investigate publication trends in popular sexual literature. It would be interesting to see whether the publication trends we have seen in peer-reviewed sexuality research (namely an imbalance in published research favoring the negative aspects of sexuality) is reflected in popular reading. While many popular works still focus on negative aspects of sexuality, such as how to tell whether or not your partner is having an affair, there is a wealth of publications on positive aspects of sexuality, like how to give and receive sexual pleasure. If publication trends in popular literature do indeed appear to have an increase in positive publications over the past half-century, it may indicate a different trajectory of American sexual culture than research publication trends might belie.

References

- Askew, J. (2007). Breaking the taboo: An exploration of female university students' experiences of attending a feminist-informed sex education course. *Sex Education*, 7(3), 251–264.
- Bailey, B. L. (1989). From front porch to back seat: Courtship in twentieth-century America. Baltimore, MD: The Johns Hopkins University Press.
- Ben-Shahar, T. (2007). Happier: Learn the secrets to daily joy and lasting fulfillment. New York, NY: McGraw-Hill.
- Ben-Shahar, T. (2009). The pursuit of perfect: How to stop chasing perfection and start living a richer, happier life. New York, NY: McGraw-Hill.
- Bradford, W. (2012). Thomas Morton of Merrymount. *History of Plimoth Plantation*, 1620–1647. Retrieved from https://facultystaff.richmond.edu/~aholton/121readings_html/merrymount_html/.
- Bryson, B. (2011). At home: A short history of private life. New York, NY: Anchor.
- Bullough, V. L. (2002). *Before stonewall: Activists for gay and lesbian rights in historical context*. New York: Harrington Park Press.
- Casey, G. W., Jr. (2011). Comprehensive soldier fitness: A vision for psychological resilience in the U.S. Army. *American Psychologist*, 66(1), 1–3.
- Cronbach, L. J., Glesser, G. C., Nanda, H., & Rajaratnam, N. (1972). The dependability of behavioral measurements: Theory of generalizability for scores and profiles. New York, NY: Wiley.
- D'Emilio, J., & Freedman, E. B. (1988). *Intimate matters: A history of sexuality in America* (2nd ed.). New York, NY: Harper and Row.
- Diener, E. (2009). Positive psychology: Past, present, and future. In S. J. Lopez & C. R. Snyder (Eds.), The Oxford handbook of positive psychology (2nd ed.). New York, NY: Oxford University Press.
- Diener, E., & Biswas-Diener, R. (2011). Happiness: Unlocking the mysteries of psychological wealth. Malden, MA: Wiley-Blackwell.
- Fredrickson, B. L. (2009). Positivity. New York: Crown.
- Freedman, E. B. (1982). Sexuality in nineteenth-century America: Behavior, ideology, and politics. *Reviews in American History*, 10(4), 196–215.
- Gay, P. (1999). Pleasure wars (Vol. 5). New York, NY: W. W. Norton & Company.
- Haidt, J. (2006). *The happiness hypothesis: Finding modern truth in ancient wisdom*. New York, NY: Basic Books.
- Hatfield, E., & Rapson, R. L. (2005). Love and sex: Cross-cultural perspectives. Needham Heights, MA: Allyn & Bacon.
- Hatfield, E., Luckhurst, C., & Rapson, R. L. (2010). Sexual motives: Cultural, evolutionary, and social psychological perspectives. *Sexuality and Culture*, 14, 173–190.
- Heck, R., Johnsrud, L. K., & Rosser, V. J. (2000). Administrative effectiveness in higher education: Improving assessment procedures. *Research in higher education*, 41(6), 663–684.
- Hefferon, K., & Boniwell, I. (2011). Positive psychology: Theory, research and applications. New York, NY: Open University Press.
- Horowitz, H. L. (2002). Rereading sex: Battles over sexual knowledge and suppression in nineteenthcentury America. New York: Knopf.
- Linley, P. A., Joseph, S., Maltby, J., Harrington, S., & Wood, A. M. (2009). Positive psychology applications. In S. J. Lopez & C. R. Snyder (Eds.), *The Oxford handbook of positive psychology* (2nd ed.). New York, NY: Oxford University Press.
- Lyubomirsky, S. (2007). The how of happiness: A scientific approach to getting the life you want. New York: Penguin Press.
- Maddock, J. W. (1997). Sexuality education in postsecondary and professional training settings. New York: Routledge.
- Marcoulides, G. A. (1996). Estimating variance components in generalizability theory: The covariance structure analysis approach. *Structural Equation Modeling: A Multidisciplinary Journal*, 3(3), 290–299.
- Marcoulides, G. A. (1998). Applied generalizability theory models. In G. A. Marcoulides (Ed.), Modern methods for business research (pp. 1–22). Mahwah, NJ: Lawrence Erlbaum Associates.
- Marcoulides, G. A., & Heck, R. (1992). Assessing instructional leadership effectiveness with "G" theory. International Journal of Educational Management, 6(3), 4–13.
- Peterson, C. (2006). A primer in positive psychology. USA: Oxford University Press.

Queen, C. (2001). Sex radical politics, sex-positive feminist thought, and whore stigma. In B. Ryan (Ed.), Identity politics in the women's movement (pp. 92–102). New York: New York University Press.

Rapson, R. L. (2003). Amazed by Life. Philadelphia, PA: Xlibris.

- Schwartz, B. (2005). The paradox of choice: Why more is less. New York: Harper Perennial.
- Seligman, M. E. P. (2002a). Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment. New York: Free Press.
- Seligman, M. E. P. (2002b). Positive psychology, positive prevention, and positive therapy. *Handbook of positive psychology* (pp. 3–9). New York: Oxford University Press.

Seligman, M. E. P. (2011). Flourish. New York: Simon & Schuster.

- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. American Psychologist, 55(1), 5–14.
- Seligman, M. E. P., Steen, T. A., Park, N., & Peterson, C. (2005). Positive psychology progress. American Psychologist, 60(5), 410–421.

Shavelson, R. J., & Webb, N. M. (1991). *Generalizability theory: A primer*. Newbury Park, CA: Sage. Stone, L. (1990). *The family, sex and marriage in England, 1500–1800*. New York, NY: Harper.

- University of California, B. (2011). Center for the study of sexual culture. Retrieved September 26, 2011, from http://vcresearch.berkeley.edu/research-unit/center-study-sexual-culture.
- Zucker, K. J., & Cantor, J. M. (2009). Cruising: Impact factor data. Archives of Sexual Behavior, 38(6), 878–882.