

“Fireworks Exploded in My Mouth”: Affective Responses Before, During, and After the Very First Kiss

Pamela C. Regan, PhD
Winny Shen, BA
Eric De La Peña, BA
Elizabeth Gosset, BA

ABSTRACT. For many people, the very first kiss represents a significant life event, a developmental milestone that serves to usher them into the realm of sexual maturity and adulthood. Surprisingly, this important sexual event has received little systematic scientific attention. The goal of the present descriptive study was to examine the affective reactions that commonly accompany the very first kiss. Using a free response format, participants ($N = 338$) described the affective responses (i.e., emotions, feelings, sentiments) they experienced before, during, and after their very first kiss. Contrary to our hypothesis, the most common responses experienced immediately prior to the kiss were subjectively unpleasant (e.g., anxiety, fear, uncertainty). Our other hypotheses were confirmed. As predicted, more men than women recalled experiencing positive affect both during and after their first kiss, and more women than men reported negative affect during and after the kiss. These gender differences are in accord with earlier research on affective reactions to other first sexual events (i.e., intercourse), and may reflect the operation of sociocultural forces that encourage men to adopt more positive attitudes than women toward sexual experience and expression. In sum, a person's very first kiss appears to evoke a shifting array of positive and negative emotions, sentiments, and feelings. doi:10.1300/J514v19n02_01 [Article copies available for a fee from The Haworth Document Delivery Service: 1-800-HAWORTH. E-mail address: <docdelivery@haworthpress.com> Website: <<http://www.HaworthPress.com>> © 2007 by The Haworth Press, Inc. All rights reserved.]

KEYWORDS. First kiss, sexuality, gender differences, affect, emotion

Sweet Helen, make me immortal with a kiss.
Her lips suck forth my soul—see where it flies!
Come Helen, come, give me my soul again.
Here will I dwell, for heaven is in these lips.
(Marlowe, *Doctor Faustus*, Act V, Scene 1)

Pamela C. Regan, Winny Shen, Eric De La Peña, and Elizabeth Gosset are all affiliates of The California State University, Los Angeles.

Address correspondence to: Pamela C. Regan, PhD, Department of Psychology, California State University, Los Angeles, 5151 State University Drive, Los Angeles, CA 90032-8227 (E-mail: pregan@calstatela.edu).

This research was supported in part by a Career Opportunities in Research fellowship (grant T34 MH065184) from the National Institutes of Health.

International Journal of Sexual Health, Vol. 19(2) 2007
Available online at <http://ijsh.haworthpress.com>
© 2007 by The Haworth Press, Inc. All rights reserved.
doi:10.1300/J514v19n02_01

The image of a kiss so powerful that it can unite the souls of two lovers represents one of the most lovely—and common—conceits employed by poets and playwrights across literary history. Depictions of the soul mingling-kiss are found as early as the third century in the works of classical Roman authors (Claudian's *Satyricon*), run rampant throughout Italian and French Renaissance poetry (Secundus's *Basium X*, Marino's *Canzone dei baci*, Marot's "Du baiser de s'amie"), and reach their zenith in the poems and prose of the English Romanticists (Shelley's *Epipsychidion*, Keats's *Endymion*). (For a more thorough review of kissing symbolism in secular and non-secular writing, the reader is referred to Perella (1969)). Such imagery continues to delight modern audiences today. Certainly the account of the kiss which awakens the heroine in the children's fairytale *Sleeping Beauty* charmingly illustrates the symbolic (and, in the fairytale, literal) ability of a single kiss to defeat death, awaken love, and serve as a shibboleth to a happy life.

Not to be outdone by their literary counterparts, philosophers and scientists also have discussed, and sometimes presented conflicting views of, the individual and interpersonal significance of the act of kissing. For example, in his 12th century treatise on the nature of love, Capellanus (1184/1960) argued that kissing was the only appropriate form of sexual expression permitted to those "who wish to love purely" (p. 122), and that to engage in any sexual act other than kissing with the beloved was to cause offense to man and God (it was considered acceptable, however, to engage in intercourse with a servant or one's spouse). More than a few centuries later, Freud (1905/1938) presented a radically different view, suggesting that kissing was merely a preliminary activity "which should normally be rapidly passed, on the way to the definite sexual aim" (p. 564) of intercourse. To linger too long at this preliminary stage, or to prefer kissing over intercourse, was to cross into the realm of pathology. One of Freud's contemporaries, Havelock Ellis (1933/1944), similarly proposed that kissing was an important step in the sequencing of sexual intercourse, and that it represented "the typical and normal erogonic method of concretionation

(tactile interaction) for the end of attaining tumescence" (p. 43).

Today, few scientists would agree with the contention that kissing can only legitimately be used in the service of obtaining intercourse, or the notion that enjoyment of kissing or a marked preference for kissing over other sexual activities is indicative of underlying psychopathology. However, recent empirical investigations confirm that kissing is consistently mentioned by couples as one of their primary methods of foreplay (Blumstein & Schwartz, 1983; Guo, Ng, & Chan, 2004). In fact, kissing is such an established component of most couples' intercourse scripts that sexual and marital therapists who adopt a sensate focus approach often recommend abstinence from kissing during treatment in order to prevent their clients from lapsing into old sexual routines (Masters, Johnson, & Kolodny, 1994).

Research on relational "turning points" also provides evidence of the interpersonal meaning associated with the act of kissing. Interview data collected by Baxter and Bullis (1986) demonstrate that the first kiss shared by a couple serves as an important marker that signifies a change in the commitment level or developmental stage of their relationship. These researchers asked a sample of 40 dating couples to identify and discuss in detail all of the turning points in their relationship since the time of their first meeting. Thirteen general categories of relationship turning points subsequently were identified. One of these categories, labeled the "passion turning point" by the researchers, included four events—the couple's first kiss, their first episode of sexual intercourse, the first time they said "I love you," and what the researchers describe as the "whirlwind phenomenon" (essentially the experience of falling in love at first sight)—that couples indicated were important markers in influencing or signaling relationship commitment. Additional research by these and other investigators (e.g., Baxter & Pittman, 2001; also see Metts, 2004) further attests to the significance of the passion turning point for romantic relationship progression.

Kissing represents an important developmental milestone not only in the life of a relationship, but in the life of an individual. Many

adolescents consider kissing to be an important rite of passage and a developmentally appropriate sexual event for their particular stage of life. Rosenthal and Smith (1997) asked a sample of teenagers to indicate at what age it was appropriate to begin engaging in kissing and other sexual behaviors (response options included 12-14, 15-17, 18-20, or 21 + years). Kissing received widespread endorsement as an appropriate sexual activity for the developmental time frame spanning early to late adolescence. Almost the entire sample indicated that brief kissing "on the mouth" was appropriate at 12-14 years of age, and a sizeable majority (69% of girls and close to 60% of boys) felt that "tongue kissing" was acceptable at that age range. All participants indicated that kissing should have begun by the age of 20 (no participant selected 21 + years as the appropriate time for kissing to begin). Survey data demonstrate that these beliefs are mirrored by adolescents' sexual behavior; by their late teens, the majority of young men and women have experienced mutual kissing with a casual or regular dating partner (Grunseit, Richters, Crawford, Song, & Kippax, 2005; O'Donnell et al., 2006; Papadopoulos, Stamboulides, & Triantafillou, 2000).

In fact, kissing is likely to be the *very first* sexual event that most individuals experience. Retrospective (Brook, Balka, Abernathy, & Hamburg, 1994; De Lamater & MacCorquodale, 1979; also see Paikoff, McCormick, & Sagrestano, 2000) and prospective (Jakobsen, 1997) investigations reveal a sequential progression of sexual activity during adolescence and young adulthood that begins with kissing, proceeds to petting and other non-coital events (e.g., genital fondling), and culminates with sexual intercourse. For example, Regan and her colleagues (2004) surveyed a large sample of young adults about the age at which they experienced a host of first sexual and romantic events. Not only was kissing the most commonly experienced form of sexual activity, but it also was developmentally the first form of sexual behavior in which participants engaged. On average, men and women experienced their first kiss at around age 15, almost two years before they experienced their first episode of intercourse.

Despite the fact that the act of kissing appears to be a common and significant sexual experience that typically precedes the onset of intercourse, the first kiss has yet to receive much systematic scientific attention. Some authors have sought to understand the first kiss by examining how it has been depicted in literature or film or by introspectively reflecting upon their own first kiss experience. For example, Ackerman (1990) has written eloquently and at length about her own unabashedly joyful, "earth-stopping, soulful, on-the-ledge-of-adolescence" (p. 110) first kiss. Alapack (1991) and Blue (1997) have painted similarly enchanting pictures of the first kiss gleaned from literary and cinematic depictions of kissing episodes. Drawn as they are from personal recollection and artistic imagination, such accounts provide readers with a contextually rich view of the meaning of the first kiss. The goal of the present study was to empirically add to these existing accounts by collecting data from a large sample of men and women and by systematically examining the common affective reactions they reported experiencing in the time period surrounding (i.e., immediately prior to, during, and after) their very first kiss. In addition, we wished to explore possible gender similarities or differences in responses to this important sexual event.

AFFECTIVE REACTIONS TO FIRST SEXUAL EVENTS: EMPIRICAL AND THEORETICAL BACKGROUND

Although there is no empirical research that directly addresses affective reactions associated with the first kiss, there is a small body of work concerning emotional reactions to the first episode of sexual intercourse. Because many researchers do not clearly indicate whether their participants are reporting affect that was experienced prior to, during, or after intercourse, it is often difficult to interpret their results with any degree of precision. Nonetheless, some basic conclusions can be drawn. In general, more men than women recall having had an emotionally positive experience *during* intercourse. For example, in one

early investigation, Eastman (1972) asked participants about their feelings during their first intercourse episode. The women in his sample were divided, with 40% recalling that they disliked the experience, 9% indicating indifference, and 51% reporting enjoyment. Not so the men; no man indicated disliking his first intercourse, only 4% were indifferent to it, and an overwhelming majority (96%) reported experiencing enjoyment during the event. Similar results were reported more recently by Sprecher, Barbee, and Schwartz (1995; also see Guggino & Ponzetti, 1997). Sexually experienced respondents indicated the degree to which they had felt each of three emotions—pleasure, anxiety, and guilt—at the time of their first sexual intercourse. Although male and female participants recalled feeling anxiety to a greater degree than either pleasure or guilt, gender differences were found such that men reported having felt significantly more pleasure than did women and women reported having felt significantly more guilt than did men during their initial coital encounter.

A similar result pattern has been observed for affective reactions *after* first intercourse. Sorensen (1973) conducted a survey of sexual behavior using a national probability sample of adolescents between the ages of 13 to 19. Sexually experienced respondents were asked to indicate which of a number of emotion terms accurately described their immediate reaction the “first time that you had sex with a boy (girl)” (p. 454). The responses most commonly endorsed by boys were positive in nature (e.g., *excited, thrilled, satisfied*), whereas those most commonly endorsed by girls were negative (e.g., *afraid, worried, guilty*). Similarly, Darling, Davidson, and Passarello (1992) found that more women than men recalled feeling guilty and more men than women reported experiencing psychological sexual satisfaction after their first intercourse episode. In general, then, more men than women have a positive emotional response, and more women than men report a negative response, during and after first sexual intercourse.

These gender differences may reflect the fact that first coitus is a more physically painful (Tsui & Nicoladis, 2004) and less physically pleasurable (Guggino & Ponzetti, 1997; Sprecher et al., 1995) event for women than it

is for men; men may have a more positive emotional reaction as a result of the greater degree of physical comfort and pleasure that they experience relative to women. In addition, however, the onset of sexual activity is likely to hold a different meaning for women than it is for men. Several scholars have documented and discussed the myriad ways in which Western culture historically has devalued, repressed, and sought to control and deny women's sexuality (see Everaerd, Laan, Both, & van der Velde, 2000; Tiefer, 1995). Although the cultural messages aimed at both genders have changed over time, researchers continue to find evidence of what has been called the “sexual double standard” (for additional discussion, see Oliver & Hyde, 1993). For example, men are believed to have a stronger sexual drive and need for sexual release than are women (Regan & Berscheid, 1999; Richgels, 1992; Tolman, 1991). Men also receive more positive reinforcement than do women for seeking out sexual opportunities and gaining sexual experience, whereas women generally receive more reinforcement than do men for establishing limits upon sexual intimacy and confining their sexual activity to committed, love-based relationships (Gagnon & Simon, 1973; Hogben & Byrne, 1998; Reiss, 1967, 1986).

In light of the different cultural standards imposed upon male and female sexuality, it is not surprising to find that women express a less positive reaction than men to their initial episode of sexual intercourse. It would also be reasonable to predict a similar gender difference with respect to affective reactions to the first kiss; that is, we might expect fewer women than men to report positive affect. However, the sociocultural context that surrounds the very first kiss is somewhat different from that surrounding the onset of intercourse. For example, one kiss does not carry the same potentially negative consequences as one episode of coitus (e.g., pregnancy, HIV). Moreover, the first kiss appears to constitute a more socially sanctioned, and even to some extent glorified, sexual “first.” (Indeed, a cursory exploration of the internet reveals several websites devoted to the first kiss. *WhereIHadMyFirstKiss.com* invites respondents to document the precise location where they ex-

perienced their very first kiss, *HOWtoKISS.info* provides a forum for sharing stories about first kisses, and *MagicalKissing.com* discusses ways to create the “first kiss mood” and how to avoid common first kiss mistakes.) A consideration of this sociocultural state of affairs, as well as of research reviewed earlier indicating that most individuals view kissing as an appropriate first sexual event, thus leads us to the following hypothesis: We expect to find few gender differences in affective responses in the time period *immediately prior* to the very first kiss; in particular, we predict that both genders will recall experiencing primarily positive affect (e.g., anticipation). At the same time, based on a consideration of research on reactions to first intercourse, we predict that more men than women will recall pleasant feelings and emotions, and more women than men will recall having experienced unpleasant affective responses, *during and also after* their very first kiss.

METHOD

Participants

A convenience sample of 356 men and women (169 men, 187 women) from a large university located in Los Angeles county participated in this study (average age = 24.9 years). Participants were all self-reported heterosexuals and were of diverse ethnicity: 57.6% Latino(a)/Hispanic, 15.4% Caucasian/non-Hispanic White, 11.2% African American, 11.0% Asian/Asian American, 2.5% Middle Eastern, 0.6% Native American/American Indian, and 1.7% Other. This sample is reasonably representative of the household population living in Los Angeles county (U. S. Census Bureau, 2004). The average age at which participants reported having experienced their very first kiss was 15.2 years, and men (15.2 years) and women (15.3 years) did not differ in their age at first kiss ($t(344) = 0.19, p \text{ ns}$).

Procedure

Participants were recruited from introductory social science courses via means of a sign

up sheet requesting volunteers for a “Brief Survey.” Upon arrival at the research site, each potential participant was escorted to a private room and informed that the present study concerned people’s emotional or affective reactions and responses to the first kiss (further defined as the very first romantic kiss that a person ever experienced). Additionally, each individual was reminded that participation was voluntary and that he or she could leave the study or cease participation at any time; no participant did so (refusal rate = 0.0%). Volunteers then received a survey packet containing three sections. The first section contained two questions, including whether or not the participant had experienced a first kiss and, if so, how old he or she was when the first kiss occurred. Those who had not experienced the event were asked to stop participation and to return their survey packet to the researcher; they were then debriefed, thanked, and excused (18 potential participants had never been kissed). Those who had experienced a first kiss were asked to complete the next section of the survey packet. In this section, participants were asked to think back to their “very first romantic kiss ever,” and to describe, in as much detail and as honestly and completely as possible, their affective responses and reactions (i.e., their feelings, emotions, and sentiments) in the time period immediately before, during, and immediately after this experience. This question was completed in a free response, essay format. Participants received up to 30 minutes to think about and record their answers (average time required = 16 minutes; no participant required more than 25 minutes). Upon completion of the free response task, participants were asked to turn to the final section of the survey packet and provide demographic information. Finally, upon returning their packets to the researcher, they were thanked and debriefed. Although research indicates that “important” interpersonal events are easily recalled (see Berscheid & Regan, 2005), during the debriefing session each participant was asked whether he or she had experienced any difficulty completing the free response task. No participant reported any difficulty; most (over 80%) spontaneously stated that the event

in question was memorable and could be recalled easily and clearly.

Overview of the Coding Procedure

The first step in our coding process was to compile a comprehensive list of the affect terms that participants used to describe their reactions to their first kiss. To that end, we compiled verbatim all of the specific emotions, feelings, sentiments, and other affective responses that were included by participants in their free responses. We then grouped these specific responses into (relatively) larger categories, following established practice for the coding of natural language concepts (see Beach & Wertheimer, 1961; Fehr, 1988; Fehr & Russell, 1984; Regan & Berscheid, 1995; Rosenberg & Jones, 1972). Specifically, responses or reactions were grouped together if: (1) they were identical but were simply modified by adjectives (e.g., "really nervous" and "nervous" were placed in the same category (anxiety/nervousness), as were "very satisfied" and "satisfied" (satisfaction)); (2) they were highly similar in meaning (e.g., "horny," "turned on," and "sexually aroused" reflect the feeling state of sexual arousal and thus were grouped in the same category (sexual arousal); "scared," "frightened," and "afraid" reflect the feeling state of "fear" and were placed in the same category); or (3) they reflected the same underlying state (e.g., "butterflies in stomach," "racing heart," and "beating pulse" are symptoms of physiological arousal, and thus they were placed together in that category).

The second step in the coding process was to organize the comprehensive list of affect terms (response categories) we had compiled. Our organizational scheme was based on earlier conceptual work on emotion by Russell (e.g., 1980; Russell & Carroll, 1999), who created a framework for organizing affective categories. Specifically, Russell's circumplex model of affect proposes that emotions, feelings, moods, sentiments, and other affective experiences can be arranged in a circle that is bisected by two independent bipolar dimensions—horizontally by a *pleasant-unpleasant dimension* (also called *positive-negative*) that reflects valence or hedonic sign and vertically

by an *activation-deactivation dimension* that reflects physiological arousal. Affective responses fall within one of the four quadrants created by the intersection of the two underlying dimensions. The *Positive-Active* quadrant includes emotions, feelings, moods, and sentiments that are pleasant and characterized by physiological arousal or activity (e.g., joy, excitement), the *Positive-Inactive* quadrant contains pleasant affective responses that are characterized by physiological deactivation (e.g., satisfaction, contentment), the *Negative-Active* quadrant includes affective responses that are unpleasant and physiologically active in nature (e.g., anxiety, fear), and the *Negative-Inactive* quadrant contains unpleasant affective responses that involve little physiological activation (e.g., disappointment, boredom). Although similar models of affective space have been proposed by other theorists (see, for example, Watson, Clark, & Tellegen, 1988; Watson & Tellegen, 1999), Russell's circumplex model provides one of the most comprehensive frameworks for capturing and organizing the large assortment of affective responses that humans are capable of experiencing. Thus, the second stage of our coding process involved placing each response category compiled in the first step within one of the four quadrants specified by the circumplex model of affect (i.e., Positive-Active, Positive-Inactive, Negative-Active, Negative-Inactive).

Once the coding scheme was in place, each participant's free response essay was typed verbatim to reduce the impact of expectancies based upon handwriting style and coded for the presence or absence of each affective category in the time period before, during, or after the first kiss. Coding was conducted by two independent raters blind to the hypotheses. The formula for computing inter-rater agreement (i.e., concordance estimates) was as follows: $C = 2(C_{1,2}) / (C_1 + C_2)$, where C = concordance for response, $C_{1,2}$ = number of identical categories assigned by both raters, and C_1 and C_2 = total number of categories assigned by the first and second raters, respectively (see Gonzales, Pederson, Manning, & Wetter, 1990; Regan & Berscheid, 1995). Concordance ranged from a low of .667 to a high of 1.000, with a mean concordance rate of .995 across all responses and

with 97.7% of the responses yielding concordance rates of .90 or higher. Coding discrepancies were resolved by a third trained rater.

RESULTS

Participants described the emotions and feelings they experienced before, during, and after their first kiss, and results are organized accordingly. To determine whether affective reactions significantly differed as a function of participant gender, we conducted a series of *z*-tests on the percentages of men and women who reported at least one reaction in each larger affect category (i.e., Positive, Negative, Active, Inactive) and in each of the four affective response dimensions (e.g., Positive-Active, Positive-Inactive), as well as on the percentages of participants who specified each individual affective reaction (e.g., joy, satisfaction; for this set of *z*-tests, we utilized the Bonferroni-procedure to control the Type I error rate and established a familywise alpha of .05).

Affective Reactions Before the First Kiss

As illustrated in Table 1, participants experienced a variety of affective reactions before their first kiss. (The percentages will not sum to 100% because most respondents specified more than one affective reaction in their free response essays.)

More men than women recalled experiencing active affective responses before their first kiss (i.e., responses characterized by high levels of physiological activation; 100.0% vs. 84.6%, $z = 4.34$, $p < .0001$), and more women than men reported inactive responses (i.e., responses characterized by low levels of arousal; 29.4% vs. 15.4%, $z = 2.74$, $p < .005$). Contrary to our hypothesis, negative affect was the most common response reported by both genders (although a small(er) proportion of respondents also recalled positive affective reactions). Also unexpected was the finding that more men than women reported negative affect in general (93.8% vs. 85.3%, $z = 2.27$, $p < .05$), and more men than women recalled Negative-Active (i.e., physiologically active, unpleasant) affective responses in particular in the time period immediately prior to their first

kiss (93.8% vs. 80.1%, $z = 3.30$, $p < .0005$). Interestingly, more men than women also reported Positive-Active responses (23.8% vs. 14.0%, $z = 2.06$, $p < .05$). In terms of specific positive-active affective reactions, more men than women recalled experiencing excitement (16.2% vs. 8.1%, $z = 2.02$, $p < .05$). More women than men mentioned Positive-Inactive responses (20.6% vs. 0.0%, $z = 5.18$, $p < .0001$); in particular, curiosity was specified by more women than men (13.2% vs. 0.0%, $z = 3.95$, $p < .0001$). Sample responses include:

I was nervous about being kissed and also frightened. It seemed to me that being kissed was as major as having sex. (Female)

First time was with a "friend" from school. We walked to the middle of the park at school late one evening and sat down on the cold, wet grass. He leaned over towards me and I felt so awkward and uncomfortable that I actually started to laugh in his face. I was nervous to the point of hysteria. Eventually, I calmed down and allowed him to kiss me. (Female)

It was exciting and nerve-wracking. I just stared into his eyes. I kept thinking that I really wanted him to kiss me. I was incredibly nervous—almost sick to my stomach—but also curious to experience my "first time." It was one of the most intensely emotional experiences of my life. (Female)

Before it happened, I felt scared and also very excited, because it was my first kiss and it meant something to me. I have kissed many women since then, but very few of those experiences meant as much to me as that first kiss. (Male)

My very first kiss was with my girlfriend. Very nervous. Very very nervous. I had a LOT of performance anxiety going into it, it being our first kiss (and my first kiss ever). My heart was pounding, palms were sweating, and my stomach felt all messed up. (Male)

TABLE 1. Affective Reactions Before the Very First Kiss

Affective Response Category	Women		Men		Total	
	No.	%	No.	%	No.	%
<i>General Response</i>						
Positive	36	26.5	31	23.8	67	25.2
Negative	116	85.3*	122	93.8*	238	89.5
Active	115	84.6*	130	100.0*	245	92.1
Inactive	40	29.4*	20	15.4*	60	22.6
<i>Positive-Active</i>	19	14.0*	31	23.8*	50	18.8
Excitement	11	8.1*	21	16.2*	32	12.0
Physiological arousal (symptoms of)	8	5.9	10	7.7	18	6.8
<i>Positive-Inactive</i>	28	20.6*	0	0.0*	28	10.5
Curiosity	18	13.2*	0	0.0*	18	6.8
Tenderness	7	5.1	0	0.0	7	2.6
Satisfaction/enjoyment	4	2.9	0	0.0	4	1.5
<i>Negative-Active</i>	109	80.1*	122	93.8*	231	86.8
Anxiety/nervousness	89	65.4	92	70.8	181	68.0
Fear	40	29.4	39	30.0	79	29.7
<i>Negative-Inactive</i>	16	11.8	20	15.4	36	13.5
Uncertainty/confusion	12	8.8	19	14.6	31	11.7
Discomfort/awkwardness	7	5.1	3	0.8	10	3.8

Note: Percentages are based on the number of respondents who described the affect they experienced before their first kiss ($N = 266$; 136 women and 130 men). Numbers in italics represent the total percentage of respondents whose descriptive essays contained at least one of the responses within the respective affective category. Non-italicized numbers represent the percentage of respondents whose descriptive essays contained each specific affective response. Percentages will not necessarily sum to 100% because most respondents specified more than one affective reaction in their free responses.

* The proportions of men and women who specified this affective reaction were significantly different. Z and p values are given in the text.

My first kiss took place in a tree house. I felt hot, nervous, and excited. I was having problems speaking. I was short of breath. I knew it was coming. And then she kissed me. (Male)

Affective Reactions During the First Kiss

Table 2 illustrates the various feelings and emotions that participants mentioned experiencing during their first kiss. (As before, the percentages will not sum to 100% because most respondents specified more than one affective reaction in their free responses.)

Affective reactions during the first kiss clearly differed as a function of participant gender. Consider the following responses from our male participants:

It was like fireworks were exploding in my mouth. It was a perfect moment. I felt euphoric and I will never forget that moment.

My first kiss was exhilarating. As I was doing it, I was thinking to myself "Wow, I'm finally kissing her. Now don't screw

this up." I felt electric, alive, romantic all at once. I loved the entire experience, best thing ever.

During my first kiss, I had only one emotion and it overwhelmed me. I felt passion, arousal, lust. I was overwhelmed with strong sexual feelings.

I felt a sort of relief when I had my first kiss. I was always pressured by peers to do it because they said it was the best feeling in the world. We were 6th graders so what did we know. Well, there was this girl in my class and she had a liking for me. I asked her if I could kiss her and she accepted the offer. I wrapped my arms around her and kissed her. My body began to sweat and I became sexually aroused. During the kiss I thought that it really *was* the best feeling in the world—it was awesome in every sense of the word. It made me feel so good and I liked it so much and got so aroused by it that I remember thinking while it was happening that I should be doing it more often.

TABLE 2. Affective Reactions During the Very First Kiss

Affective Response Category	Women		Men		Total	
	No.	%	No.	%	No.	%
<i>General Response</i>						
Positive	107	60.5*	131	81.4*	238	70.4
Negative	98	55.4*	49	30.4*	147	43.5
Active	125	70.6	114	70.8	239	70.7
Inactive	107	60.5*	81	50.3*	188	55.6
<i>Positive-Active</i>	<i>81</i>	<i>45.8*</i>	<i>92</i>	<i>57.1*</i>	<i>173</i>	<i>51.2</i>
Physiological arousal (symptoms of)	32	18.1	16	9.9	48	14.2
Joy/elation	16	9.0*	30	18.6*	46	13.6
Excitement	18	10.2	17	10.6	35	10.4
Happiness	13	7.3	21	13.0	34	10.1
Sexual arousal	11	6.2*	23	14.3*	34	10.1
Passion	9	5.1	6	3.7	15	4.4
Astonishment	7	4.0	5	3.1	12	3.6
<i>Positive-Inactive</i>	<i>54</i>	<i>30.5</i>	<i>55</i>	<i>34.2</i>	<i>109</i>	<i>32.2</i>
Satisfaction/enjoyment	29	16.4	38	23.6	67	19.8
Tenderness	20	11.3	11	6.8	31	9.2
Pride	6	3.4	3	1.9	9	2.7
<i>Negative-Active</i>	<i>59</i>	<i>33.3*</i>	<i>30</i>	<i>18.6*</i>	<i>89</i>	<i>26.3</i>
Anxiety/nervousness	25	14.1	18	11.2	43	12.7
Disgust	21	11.9*	5	3.1*	26	7.7
Fear	14	7.9	5	3.1	19	5.6
Alarm/shock	4	2.3	1	0.6	5	1.5
<i>Negative-Inactive</i>	<i>63</i>	<i>35.6*</i>	<i>30</i>	<i>18.6*</i>	<i>93</i>	<i>27.5</i>
Discomfort/awkwardness	20	11.3	10	6.2	30	8.9
Uncertainty/confusion	18	10.2	7	4.3	25	7.4
Unhappiness/dissatisfaction	10	5.6	7	4.3	17	5.0
Boredom/indifference	13	7.3*	3	1.9*	16	4.7
Disappointment	7	4.0	4	2.5	11	3.3
Embarrassment	6	3.4	2	1.2	8	2.4

Note: Percentages are based on the number of respondents who described the affect they experienced during their first kiss ($N = 338$; 177 women and 161 men). Numbers in italics represent the total percentage of respondents whose descriptive essays contained at least one of the responses within the respective affective category. Non-italicized numbers represent the percentage of respondents whose descriptive essays contained each specific affective response. Percentages will not necessarily sum to 100% because most respondents specified more than one affective reaction in their free responses.

* The proportions of men and women who specified this affective reaction were significantly different. Z and p values are given in the text.

My first kiss happened at a friend's house. One day we were in her room playing a computer game and she just leaned over and kissed me. It was totally unexpected and I clearly remember feeling three separate emotional reactions all at once: (1) surprise because the kiss happened out of the blue with no warning and we were "just friends" (in other words, "what the (expletive)???"). (2) disappointment because I expected the first kiss to be much more than it was (in other words, "That's IT? I've been waiting for THAT?"). (3) pleasure (I wasn't exactly ecstatic that this happened, but I have to admit that kissing someone—doing anything sexual with a girl—was high on my teenage To-Do list, and even though this didn't resemble my fantasy of my "first kiss," I did enjoy it and feel

some degree of satisfaction). I also remember thinking that this was going to ruin our friendship, but I'm happy to say that it didn't.

Conversely, consider these responses, written by women:

I felt comfortable and safe with this person because he was so gentle during the kiss. I also felt a little grossed out and disgusted because of the wet slimy lips. I think that was probably because it was new to me (now, I don't feel that way about kissing!).

When it happened, I couldn't see my partner in the face. We were standing so close. My heart was beating . . . fast . . . faster . . . even more faster . . . My

thoughts? 'Oh, I think my heart will explode.' My feelings? Wonder, excitement, joy, amazement.

When his lips touched mine it was only for a few seconds, but it was so gentle and sweet. I was so happy and excited . . . I was actually having my first kiss! My heart was literally soaring. I had liked him soooo much and to finally have something that I daydreamed about come true was unbelievable. A real kiss is much better than one that you wish for.

It was awful. Too messy. He didn't know what he was doing. It wasn't romantic or soft. It felt like an attack. I didn't see him much after that and I didn't want to. It was one of the most disgusting moments of my life.

I felt nervous because I didn't know if I knew how to kiss or if I was doing it right or what my partner was thinking of the way I was kissing. I didn't enjoy it due to the fact that the whole time we were kissing I was so nervous and also because it did not feel very good. My partner smiled at me after and I smiled back but I was lying because I didn't enjoy it and sure didn't want to do it again.

My first kiss was awful. It was absolutely disgusting. My 14 yr old b-friend just started kissing me. I just stood there while he stuck his tongue in my mouth. Disgusting. It makes me sick to even think back to that experience.

As hypothesized, more men than women reported positive affect in general in response to their first kiss (81.4% vs. 60.5%, $z = 4.21$, $p < .0001$). In addition, although Positive-Active affect was the most common category of response reported by both genders, significantly more men than women mentioned having experienced at least one positively valenced, physiologically active response during their first kiss (57.1% vs. 45.8%, $z = 2.09$, $p < .05$). In terms of specific positive-active affective reactions, more men than women recalled experiencing joy or elation (18.6% vs. 9.0%, $z =$

2.57, $p < .01$) and sexual arousal (14.3% vs. 6.2%, $z = 2.46$, $p < .01$). Conversely, and as expected, more women than men reported negative affect in general (55.4% vs. 30.4%, $z = 4.62$, $p < .0001$). More women than men also mentioned Negative-Active (33.3% vs. 18.6%, $z = 3.07$, $p < .005$) and Negative-Inactive (35.6% vs. 18.6%, $z = 3.49$, $p < .0005$) responses when describing how they felt during their first kiss. In fact, there were no specific negative affective reactions that were more commonly reported by men than women (e.g., more women than men recalled having experienced disgust (11.9% vs. 3.1%, $z = 3.02$, $p < .005$) and boredom or indifference (7.3% vs. 1.9%, $z = 2.37$, $p < .01$)). More women than men also reported inactive affective responses during their first kiss (60.5% vs. 50.3%, $z = 1.87$, $p < .05$).

Affective Reactions After the First Kiss

Table 3 illustrates the affective reactions that participants recalled feeling after having had their first kiss. Gender differences were obtained and were in the expected direction.

Specifically, after having engaged in their very first kiss, more men than women recalled having a generally positive affective response (73.1% vs. 43.6%, $z = 4.06$, $p < .0001$), and this pattern was observed for both Positive-Active (34.6% vs. 23.1%, $z = 1.76$, $p < .05$) and Positive-Inactive (46.2% vs. 28.2%, $z = 2.57$, $p < .01$) response dimensions. In terms of specific positive reactions, a greater proportion of men than women mentioned having felt a pleasant shyness after their first kiss (23.1% vs. 0.0%, $z = 5.13$, $p < .0001$). For example, men said:

The moment felt right, somehow. I leaned over and kissed her . . . My heart was racing, I closed my eyes. Afterwards I felt shy and tender and happy. It was the nicest experience and the most pleasant feeling. I had had my first kiss, and it was with someone I really liked. I can still remember that day and my happy feelings.

We were sitting on the swings & we leaned into each other at the same time and we kissed. After it ended, I felt happy

TABLE 3. Affective Reactions After the Very First Kiss

Affective Response Category	Women		Men		Total	
	No.	%	No.	%	No.	%
<i>General Response</i>						
Positive	51	43.6*	57	73.1*	108	55.4
Negative	72	61.5*	33	42.3*	105	53.8
Active	45	38.5	30	38.5	75	38.5
Inactive	87	74.4	54	69.2	141	72.3
<i>Positive-Active</i>	27	23.1*	27	34.6*	54	27.7
Happiness	15	12.8	18	23.1	33	16.9
Physiological arousal (symptoms)	6	5.1	9	11.5	15	7.7
Excitement	6	5.1	6	7.7	12	6.2
Joy/elation	3	2.6	6	7.7	9	4.6
<i>Positive-Inactive</i>	33	28.2*	36	46.2*	69	35.4
Relief (that kiss occurred)	15	12.8	12	15.4	27	13.8
Satisfaction/enjoyment	9	7.7	12	15.4	21	10.8
Shyness	0	0.0*	18	23.1*	18	9.2
Pride	9	7.7	0	0.0	9	4.6
<i>Negative-Active</i>	27	23.1*	3	3.8*	30	15.4
Alarm/shock	9	7.7	0	0.0	9	4.6
Upset/distress	9	7.7	0	0.0	9	4.6
Shame	6	5.1	3	3.8	9	4.6
Disgust	6	5.1	0	0.0	6	3.1
Fear	6	5.1	0	0.0	6	3.1
<i>Negative-Inactive</i>	54	46.2	30	38.5	84	43.1
Relief (that kiss is finished)	18	15.4	12	15.4	30	15.4
Disappointment	18	15.4	6	7.7	24	12.3
Embarrassment	9	7.7	12	15.4	21	10.8
Regret	9	7.7	0	0.0	9	4.6

Note: Percentages are based on the number of respondents who described the affect they experienced after their first kiss ($N = 195$; 117 women and 78 men). Numbers in italics represent the total percentage of respondents whose descriptive essays contained at least one of the responses within the respective affective category. Non-italicized numbers represent the percentage of respondents whose descriptive essays contained each specific affective response. Percentages will not necessarily sum to 100% because most respondents specified more than one affective reaction in their free responses.

* The proportions of men and women who specified this affective reaction were significantly different. Z and p values are given in the text.

and relieved that it had finally happened and I finally knew what it felt like.

After it was over, I was euphoric, almost like I was high or having an out of body experience, I was light-headed, heavy breathing, and so on. I remember feeling like I wanted to stay in that emotional high forever.

My first kiss was from the prettiest girl in school (or so I thought) so it was something that made me happy. Right after we kissed I felt shy. I laughed and blushed and she did the same thing. I smiled whenever I thought about it for a week or two after.

Conversely, and also as expected, more women than men reported a hedonically unpleasant affective response (61.5% vs. 42.3%, $z = 2.64$, $p < .005$), and more women than men

mentioned at least one negative, physiologically active emotion in their free responses (23.1% vs. 3.8%, $z = 3.65$, $p < .0005$). For example, women said:

He leaned closer, and we kissed, and *he* went at it. I felt embarrassed because I didn't know what to do. He was doing most of it. When he stopped I got up and went to the restroom and cried because I was ashamed. I couldn't believe I kissed him. I was in shock, and worried about how I would tell my mother.

I felt two emotions after the kiss—relief that it was over and he had finally taken his tongue out of my mouth and disgust at how nauseating the entire thing was. In fact, I went to the restroom and washed my mouth. I felt like throwing up. I remember thinking that it was awful and that I never wanted to do it again.

It was nothing special. My one emotional reaction was disappointment. I was expecting to experience what "Seventeen" magazine describes. I did not. What a total lie.

It was about a year ago with my first serious boyfriend. We were at the movies and he took me aside to look at the night scenery overlooking the theater and he kissed me. It was my very first time. I liked him, but I didn't like that first kiss. It was actually kind of disappointing and not what I expected. After it was over I thought "this is it?" but to him it was like "walking on clouds holding a star" when I asked him what he thought.

DISCUSSION

The goal of this descriptive study was to explore the sentiments, feelings, emotions, and other affective responses commonly experienced by men and women in the time period surrounding their very first romantic kiss. Based on a consideration of the existing empirical literature as well as of sociocultural discourse on the meaning and significance of the first kiss, we hypothesized that both genders would recall having experienced positive affect *immediately prior to* the occurrence of the kiss. However, this hypothesis was not confirmed. The majority of participants (85% of women and 94% of men) approached their first kiss filled with feelings of anxiety, confusion, and fear, rather than with the positive sentiments we expected. In fact, over three-quarters remembered experiencing *only* negative affect at that particular moment (that is, they did not specify even one subjectively pleasant emotion in their free responses). The most commonly reported response was anxiety or nervousness, spontaneously mentioned by 65% of women and 71% of men. Emotion theorists suggest that anxiety can be aroused by any potential sexual act, but is especially likely to occur if that activity is novel or unfamiliar (see DeLamater, 1991). Insofar as the very first kiss is by its nature both novel and unfamiliar, it is perhaps not surprising that anxiety was among the reactions most com-

monly reported by our participants as they anticipated experiencing their first kiss.

Although the primary affective reaction of both genders was negative in hedonic tone, more men than women generated negative responses in their essays when describing how they felt prior to kissing their partner. This gender difference may reflect the fact that men traditionally have been expected to adopt the role of initiator in sexual interactions, whereas women are expected to then accept or refuse men's sexual requests (for additional discussion of the traditional "heterosexual sexual script," see Sprecher & Regan, 2000). These gender-based expectations arise early and continue to operate across the lifespan. Boys as young as 10 or 11 years old report being actively pressured to take the lead in romantic situations and bestow kisses upon particular girls (Renold, 2003). Similarly, young men experience pressure from their peers to engage in sexual intercourse (Cullari & Mikus, 1990; Stanton, Black, Kaljee, & Ricardo, 1993), seek out sexual opportunities in order to enhance their social status and reputation among other men (Regan & Dreyer, 1999; Woody, D'Souza, & Russel, 2003), and even engage in unwanted sexual activities because of peer pressure, their own desire to gain prestige and popularity, and gender-role concerns (e.g., fear of appearing sexually inexperienced, un-masculine, or gay; Muehlenhard & Cook, 1988). Faced with a novel sexual situation in which they may have felt pressured to initiate and direct the ensuing activity, it is thus not surprising that most of the men in our sample (and more men than women) reported feeling negative affect as they prepared for their very first kiss.

Our hypotheses with regard to gender differences in affective responses *during* and *after* the first kiss were supported. As predicted, and in accord with earlier research on emotional reactions to first intercourse (e.g., Davidson et al., 1992; Sprecher et al., 1995), more men than women recalled experiencing positive affect during (81% vs. 61%) and after (73% vs. 44%) their very first kiss. Conversely, and also as predicted, more women than men reported experiencing negative affect both at the time of (55% vs. 30%) and following (62% vs. 42%) their first kiss. This re-

sponse pattern may be explained by a consideration of sociocultural discourse on the meaning of sexuality, particularly during adolescence and young adulthood (see, for example, Castañeda & Burns-Glover, 2004; Christopher, 2001; Tolman, 1994). Theorists suggest that for men, the process of gaining sexual experience and becoming sexually mature tends to be both socially accepted and rewarded. For women, however, the path to sexual maturity is fraught with difficulties and dangers, ranging from social disapproval and reputational damage to pregnancy and disease. Empirical research largely has substantiated these suppositions, revealing that sexual *inexperience* is a source of embarrassment for many men but a source of pride for many women (Carpenter, 2002; Sprecher & Regan, 1996). Although the first kiss may not have the same personal or social significance as the initial episode of intercourse, it nonetheless represents an important first step along the path to sexual maturity and adulthood. As such, it is reasonable to expect that men would have a more positive response and women a more negative response to this particular sexual event. (And, interestingly, relief at having finally experienced a kiss (and, presumably, gaining a modicum of sexual experience) was one of the more common reactions reported by male participants.)

Another factor also may be at work. Although our interest was in affective response, and thus we examined participants' essays for the presence or absence of emotion terms rather than for other informational details, it was clear from the nature of the free responses that women were often the recipients rather than the initiators of the kiss. Contemporary models of emotion (e.g., Berscheid, 1983/2002, 1991) suggest that the recipient of an action is more vulnerable to having his or her expectancies violated than is the event initiator (for whom the action is planned and purposive). Expectancy violation, in turn, increases the likelihood that an emotion will be experienced. It is possible that the role in which women found themselves during the first kiss episode—that is, as recipient of a sexual action initiated by another—was associated with an increased likelihood of expectancy violation; this, in turn, may have contributed to the

negative affect these women experienced after the kiss occurred.

This study was exploratory in nature. Our primary interest was in documenting affective responses to the first kiss and examining possible gender differences in response patterns. Consequently, we did not assess potentially important correlates or consequences of these affective responses. Previous research (e.g., Weis, 1983) has documented an array of attitudinal (e.g., sexual permissiveness) and demographic (e.g., age) variables that are associated with affective reactions to first intercourse. Future investigations might explore whether these and other variables also are correlated with affective responses to the first kiss.

In addition, it is important to recognize that our conclusions are constrained by the characteristics of our undergraduate participant sample as well as by our reliance upon retrospective reports. Retrospective self-report measures are frequently utilized in sexuality research and generally appear to be reliable (Davoli, Perucci, Sangalli, Brancato, & Dell'Uomo, 1992; Rohan, McLaughlin, & Harnish, 1994; Sieving et al., 2005), particularly if respondents are reporting about sexual events that occur infrequently or represent romantic or sexual "milestones" (e.g., first time in love, first intercourse; Hearn, O'Sullivan, & Dudley, 2003). The first kiss is one such event. Nonetheless, the kind of retrospective methodology we utilized in our investigation is vulnerable to several sources of bias (see Orbach & Harvey, 1991; Wiederman, 2004). For example, participants may distort aspects of their reports about their sexual experiences because of self-presentational concerns, including a desire to appear sexually "normal," adequate, or sophisticated. Assurances of anonymity, individual as opposed to group participation, and the use of self-administered questionnaires have been proposed as effective ways of reducing self-presentational concerns and enhancing reliability of reports (see Wiederman, 2006). We adopted these procedures and gave participants sufficient time and privacy to accurately and honestly record their responses; thus, we are reasonably confident that their reports are reliable. However, the possibility that participants' free responses

were compromised by social desirability or other concerns must be acknowledged.

In closing, we note that the first kiss is a memorable experience that occurs only once in a person's lifetime. Perhaps because of its personal significance, most young men and women approach their first kiss with something akin to dread—although some are excited, almost all report feeling nervous, frightened, awkward, and confused. During the kiss itself, their emotions shift. For men, anxiety and fear generally are replaced with elation, happiness, sexual arousal, enjoyment, and other positive feelings. Women have a more mixed reaction, ranging from unpleasant states of disgust, uncertainty, and boredom to pleasant feelings of enjoyment, tenderness, and excitement. After the kiss ends, most men continue to experience positive responses including happiness and satisfaction, but sizeable proportions also experience embarrassment and other negative sentiments. The reverse occurs for women; although a good number report positive affect, negative responses ranging from disappointment and regret to alarm and distress are even more commonly reported. Clearly, a person's very first kiss is an affect-filled experience, one that evokes a shifting array of both pleasant and unpleasant sentiments, feelings, and emotions.

REFERENCES

- Ackerman, D. (1990). *A natural history of the senses*. New York, NY: Random House.
- Alapack, R. J. (1991). The adolescent first kiss. *The Humanistic Psychologist*, 19, 48-67.
- Baxter, L. A., & Bullis, C. (1986). Turning points in developing romantic relationships. *Human Communication Research*, 12, 469-493.
- Baxter, L. A., & Pittman, G. (2001). Communicatively remembering turning points of relational development in heterosexual romantic relationships. *Communication Reports*, 14, 1-17.
- Beach, L., & Wertheimer, M. (1961). A free response approach to the study of person cognition. *Journal of Abnormal and Social Psychology*, 62, 367-374.
- Berscheid, E. (1991). The emotion-in-relationships model: Reflections and update. In W. Kessen & A. Ortony (Eds.), *Memories, thoughts, and emotions: Essays in honor of George Mandler* (pp. 323-335). Hillsdale, NJ: Erlbaum.
- Berscheid, E. (2002). Emotion. In H. H. Kelley, E. Berscheid, A. Christensen, J. H. Harvey, T. L. Huston, G. Levinger, E. McClintock, L. A. Peplau, & D. R. Peterson (Eds.), *Close relationships* (pp. 110-168). Clinton Corners, NY: Percheron Press. (Original work published 1983)
- Berscheid, E., & Regan, P. (2005). *The psychology of interpersonal relationships*. Upper Saddle River, NJ: Pearson Education.
- Blue, A. (1997). *On kissing: Travels in an intimate landscape*. New York: Kodansha America, Inc.
- Blumstein, P., & Schwartz, P. (1983). *American couples*. New York: William Morrow.
- Brook, J. S., Balka, E. B., Abernathy, T., & Hamburg, B. A. (1994). Sequence of sexual behavior and its relationship to other problem behaviors in African American and Puerto Rican adolescents. *The Journal of Genetic Psychology*, 155, 107-114.
- Capellanus, A. (1960). *The art of courtly love*. Trans. by J. J. Parry. New York: Columbia University Press. (Original work created approximately 1184)
- Carpenter, L. M. (2002). Gender and the meaning and experience of virginity loss in the contemporary United States. *Gender & Society*, 16, 345-365.
- Castañeda, D., & Burns-Glover, A. (2004). Gender, sexuality, and intimate relationships. In M. A. Paludi (Ed.), *Praeger guide to the psychology of gender* (pp. 69-91). Westport, CT: Praeger Publishers/Greenwood Publishing Group, Inc.
- Christopher, F. S. (2001). *To dance the dance: A symbolic interactional exploration of premarital sexuality*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Cullari, S., & Mikus, R. (1990). Correlates of adolescent sexual behavior. *Psychological Reports*, 66, 1179-1184.
- Darling, C. A., Davidson, J. K., & Passarello, L. C. (1992). The mystique of first intercourse among college youth: The role of partners, contraceptive practices, and psychological reactions. *Journal of Youth and Adolescence*, 21, 97-117.
- Davoli, M., Perucci, C. A., Sangalli, M., Brancato, G., & Dell'Uomo, G. (1992). Reliability of sexual behaviour data among high school students in Rome. *Epidemiology*, 3, 531-535.
- DeLamater, J. (1991). Emotions and sexuality. In K. McKinney & S. Sprecher (Eds.), *Sexuality in close relationships* (pp. 49-70). Hillsdale, NJ: Lawrence Erlbaum.
- DeLamater, J., & MacCorquodale, P. (1979). *Premarital sexuality: Attitudes, relationships, behavior*. Madison: University of Wisconsin Press.
- Eastman, W. F. (1972). First intercourse: Some statistics on who, where, when, and why. *Sexual Behavior*, 2, 22-27.
- Ellis, H. (1944). *Psychology of sex: A manual for students*. New York, NY: Emerson Books, Inc. (Original work published 1933)
- Everaerd, W., Laan, E. T. M., Both, S., & van der Velde, J. (2000). Female sexuality. In L. T. Szuchman & F.

- Muscarella (Eds.), *Psychological perspectives on human sexuality* (pp. 101-146). New York: John Wiley & Sons, Inc.
- Fehr, B. (1988). Prototype analysis of the concepts of love and commitment. *Journal of Personality and Social Psychology*, 55, 557-579.
- Fehr, B., & Russell, J. A. (1984). Concept of emotion viewed from a prototype perspective. *Journal of Experimental Psychology: General*, 113, 464-486.
- Freud, S. (1938). Three contributions to the theory of sex. In A. A. Brill (Ed. and Trans.), *The basic writings of Sigmund Freud* (pp. 553-629). New York: Random House, Inc. (Original work published 1905)
- Gagnon, J. H., & Simon, W. (1973). *Sexual conduct: The social sources of human sexuality*. Chicago: Aldine Publishing Co.
- Gonzales, M. H., Pederson, J. H., Manning, D. J., & Wetter, D. W. (1990). Pardon my gaffe: Effects of sex, status, and consequence severity on accounts. *Journal of Personality and Social Psychology*, 58, 610-621.
- Grunseit, A., Richters, J., Crawford, J., Song, A., & Kipax, S. (2005). Stability and change in sexual practices among first-year Australian university students (1990-1999). *Archives of Sexual Behavior*, 34, 557-568.
- Guggino, J. M., & Ponzetti, J. J., Jr. (1997). Gender differences in affective reactions to first coitus. *Journal of Adolescence*, 20, 189-200.
- Guo, Y. N., Ng, E. M. L., & Chan, K. (2004). Foreplay, orgasm and after-play among Shanghai couples and its integrative relation with their marital satisfaction. *Sexual and Relationship Therapy*, 1, 65-78.
- Hearn, K. D., O'Sullivan, L. F., & Dudley, C. D. (2003). Assessing reliability of early adolescent girls' reports of romantic and sexual behavior. *Archives of Sexual Behavior*, 32, 513-521.
- Hogben, M., & Byrne, D. (1998). Using social learning theory to explain individual differences in human sexuality. *The Journal of Sex Research*, 35, 58-71.
- Jakobsen, R. (1997). Stages of progression in noncoital sexual interactions among young adolescents: An application of the Mokken scale analysis. *International Journal of Behavioral Development*, 21, 537-553.
- Marlowe, C. (1979). *The tragical history of the life and death of Doctor Faustus*. In *The Norton anthology of English literature* (Vol. 1, pp. 746-795). New York: W. W. Norton & Company. (Original work ca. 1592-93)
- Masters, W. H., Johnson, V. E., & Kolodny, R. C. (1994). *Heterosexuality*. New York, NY: HarperCollins.
- Metts, S. (2004). First sexual involvement in romantic relationships: An empirical investigation of communicative framing, romantic beliefs, and attachment orientation in the passion turning point. In J. Harvey, A. Wenzel, & S. Sprecher (Eds.), *The handbook of sexuality in close relationships* (pp. 135-158). Mahwah, NJ: Lawrence Erlbaum.
- Muehlenhard, C. L., & Cook, S. W. (1988). Men's self-reports of unwanted sexual activity. *The Journal of Sex Research*, 24, 58-72.
- O'Donnell, L., Stueve, A., Wilson-Simmons, R., Dash, K., Agronick, G., & JeanBaptiste, V. (2006). Heterosexual risk behaviors among urban young adolescents. *Journal of Early Adolescence*, 26, 87-109.
- Oliver, M. B., & Hyde, J. S. (1993). Gender differences in sexuality: A meta-analysis. *Psychological Bulletin*, 114, 29-51.
- Orbuch, T. L., & Harvey, J. H. (1991). Methodological and conceptual issues in the study of sexuality in close relationships. In K. McKinney & S. Sprecher (Eds.), *Sexuality in close relationships* (pp. 9-24). Hillsdale, NJ: Lawrence Erlbaum.
- Paikoff, R. L., McCormick, A., & Sagrestano, L. M. (2000). Adolescent sexuality. In L. T. Szuchman & F. Muscarella (Eds.), *Psychological perspectives on human sexuality* (pp. 416-439). New York: John Wiley & Sons, Inc.
- Papadopoulos, N. G., Stamboulides, P., & Triantafyllou, T. (2000). The psychosexual development and behavior of university students: A nationwide survey in Greece. *Journal of Psychology & Human Sexuality*, 11, 93-110.
- Perella, N. J. (1969). *The kiss sacred and profane: An interpretative history of kiss symbolism and related religio-erotic themes*. Berkeley, CA: University of California Press.
- Regan, P. C., & Berscheid, E. (1995). Gender differences in beliefs about the causes of male and female sexual desire. *Personal Relationships*, 2, 345-358.
- Regan, P. C., & Berscheid, E. (1999). *Lust: What we know about human sexual desire*. Thousand Oaks, CA: Sage.
- Regan, P. C., & Dreyer, C. S. (1999). Lust? Love? Status? Young adults' motives for engaging in casual sex. *Journal of Psychology and Human Sexuality*, 11, 1-24.
- Regan, P. C., Durvasula, R., Howell, L., Ureño, O., & Rea, M. (2004). Gender, ethnicity, and the developmental timing of first sexual and romantic experiences. *Social Behavior and Personality*, 32, 667-676.
- Reiss, I. L. (1967). *The social context of premarital sexual permissiveness*. New York: Holt, Rinehart, and Winston.
- Reiss, I. L. (1986). *Journey into sexuality: An exploratory voyage*. New York: Prentice-Hall.
- Renold, E. (2003). "If you don't kiss me, you're dumped": Boys, boyfriends and heterosexualised masculinities in the primary school. *Educational Review*, 55, 179-194.
- Richgels, P. B. (1992). Hypoactive sexual desire in heterosexual women: A feminist analysis. *Women and Therapy*, 12, 123-135.
- Rohan, T. E., McLaughlin, J. R., & Harnish, D. G. (1994). Repeatability of interview-derived informa-

- tion on sexual history: A study in women. *Epidemiology*, 5, 360-363.
- Rosenberg, S., & Jones, R. (1972). A method for investigating and representing a person's implicit theory of personality: Theodore Dreiser's view of people. *Journal of Personality and Social Psychology*, 22, 372-386.
- Rosenthal, D. A., & Smith, A. M. A. (1997). Adolescent sexual timetables. *Journal of Youth and Adolescence*, 26, 619-636.
- Russell, J. A. (1980). A circumplex model of affect. *Journal of Personality and Social Psychology*, 39, 1161-1178.
- Russell, J. A., & Carroll, J. M. (1999). On the bipolarity of positive and negative affect. *Psychological Bulletin*, 125, 3-30.
- Sieving, R., Hellerstedt, W., McNeely, C., Fee, R., Snyder, J., & Resnick, M. (2005). Reliability of self-reported contraceptive use and sexual behaviors among adolescent girls. *The Journal of Sex Research*, 42, 159-166.
- Sorensen, R. C. (1973). *Adolescent sexuality in contemporary America: Personal values and sexual behavior ages thirteen to nineteen*. New York, NY: The World Publishing Company.
- Sprecher, S., Barbee, A., & Schwartz, P. (1995). "Was it good for you, too?": Gender differences in first sexual intercourse experiences. *The Journal of Sex Research*, 32, 3-15.
- Sprecher, S., & Regan, P. C. (1996). College virgins: How men and women perceive their sexual status. *The Journal of Sex Research*, 33, 3-15.
- Sprecher, S., & Regan, P. C. (2000). Sexuality in a relational context. In C. Hendrick & S. S. Hendrick (Eds.), *Close relationships: A sourcebook* (pp. 217-227). Thousand Oaks, CA: Sage.
- Stanton, B. F., Black, M., Kaljee, L., & Ricardo, I. (1993). Perceptions of sexual behavior among urban early adolescents: Translating theory through focus groups. *Journal of Early Adolescence*, 13, 44-66.
- Tiefer, L. (1995). *Sex is not a natural act and other essays*. Boulder, CO: Westview Press.
- Tolman, D. L. (1991). Adolescent girls, women and sexuality: Discerning dilemmas of desire. *Women and Therapy*, 11, 55-69.
- Tolman, D. L. (1994). Doing desire: Adolescent girls' struggles for/with sexuality. *Gender & Society*, 8, 324-342.
- Tsui, L., & Nicoladis, E. (2004). Losing it: Similarities and differences in first intercourse experiences of men and women. *The Canadian Journal of Human Sexuality*, 13, 95-106.
- U. S. Census Bureau. (2004). *2004 American Community Survey*. Retrieved June 22, 2006 from http://www2.census.gov/acs2004/Profiles/2004_Single_Year_Profile/050County/.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063-1070.
- Watson, D., & Tellegen, A. (1999). Issues in the dimensional structure of affect - effects of descriptors, measurement error, and response format: Comment on Russell and Carroll (1999). *Psychological Bulletin*, 125, 601-610.
- Weis, D. L. (1983). Affective reactions of women to their initial experience of coitus. *The Journal of Sex Research*, 19, 209-237.
- Wiederman, M. W. (2004). Methodological issues in studying sexuality in close relationships. In J. Harvey, A. Wenzel, & S. Sprecher (Eds.), *The handbook of sexuality in close relationships* (pp. 31-56). Mahwah, NJ: Lawrence Erlbaum.
- Wiederman, M. (2006). Sex research. In R. D. McAnulty & M. M. Burnette (Eds.), *Sex and sexuality. Vol. 1. Sexuality today: Trends and controversies* (pp. 1-15). Westport, CT: Praeger.
- Woody, J. D., D'Souza, H. J., & Russel, R. (2003). Emotions and motivations in first adolescent intercourse: An exploratory study based on object relations theory. *The Canadian Journal of Human Sexuality*, 12, 35-51.

doi:10.1300/J514v19n02_01

Received: 02/04/06

Accepted: 09/15/06