

Who Gives and Who Gets: Why, When, and with Whom Young People Engage in Oral Sex

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Abstract Surprisingly little is known about oral sex experiences among emerging adults, including the motives behind their participation in this sexual activity. The current study examined the characteristics of emerging adults’ most recent oral sex experience. A total of 431 young people (M age = 21.7 years; 71.7% female) completed an on-line survey assessing their sexual history, context (partner type, co-occurring sexual behaviors), and motives (physical, emotional, goal attainment, and insecurity) for engaging in their most recent heterosexual oral sex interaction. The majority of oral sex encounters occurred within the context of a committed relationship and during an interaction that also included intercourse. Cunnilingus was rare unless reciprocated with fellatio. Overall, both males’ and females’ reports indicate that they were motivated to engage in oral sex by sexual desire and attraction to their partner, or to enhance an emotional connection with their partner. Insecurity and goal attainment motives were uncommon. Males reported more physical motives than did females, and females reported more emotional and insecurity motives than did males. The findings provide insights into youths’ oral sex experiences, and make clear how essential it is to understand the broader sexual and partnership context in which a given sexual activity occurs. These findings have implications for policies aimed at the development of effective sexual health education programs.

Keywords Oral sex · Motives · Emerging adults · Gender differences

Introduction

Emerging adulthood is a distinct developmental period during which the foundation and maintenance of intimate relationships are key developmental tasks (Arnett 2000; Erikson 1950, 1968; Lefkowitz and Gillen 2005). Despite a call to incorporate sexual behavior into our understanding of late adolescence and emerging adulthood (Lefkowitz and Gillen 2005), research examining sexual development typically adopts a risk-behavior framework focusing on unprotected sex (Pharo et al. 2011; Kiene et al. 2009), coercion (Fair and Vanyur 2011; Howard et al. 2008), and concurrent or casual interactions (Eisenberg et al. 2009; Patrick et al. 2011). This risk perspective does not acknowledge sufficiently that emerging adulthood is the period during which partnered sexual activity becomes “a normal part of life” (Lefkowitz and Gillen 2005, p. 251) and young people begin to successfully adopt and integrate patterns of adult sexuality (Arnett 2000). There is still much that remains unexplored about the development of normative sexual behavior.

One aspect of emerging adults’ sexual behavior that has received almost no research attention is oral sex. This is surprising as oral sex is a common behavior that typically emerges during adolescence (Boyce et al. 2006; Halpern-Felsher et al. 2005; Ronis and O’Sullivan, 2011; Prinstein et al. 2003), and becomes increasingly prevalent throughout emerging adulthood (Kaestle and Halpern 2007; Leichliter et al. 2007; Malacad and Hess 2010) and adulthood (Laumann et al. 1994; Leichliter et al. 2007). Although it is unclear whether the prevalence of oral sex

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has actually increased in recent years, oral sex is more commonly reported among young adults than it was decades ago (Gagnon and Simon 1987; Kinsey et al. 1948, 1953). Recent data from the National Longitudinal Study of Adolescent Health (Kaestle and Halpern 2007) revealed that approximately 85% of emerging adults involved in a romantic relationship had engaged in oral sex with their romantic partner. Judging from surveys in which oral sex is incorporated into reports of other sexual activities, oral sex appears to be a normative part of sexual development among emerging adults (McKay 2004). Despite being a prevalent behavior among young adults, we still know very little about the reasons emerging adults choose to engage in oral sex or the characteristics of their oral sex experiences.

In one of the few studies that have focused on oral sex directly, Chambers (2007) asked U.S. college students (M age = 19.3, 62% female) about their experiences, attitudes, and motives. She found that 79% reported having given oral sex and 78% reported having received oral sex. The majority of the sample perceived oral sex to be an intimate behavior, and indicated that they would not be comfortable engaging in oral sex outside the context of a committed relationship. Female students in the sample reported giving oral sex more often than receiving oral sex, and male students reported receiving oral sex more often than giving oral sex. The most common reason that both males and females reported for giving and receiving oral sex was physical pleasure. Motives such as power and avoiding intercourse were reported by 7 and 14% of the sample respectively. Malacad and Hess (2010) examined the attitudes and emotions that young women (18–25 years old) associated with their oral sex experiences. Three-quarters (74%) of the sample had engaged in oral sex at least once, and the majority (76%) of these participants indicated that their most recent oral sex experience had been with a committed partner. Most of the women reported positive emotions associated with their recent oral sex experiences, such as love, excitement, and physical arousal. Some women (10–20%) reported experiencing negative emotions, such as guilt and anxiety. Negative emotions were more likely to be reported by younger women and by women who were not in love with their partner.

Although these two studies provide useful insights regarding the prevalence and context of young adults' oral sex experiences, there are several clear gaps in our understanding. First, the reasons why young people choose to engage in oral sex remain unclear. Although Chambers (2007) was the first to directly assess emerging adults' motives behind giving and receiving oral sex, response options were limited to physical pleasure, power, and

avoidance of other sexual activities. By relying on such a limited range of items, Chambers may have obtained a biased, or incomplete, understanding of emerging adults' oral motives. Most notably, emotional or intimacy-based motives may be common reasons for engaging in oral sex (Cornell and Halpern-Felsher 2006).

We also know very little regarding who emerging adults are choosing as oral sex partners. Emerging adulthood is a period in which individuals report the highest numbers of new sexual partners and report being open to various types of sexual relationships, such as hook-ups and “friends with benefits” (Laumann et al. 1994; Paul et al. 2000). Some research suggests that oral sex is common during casual sex encounters (Lewis et al. 2011), although young adults who report being in love with a romantic partner are more likely to report giving and receiving oral sex than their peers who are not in love (Kaestle and Halpern 2007). However, there are no studies to our knowledge that examine oral sex experiences specifically, linking them to their respective partnership contexts. The relationship context in which oral sex occurs can have implications for young adults' well-being. Engaging in oral sex with a casual partner is linked to feelings of guilt and anxiety (Malacad and Hess 2010), and engaging in oral sex with multiple partners elevates the risk of contracting a sexually transmitted infection, such as HPV (D'Souza et al. 2009). Thus, understanding the relationship context in which oral sex occurs may be particularly important during emerging adulthood when sexual activity and variability in sexual partners are at their highest.

Finally, we know little about the broader sexual context in which oral sex occurs. That is, it is unclear whether sexual interactions that include oral sex are likely to include other sexual activities (e.g., vaginal or anal intercourse). When we examine lifetime experience, individuals who have engaged in oral sex also have usually engaged in vaginal intercourse (Higgins et al. 2010). However, it is still unclear to what extent these behaviors co-occur at the event level.

The ways in which oral sex is incorporated into young people's sexual repertoires may be linked to both positive and negative outcomes. For example, casual encounters that include only oral sex are less likely to lead to negative affect than casual encounters that also include intercourse (Lewis et al. 2011). Furthermore, it is unclear whether specific oral sex encounters are typically unidirectional, with one partner giving oral sex while the other receives, or are reciprocal in nature, with both partners giving and receiving oral sex. Although some research suggests that women are more likely to give oral sex, and men are more likely to receive oral sex (Chambers 2007; Leichter et al. 2007), these findings are not consistent across all studies

(Brewster and Tillman 2008). Thus, research is needed to clarify the characteristics, including motives and context, of what is apparently a common sexual activity among emerging adults.

According to Sexual Script Theory (Simon and Gagnon 1984, 1987, 2003), males are traditionally encouraged to be sexually proactive and pursue a variety of sexual experiences and partners with the goal of experiencing physical pleasure. In contrast, females are encouraged to be sexually passive or reticent, to restrict sexual activity and sexual partners, and to use sexual behavior primarily as a tool for intimacy and relationship development.

Sexual script theory is consistent with a large body of literature that has demonstrated reliably that females tend to report greater intimacy or relationship-based motives than do males, whereas males report greater physical or pleasure-based motives than do females (Boyce et al. 2006; Brigman and Knox 1992; Leigh 1989; Meston and Buss 2007; Ott et al. 2006; Patrick and Lee 2008; Woody et al. 2003). However, no research to date has assessed comprehensively gender differences in motives for oral sex. This is an important gap in the literature as a great deal of the media discourse on oral sex among youth suggests that females are performing oral sex for male attention or social status motives, and are ultimately degraded in the process (Ducharme 2006). On the other hand, males are portrayed as receiving oral sex for pleasure or power, and gain status amongst peers from their experience (Jackson 2004; Nebenzahl 2003). Thus, Sexual Script Theory was used to frame the current study as it provides a useful way of conceptualizing gender differences in motives.

The Current Study

This study was designed to redress the dearth of research on young people's oral sex experiences. We chose to assess participants' most recent experience of oral sex to reduce problems of recall bias that often are associated with asking individuals to estimate past prevalence or provide information about their "usual" or more distal sexual experiences (Lindberg et al. 2008; McAuliffe et al. 2007; Leigh et al. 1998). Furthermore, past research frequently has examined lifetime oral sex experience, and asked participants to report on their oral sex experiences and attitudes in general (e.g., Chambers 2007; Kaestle and Halpern 2007; Leichliter et al. 2007). By examining individuals' most recent oral sex experience, we are able to understand better what constitutes a typical oral sex interaction. In addition, the majority of past research on emerging adulthood has relied on college samples which necessarily excludes non-students. We recruited participants online to ensure better

representation of young adults. Online methods are particularly suited to a young adult sample as 95% of age group reports being frequently "online" and highly active on the Internet (Zickuhr 2010).

Consistent with previous research examining oral sex attitudes and experiences (Chambers 2007; Kaestle and Halpern 2007), we predicted that more occasions of oral sex would take place with a committed partner than with a casual partner. As there is no research examining the co-occurrence of oral sex with other sexual behaviors at the event level, no specific predictions were made in this regard. However, as past research suggests that women are more likely to give oral sex, and men more likely to receive oral sex (Chambers 2007; Leichliter et al. 2007), we predicted that fellatio would be reported more often than would cunnilingus.

We developed several hypotheses regarding oral sex motives in line with previous research on sexual intercourse, as well as our theoretical framework. First, we predicted that physical and emotional motives would be the most commonly endorsed motives for engaging in oral sex. Second, we predicted that goal attainment and insecurity motives would be the least commonly endorsed motives for engaging in oral sex. These hypotheses were based on the literature examining sexual motives in general (Meston and Buss 2007), as well as the two studies that have examined oral sex motives in particular (Chambers 2007; Cornell and Halpern-Felsher 2006). Based on Sexual Script Theory (Simon and Gagnon 1984, 1987, 2003), we predicted that males would report more physical motives than would females, and females would report more emotional motives than would males. Finally, based on the literature examining motives for sexual intercourse (Cooper et al. 1998), we predicted that those who were involved in a committed relationship with their sexual partner would report more emotional motives than would those in casual sexual relationships.

Method

Participants

A total of 726 Canadian participants responded to advertisements on social network sites, message boards, and university newsletters to complete an online survey about young adults' experiences with oral sex, intercourse, and intimacy. Of these participants, only the 515 (71%) who reported engaging in oral sex within the prior 30 days were included in the current analyses. Participants who did not provide information about their age ($n = 23$; 4.5%), completed the survey more than once ($n = 2$; 0.4%), or failed to complete more than 20% of any of the measures

($n = 27$; 5.2%) were excluded from further analyses. As compared to participants in the final sample, the 52 participants who were excluded from the final analyses reported a higher number of lifetime oral sex partners ($M_s = 15.34$ vs. 9.53), $F(1, 511) = 5.15$, $p < .05$, a higher number of lifetime anal sex partners ($M_s = 2.94$ vs. 1.37), $F(1, 512) = 5.27$, $p < .05$, a higher number of partners from whom they had received oral sex ($M_s = 12.12$ vs. 7.21), $F(1, 511) = 5.12$, $p < .05$, and a younger age of first vaginal intercourse ($M_s = 15.92$ vs. 16.78 years), $F(1, 495) = 6.91$, $p < .01$. In addition, excluded participants were more likely to be male, $\chi^2(1) = 6.99$, $p < .01$. There were no differences between participants in the final sample and excluded participants in terms of total number of sexual partners, number of partners to whom they had has given oral sex, number of vaginal intercourse partners, frequency of oral sex and intercourse within the prior 30 days, religiosity, sexual orientation, or relationship status. Finally, participants whose most recent oral sex experience involved a same-sex partner ($n = 31$) were not included in the current analyses. This resulted in a final sample of 431 participants (309 females and 122 males).

All participants were Canadian and between the ages of 18 and 24 ($M = 21.7$ years). Participants' ethnicities were Caucasian (88%), Asian (3%), Native American (2%), Hispanic (2%), Multiracial (2%), African American (1%), and other (2%). They identified as heterosexual (79%), bisexual (14%), questioning (4%), and unlabeled (2%). Participants were in a romantic relationship (42%), cohabitating (28%), single (22%), or married (7%). Approximately half were students (54%). The remainder were employed full-time (21%), employed part-time (9%), unemployed (9%), homemaking (3%), on medical leave (1%), or on public assistance (1%).

Measures

Background Questionnaire

Participants provided information about their gender, age, ethnicity, province of residence, employment status, educational level, relationship status, and religiosity.

Sexual History

This measure assessed number of sexual partners with whom participants had engaged in oral sex (giving and receiving), vaginal intercourse, and anal intercourse. Participants also indicated the age at which they had first engaged in vaginal intercourse, and the number of times that they had engaged in oral sex and vaginal intercourse in the preceding 30 days.

Last Experience of Oral Sex

Participants who had engaged in oral sex in the prior 30 days (yes/no) were asked to provide detailed information about the event including: (1) how many days previous to the study they had engaged in oral sex (1–30); (2) the gender of their sexual partner (male/female); (3) their relationship with the sexual partner (i.e., one-time, casual, romantic relationship <3 months, romantic relationship longer than 3 months); (4) whether they had engaged in sexual activity with this sexual partner in the past (yes/no); (5) the types of sexual activities in which they had engaged on that occasion (i.e., genital touch, cunnilingus, fellatio, vaginal intercourse, anal intercourse); (6) whether they experienced an orgasm (yes/no/unsure); and, (7) whether their partner experienced an orgasm during their interaction (i.e., yes, no, unsure). All sexual behaviors were defined for participants.

Motives for Oral Sex

Participants completed a modified version of the YSex? Scale developed by Meston and Buss (2007), which assesses individuals' motives for engaging in sexual intercourse. The original scale includes 142 items that can be grouped into 4 factors and 13 sub-factors and demonstrates strong reliability (All $\alpha_s > .85$) and external validity. To facilitate online administration of the survey, we developed a brief version of the scale using the information about item frequency and factor loadings provided by Meston and Buss (2007). We retained four items from each subscale, balancing items that had the highest factor loadings, were most frequently endorsed, and captured variability in the construct measured by each sub-factor. In addition, all references to sexual intercourse were replaced with references to oral sex. The final measure included 52 items requiring participants to indicate which items represented their motives for engaging in oral sex on their most recent occasion of this sexual activity on a 5-point Likert scale (from 1—*not at all* to 5—*a great deal*). Participants were given the instruction “Thinking about the last time you had oral sex, to what extent did you have oral sex because” followed by the list of the 52 items.

Physical Motives The Physical factor includes items assessing the stress reduction (e.g., “I was frustrated and needed relief”), pleasure (e.g., “I was horny”), physical desirability (e.g., “The person’s physical appearance turned me on”), and experience seeking (e.g., “I wanted the experience”) sub-factors. Alphas ranged from .70 to .88. The internal consistency for the overall Physical factor was good ($\alpha = .85$).

Goal Attainment Motives The Goal Attainment factor includes the resources (e.g., “I wanted to hurt/humiliate the

person”), social status (e.g., “I wanted to be popular”), revenge (e.g., “I wanted to make someone else jealous”), and utilitarian (e.g., “I wanted to get out of doing something”) sub-factors. Alphas ranged from .55 to .83. The internal consistency for the overall Goal Attainment factor was good ($\alpha = .83$).

Emotional Motives The Emotional factor includes the love and commitment (e.g., “I wanted to feel connected to the person”), and expression (e.g., “I wanted to say I’ve missed you”) sub-factors. Alphas ranged from .55 to .78. The internal consistency for the overall Emotional factor was acceptable ($\alpha = .77$).

Insecurity Motives The Insecurity factor includes the self-esteem boost (e.g., “I wanted attention”), duty/pressure (e.g., “I felt guilty”), and mate guarding (e.g., “I wanted to keep my partner from straying”) sub-factors. Alphas ranged from .71 to .80. The internal consistency for the overall Insecurity factor was good ($\alpha = .80$).

Procedure

Participants were recruited through advertisements inviting sexually active Canadians between the ages of 18 and 24 to complete a brief, anonymous, online survey. Advertisements were distributed over a period of 8 months through multiple methods, including online message boards, university list serves, and social networking sites. Individuals who were interested in participating in the study clicked on a web link that directed them to detailed information about the study and the consent form. After indicating consent, participants complete the survey, which took approximately 20 min to complete. At the end of the survey, participants were linked to a separate web page where they were entered into a draw to win a \$50 gift card. All procedures were approved by the university’s research ethics board.

Table 1 Sexual histories of male and female participants

N = 473 (121 men and 308 women). One male and one female participant were identified as outliers in terms of their sexual history. However, as they were not outliers on other variables, and sexual history was not included in any predictive analyses, we retained their data in the sample

	Men			Women			Overall		
	M	SD	Range	M	SD	Range	M	SD	Range
Sexual partners									
Total	11.8	18.8	1–152	12.57	31.8	1–500	12.4	28.7	1–500
Oral sex	9.7	14.8	1–100	8.8	12.4	1–100	9.1	13.1	1–100
Oral sex—given	6.2	10.3	0–78	8.8	15.9	0–200	8.1	14.6	0–200
Oral sex—received	9.2	13.7	1–100	5.8	8.2	0–71	6.8	10.2	0–100
Vaginal intercourse	9.3	14.6	1–115	10.4	31.1	0–500	10.1	27.4	0–500
Anal intercourse	1.3	3.2	0–25	1.0	1.5	0–14	1.1	2.1	0–25
Frequency in prior 30 days									
Oral sex	9.4	19.0	1–200	7.9	8.5	1–100	8.3	12.4	1–200
Vaginal sex	10.8	10.8	0–100	10.9	9.5	0–60	10.9	10.2	0–100

Results

Participants’ Sexual Histories

A summary of participants’ sexual histories can be found in Table 1. Participants reported a lifetime average of 12 oral sex partners, and an average of eight occasions of oral sex within the prior 30 days. Thus, participants reported active histories and relatively extensive sexual experience. Males reported having received oral sex from more partners than did females ($M_s = 9.2$ and 5.8 , respectively), $F(1, 427) = 9.58, p < .01$. [Anal sex was relatively uncommon compared to oral sex and vaginal intercourse, in line with other surveys of emerging adults (e.g., Herbenick et al. 2010)].

Contexts of Oral Sex Experiences

On average, participants’ last experience of oral sex had occurred 5.8 days prior to completing the survey (range = 1–30; $SD = 6.17$). The majority of sexual encounters (82.6%) was with a committed partner (e.g., dating exclusively, cohabitating, or married). The remainder was with a casual sexual partner (17.4%). There were no differences in the relationship types reported by males and females (i.e., casual partner vs. committed), $\chi^2(2) = 4.35, p > .05$. Almost all participants (93.3%) had engaged in sexual activity with the sexual partner on a previous occasion. Among participants who reported oral sex only, 81% of males and 32% of females reported that they experienced an orgasm, and 38% of males and 88% of females reported that their partner experienced an orgasm. Among participants who engaged in both oral sex and intercourse, 89% of males and 61% of females reported that they experienced an orgasm, and 81% of males and 93% of females reported that their partner experienced an orgasm. More males reported that their female partner experienced an orgasm than females reported for

themselves, $\chi^2(1) = 13.8, p < .001$. There was no difference in reports regarding males’ orgasms.

Most (83.1%) occasions of oral sex took place during an interaction that also included intercourse. As there may be qualitative differences between sexual encounters that involved only oral sex and those encounters that included oral sex as well as intercourse, we examined these interactions separately. When the occasion comprised oral sex only, the most common sexual activity was fellatio (61.1%), followed by mutual oral sex (33.3%). The least common sexual activity was cunnilingus (5.6%), $\chi^2(2) = 50, p < .001$, occurring on only 4 of the 72 oral sex only occasions. When the interactions also included intercourse, the most common sexual activities were mutual oral sex (55.6%) and fellatio (33%). Again, the least common sexual activity was cunnilingus (10.8%), $\chi^2(2) = 177, p < .001$, occurring on only 39 of the 359 sexual occasions reported.

Motives for Engaging in Oral Sex

Although we planned to examine potential differences in motives for giving and receiving oral sex, as can be seen in Table 2, there were no occasions on which males reported performing oral sex on their partner without either receiving oral sex themselves or engaging in intercourse. There were also very few occasions ($n = 4$) on which females reported receiving oral sex without also performing oral sex or engaging in intercourse. There did not appear to be an actor-observer bias in reports, as there were no differences between males’ and females’ reports of cunnilingus, fellatio, and mutual oral sex, (Fisher’s Exact test, $p = .23$). Thus, we grouped all three types of oral sex behavior (giving, receiving, both) for the remainder of the analyses.

Table 2 Frequency of sexual activities during participants’ most recent oral sex experiences

	Men (<i>N</i> = 122)		Women (<i>N</i> = 309)		Overall (<i>N</i> = 431)	
	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>
Oral sex only						
Total occasions	13.1	16	18.1	56	16.7	72
Cunnilingus	0.0	0	7.1	4	5.6	4
Fellatio	50.0	8	64.2	36	61.1	44
Both	50.0	8	28.6	16	33.3	24
Oral sex and intercourse						
Total occasions	86.9	106	85.8	253	83.3	359
Cunnilingus	7.6	8	12.3	31	10.9	39
Fellatio	24.5	26	36.8	93	33.0	119
Both	67.9	72	51.0	129	56.0	201

Mean ratings of motives can be found in Table 3. Analyses comparing the means of the four main motive factors (Physical, Emotional, Insecurity, and Goal Attainment) were interpreted using a significance value of .05. However, a Bonferroni adjustment was used for the analyses comparing the means of the 13 sub-factors to avoid inflation of Type I error. The significance value was subsequently set at .001. As predicted, the most frequently endorsed motives for engaging in oral sex were physical. The second most frequently endorsed motives were emotional, followed by insecurity motives. Goal attainment motives were the least frequently endorsed. This pattern was the same for interactions that involved oral sex only, $F(3,213) = 180.67, p < .001$, and oral sex interactions that also included intercourse, $F(3,1074) = 1,102.38, p < .001$. Participants reported higher levels of physical motives associated with occasions that involved both oral sex and intercourse, as compared to occasions involving only oral sex, $F(1,429) = 3.94, p < .05$. However, this was only true for the pleasure sub-factor, $F(1,429) = 18.98, p < .001$. There were no differences between the two types of interactions on emotional, goal attainment, or insecurity motives.

Our hypotheses regarding gender differences were partially supported. Females reported higher levels of emotional motives than did males during both interactions involving only oral sex, $F(1,70) = 15.01, p < .001$, as well as interactions that included intercourse, $F(1, 357) = 12.9, p < .001$. Moreover, for both types of oral sex interactions, a gender difference was noted for the love and commitment subscale, $F(1,70) = 13.80, p < .001$ and $F(1,70) = 12.18, p < .001$, but not for the expression sub-factor. In both cases, the motive was not particularly strong (see Table 3). Females also reported higher levels of insecurity motives than did males for both interactions involving only oral sex, $F(1,70) = 4.01, p < .05$, as well as interactions that included intercourse, $F(1, 357) = 5.5, p < .05$. However, there were no statistically significant gender differences among any of the insecurity sub-factors. Males reported higher levels of physical motives than did females, $F(1, 357) = 5.5, p < .05$, but only for oral sex occasions that also included intercourse. This gender difference also was found in the stress reduction $F(1,357) = 11.80, p = .001$, pleasure, $F(1,357) = 13.98, p < .001$, and physical desirability sub-factors, $F(1,357) = 15.15, p < .001$.

Finally, our hypothesis regarding relationship context was supported. All means are presented in Table 4. Both males and females reported greater emotional motives when engaging in oral sex with a committed partner than when engaging in oral sex with a casual partner, $F(1,120) = 9.52, p < .01$ and $F(1,307) = 5.66, p < .05$, respectively. However, analyses of the emotional subscales indicated that this difference was only found in males’ reports of love and

Table 3 Motives for engaging in oral sex

	Overall		Oral sex only		Oral sex and intercourse	
	Oral sex only (<i>N</i> = 72)	Oral sex and intercourse (<i>N</i> = 349)	Men (<i>N</i> = 106)	Women (<i>N</i> = 56)	Men (<i>N</i> = 106)	Women (<i>N</i> = 253)
Physical	2.94	3.12*	3.01	2.91	3.36	3.02***
Stress reduction	1.90	1.96	2.14	1.83	2.21	1.85***
Pleasure	3.53	4.09***	4.08	3.37	4.39	3.97***
Physical desirability	3.58	3.67	3.63	3.57	4.02	3.52***
Experience seeking	2.73	2.76	2.19	2.89	2.82	2.73
Emotional	2.19	2.21	1.55	2.37***	1.98	2.31***
Love and commitment	2.74	2.72	1.89	2.98***	2.41	2.85***
Expression	1.63	1.70	1.20	1.75	1.54	1.77
Insecurity	1.40	1.34	1.23	1.45*	1.25	1.38*
Self-esteem boost	1.81	1.65	1.60	1.87	1.50	1.71
Duty/pressure	1.24	1.17	1.09	1.29	1.09	1.21
Mate guarding	1.16	1.20	1.00	1.21	1.06	1.22
Goal attainment	1.03	1.07	1.07	1.02	1.06	1.07
Resources	1.02	1.03	1.02	1.02	1.02	1.04
Social status	1.03	1.04	1.04	1.02	1.06	1.03
Revenge	1.04	1.09	1.11	1.01	1.06	1.10
Utilitarian	1.06	1.10	1.03	1.06	1.11	1.10

Participants rated all of the items included in the motives measure on a 5-point Likert scale (from 1—*not at all* to 5—*a great deal*). Analyses comparing the means of the four main factors were interpreted using a significance value of .05. Analyses comparing the means of the 13 sub-factors were interpreted using a Bonferroni adjustment, and the significant value was set to at .001

* $p < .05$, *** $p < .001$

commitment motives, $F(1,120) = 13.28$, $p > .05$. Both males and females also reported greater goal attainment motives when engaging in sexual activity with a casual partner than when engaging in sexual activity with a committed partner, $F(1,120) = 98.97$, $p < .01$ and $F(1,307) = 10.86$, $p < .01$, respectively. For males, this pattern was present in both the social status, $F(1,120) = 12.24$, $p > .05$ and revenge subscales, $F(1,120) = 12.73$, $p > .05$, but among females this pattern was present for only the revenge subscale, $F(1,307) = 26.33$, $p > .05$. Finally, females reported greater insecurity motives when engaging in sexual activity with a casual partner than when engaging in sexual activity with a committed partner, $F(1,307) = 9.41$, $p < .01$, and this pattern was present in the self-esteem boost subscale, $F(1,307) = 20.12$, $p > .05$. Relationship status was not associated with males' physical, goal attainment, or insecurity motives, or with females' physical motives.

Discussion

Oral sex is a normative and common sexual behaviour during emerging adulthood (Kaestle and Halpern 2007; Leichter et al. 2007). Past research has provided some insight into young adults' reasons for engaging in oral sex

(Chambers 2007), as well as young women's emotional reactions to engaging in oral sex (Malacad and Hess 2010). However, little is known about the characteristics of young adults' typical oral sex experiences. Therefore, the current study examined emerging adults' most recent oral sex experience. Variables of interest were the context of the interaction (partner type, co-occurring sexual behaviors), and young people's motives (physical, emotional, goal attainment, and insecurity) for engaging in their most recent oral sex experience.

This is the first study to our knowledge to explore in detail emerging adults' recent oral sex experiences to help characterize the features of a typical scenario between women and men. The results of this study add to the growing body of literature showing that oral sex is a normative component of young peoples' sexual repertoires (Kaestle and Halpern 2007; McKay 2004). It also provides insight into characteristics of emerging adults' oral sex interactions, and related motives. Our participants were sexually active and most had engaged in oral sex within the week prior to completing the study. Oral sex was certainly more common during sexual interactions with a steady partner and usually occurred in the context of a sexual interaction that also included intercourse, as we had expected.

Table 4 Motives for engaging in oral sex with a casual and committed sexual partner

	Men		Women	
	Casual (N = 29)	Committed (N = 93)	Casual (N = 66)	Committed (N = 242)
Physical	3.33	3.30	3.08	2.97
Stress reduction	2.40	2.13	2.11	1.78
Pleasure	4.29	4.36	3.82	3.87
Physical desirability	3.83	4.01	3.40	3.56
Experience seeking	2.79	2.72	2.99	2.70
Emotional	1.56	2.04**	2.11	2.37*
Love and commitment	1.75	2.53***	2.64	2.93
Expression	1.36	1.54	1.58	1.81
Insecurity	1.32	1.22	1.57	1.34***
Self-esteem boost	1.74	1.44	2.16	1.62***
Duty/pressure	1.19	1.06	1.23	1.22
Mate guarding	1.04	1.18	1.30	1.20
Goal attainment	1.13	1.04**	1.13	1.04**
Resources	1.02	1.02	1.07	1.03
Social status	1.22	1.02***	1.07	1.02
Revenge	1.19	1.03***	1.30	1.03***
Utilitarian	1.10	1.10	1.09	1.09

Participants rated all of the items included in the motives measure on a 5-point Likert scale (from 1—*not at all* to 5—*a great deal*). Analyses comparing the means of the four main factors were interpreted using a significance value of .05. Analyses comparing the means of the 13 sub-factors were interpreted using a Bonferroni adjustment, and the significant value was set to at .001

* $p < .05$, ** $p < .01$, *** $p < .001$

Consistent with past research, we found that fellatio was more common than cunnilingus (Chambers 2007). Over 90% of the sexual interactions included in this study included fellatio, yet surprisingly less than half (46%) of all interactions included cunnilingus. This contrast is even more striking when we examine unidirectional sexual activity, that is, when one partner gives oral sex without also engaging in intercourse or receiving oral sex from their partner. Of the 48 unidirectional interactions reported by our participants, on only four occasions did females report receiving oral sex without also engaging in fellatio or intercourse. On the other hand, participants reported 44 occasions during which males received fellatio without also engaging in cunnilingus or intercourse. This is likely the reason that females were less likely to report experiencing an orgasm when engaging in oral sex alone than when engaging in oral sex and intercourse.

Although the data demonstrate that females are more likely to give oral sex, and males are more likely to receive

oral sex, it is difficult to identify the exact reasons for this gender difference. This finding may reflect fundamental differences in the nature of the two forms of oral sex. Although fellatio and cunnilingus are treated as equivalent in many respects, we should bear in mind that they do not involve the same form of sexual activity, require different states of undress, and are surrounded by different social norms (Tolman 2005). Fellatio and cunnilingus might not be viewed as equivalent by males and females. For example, Chambers (2007) found that males were more likely than were females to report receiving oral sex for their own pleasure (84 vs. 75%). In contrast, females were more likely than were males to report receiving oral sex to please their partner (27 vs. 18%). This suggests that, at least for some females, giving oral sex may be perceived as more desirable than receiving oral sex. This also may reflect gender differences in genital perceptions. Individuals who report more negative perceptions of their genitals are less likely to engage in oral sex (Reinholtz and Muehlenhard 1995), and women tend to report less favourable perceptions of their genitals, and greater concern about body hair and genital odour, than do men (Morrison et al. 2005). Sociocultural taboos surrounding oral sex during menstruation might also help to account for the discrepancy in rates.

However, the finding that unidirectional cunnilingus is far less common than unidirectional fellatio may reflect the gender differential in passive/initiator roles, in line with Sexual Script Theory (Simon and Gagnon 1984, 1987, 2003). For example, giving oral sex is perceived to be a submissive sexual role, which traditionally is expected of females in heterosexual interactions, whereas receiving oral sex is associated with a dominant male sexual role (Baumeister 1988). Research with men who have sex with men describe cultural stigma reflecting a less dominant, more passive role for the individual who is giving oral sex as compared to the individual who is receiving oral sex (Carballo-Diéguez et al. 2004). Thus, these roles and expectations may extend to other relationship contexts. Further research on perceptions of these oral sex behaviors is needed.

We found support for two other hypotheses. Physical and emotional motives were the most common motives for engaging in oral sex, and insecurity and goal attainment motives were the least common motives for engaging in oral sex. This was true for both interactions involving only oral sex and oral sex interactions that included intercourse. This finding is consistent with research examining motives for engaging in other types of sexual activity (Meston and Buss 2007) and contradicts the lay view that young people may be using oral sex as a means to increase their popularity or feelings of self-worth (Ducharme 2006; Nebenzahl 2003). In fact, very few participants endorsed insecurity

motives, which included items such as, “I wanted attention” and “I felt obliged to;” nor did they endorse goal attainment motives, which included items such as, “I wanted to be popular” and “I wanted to get a favor from someone.” It is possible that these motives were endorsed less frequently for reasons relating to social desirability. However, past research has demonstrated that participants tend to report higher rates of sensitive or socially stigmatized behavior on computerized surveys like ours than in paper and pencil surveys (Brenner et al. 2006), possibly because of increased feelings of privacy and anonymity. Overall, participants’ reports indicate that they were motivated to engage in oral sex by sexual desire and attraction to their partner, or to enhance an emotional connection with their partner.

Another interesting finding that emerged was the cluster of gender differences in motives for oral sex. As expected, males reported more physical motives than did females. However, this difference was only significant for interactions including intercourse. Also, as predicted, females reported more emotional motives than did males. However, of note, both males and females reported higher rates of physical motives than they did emotional motives. This finding does not mean that the emerging adults in our study were engaging in sexual activity for purely physical reasons or that they perceived sexual activity to be casual or disconnected from emotions. However, it does suggest that motives grounded in physical pleasure, arousal and release, as well as stress reduction, play a large role in determining their day-to-day sexual activities, particularly for those involved in committed relationships. Males and females may be drawing from, at least in part, a common sexual script (Hyde 2005; Meston and Buss 2007; Simon and Gagnon 1984, 1987, 2003).

We found support for our hypothesis that participants who were involved in a committed relationship with their sexual partner would report more emotional motives than would participants in casual sexual relationships. Furthermore, both males and females reported greater goal attainment motives, and females reported greater insecurity motives, when engaging in oral sex with a casual partner as compared to engaging in oral sex with a committed partner. Engaging in sexual activity for either goal attainment or insecurity motives may be problematic as some research suggests that these types of motives are associated with more negative outcomes. For example, one study found that individuals who reported engaging in sexual activity for coping motives were more likely to report experiencing negative outcomes, particularly if they were not in an exclusive relationship (Cooper, et al. 1998). Thus, the individuals in our study who are reporting engaging in oral sex with casual partners for either goal attainment or insecurity motives may be at a somewhat heightened risk

for experiencing negative outcomes. However, it is important to note that even among participants who were engaging in oral sex with a casual partner, rates of goal attainment and insecurity motives were low.

Several limitations to the current study should be taken into account. First, participants were recruited through online message boards, announcements on university listservs, and social networking sites. Although this method allowed us to include a relatively broad range of young adults outside of the college population, the sample remained a convenience sample and it is unclear to what extent it is representative of emerging adults in general. We also chose to exclude participants with a large amount of missing data. Unfortunately, as compared to our final sample, these excluded participants were more likely to be male, reported greater numbers of sexual partners, and reported a younger age at first intercourse. This suggests that the excluded participants may represent a somewhat different population than our final sample, although there was considerable overlap in their sexual histories. Moreover, the majority of our participants was in a committed relationship, likely because an eligibility criterion was participation in oral sex in the past 30 days. Individuals who have a committed partner are more likely to be engaging in sexual activity and, thus, more likely to have been included.

Another limitation relates to the unit of measurement. Although we chose to ask participants about their most recent oral sex experience, we did not specify whether this interaction should be unidirectional, bidirectional, or include other sexual activities. We made this decision because we wanted to understand the contexts in which young adults engage in oral sex. It turned out that the majority of oral sex interactions also included intercourse. Thus, it was relatively difficult to examine the characteristics of interactions that involved only oral sex alone, which may be qualitatively different from interactions that include other sexual behaviors. Future research should sample a wider range of interactions, among a more diverse sample including same-sex interactions, and among individuals from other age groups and cultures.

In conclusion, this study provides some of the first insights into gender differences (and more notably gender similarities) in the meanings that young adults give to oral sex experiences. Our findings have important implications for the development of social policies aimed at improving sexual health education and the provision of sexual health care. More broadly, the findings improve our understanding of young people’s motives for engaging in oral sex, making it possible to address these motives directly, and also they allow educators, health care providers, and counselors to develop strategies that are tailored to young people’s specific oral sex experiences, including the relationship

context on which the oral sex occurs. Overall, our findings suggest that oral sex is a normative and healthy component of emerging adults' sexual repertoires.

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References

- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, *55*, 469–480. doi:10.1037/0003-066X.55.5.469.
- Baumeister, R. F. (1988). Gender differences in masochistic scripts. *Journal of Sex Research*, *25*, 478–499. doi:10.1023/A:1018871009381.
- Boyce, W., Doherty-Poirier, M., MacKinnon, D., Fortin, C., Saab, H., King, M., et al. (2006). Sexual health of Canadian youth: Findings from the Canadian youth, sexual health and HIV/AIDS study. *The Canadian Journal of Human Sexuality*, *15*, 59–68.
- Brener, N. D., Eaton, D. K., Kann, L., Grunbaum, J. A., Gross, L. A., Kyle, T. M., et al. (2006). The association of survey setting and mode with self-reported health risk behaviors among high school students. *Public Opinion Quarterly*, *70*, 354–374. doi:10.1093/poq/nfl003.
- Brewster, K. L., & Tillman, K. H. (2008). Who's doing it? Patterns and predictors of youths' oral sexual experiences. *Journal of Adolescent Health*, *42*, 73–80. doi:10.1016/j.jadohealth.2007.08.010.
- Brigman, B., & Knox, D. (1992). University students' motivations to have intercourse. *College Student Journal*, *26*, 406–408.
- Carballo-Diéguez, A., Nieves, L., Diaz, F., Decena, C., & Balan, I. (2004). Looking for a tall, dark, macho man... sexual-role behavior variations in Latino gay and bisexual males. *Culture, Health & Sexuality*, *6*, 159–171. doi:10.1080/13691050310001619662.
- Chambers, W. C. (2007). Oral sex: Varied behaviors and perceptions in a college population. *Journal of Sex Research*, *44*, 28–42. doi:10.1207/s15598519jsr4401_4.
- Cooper, M. L., Shapiro, C. M., & Powers, A. M. (1998). Motivations for sex and risky sexual behavior among adolescents and young adults: A functional perspective. *Journal of Personality and Social Psychology*, *75*, 1528–1558. doi:10.1037/0022-3514.75.6.1528.
- Cornell, J. L., & Halpern-Felsher, B. L. (2006). Adolescents tell us why teens have oral sex. *Journal of Adolescent Health*, *38*, 299–301. doi:10.1016/j.jadohealth.2005.04.015.
- D'Souza, G., Agrawal, Y., Halpern, J., Bodison, S., & Gillison, M. L. (2009). Oral sexual behaviors associated with prevalent oral human papillomavirus infection. *Journal of Infectious Diseases*, *199*, 1263–1269. doi:10.1086/597755.
- Ducharme, J. (2006). Teens use sex as a bargaining chip for favours. *New Brunswick Telegraph-Journal*, pp. B1–B2.
- Eisenberg, M. E., Ackard, D. M., Resnick, M. D., & Neumark-Sztainer, D. (2009). Casual sex and psychological health among young adults: Is having "friends with benefits" emotionally damaging? *Perspectives on Sexual and Reproductive Health*, *41*, 231–237.
- Erikson, E. H. (1950). *Childhood and Society*. New York: Norton.
- Erikson, E. H. (1968). *Identity, youth and crisis*. New York: Norton.
- Fair, C. D., & Vanyur, J. (2011). Sexual coercion, verbal aggression, and condom use consistency among college students. *Journal of American College Health*, *59*(4), 273–280. doi:10.1080/07448481.2010.508085.
- Gagnon, J. H., & Simon, W. (1987). The sexual scripting of oral genital contacts. *Archives of Sexual Behavior*, *16*, 1–25. doi:10.1007/BF01541838.
- Halpern-Felsher, B. L., Cornell, J. L., Kropp, R. Y., & Tschann, J. M. (2005). Oral versus vaginal sex among adolescents: Perceptions, attitudes, and behavior. *Pediatrics*, *115*, 845–851. doi:10.1542/peds.2004-2108.
- Herbenick, D., Reece, M., Schick, V., Sanders, S. A., Dodge, B., & Fortenberry, J. D. (2010). Sexual behavior in the United States: Probability sample of males and females ages 14–94. *The Journal of Sexual Medicine*, *7*, 255–265. doi:10.1111/j.1743-6109.2010.02012.x.
- Higgins, J. A., Trussell, J., Moore, N. B., & Davidson, J. K. (2010). Young adult sexual health: Current and prior sexual behaviors among non-Hispanic white US college students. *Sexual Health*, *7*, 35–43. doi:10.1071/SH09028.
- Howard, D. E., Griffin, M. A., & Boekeloo, B. O. (2008). Prevalence and psychosocial correlates of alcohol-related sexual assault among university students. *Adolescence*, *43*, 733–750.
- Hyde, J. S. (2005). The gender similarities hypothesis. *American Psychologist*, *60*, 581–592. doi:10.1037/0003-066X.60.6.581.
- Jackson, J. (2004). Sex and the teenage girl. *The Ottawa Citizen*, p. B1.
- Kaestle, C. E., & Halpern, C. T. (2007). What's love got to do with it? Sexual behaviors of opposite-sex couples through emerging adulthood. *Perspectives on Sexual and Reproductive Health*, *39*, 134–140. doi:10.1363/3913407.
- Kiene, S. M., Barta, W. D., Tennen, H., & Armeli, S. (2009). Alcohol, helping young adults to have unprotected sex with casual partners: Findings from a daily diary study of alcohol use and sexual behavior. *Journal of Adolescent Health*, *44*, 73–80. doi:10.1016/j.jadohealth.2008.05.008.
- Kinsey, A. C., Pomeroy, W., & Martin, C. (1948). *Sexual behavior in the human male*. Philadelphia: Saunders.
- Kinsey, A. C., Pomeroy, W., Martin, C., & Gebhard, P. (1953). *Sexual behavior in the human female*. Philadelphia: Saunders.
- Laumann, E. O., Gagnon, J. H., Michael, R. T., & Michaels, S. (1994). *The social organization of sexuality: Sexual practice in the United States*. Chicago: University of Chicago Press.
- Lefkowitz, E. S., & Gillen, M. M. (2005). "Sex is just a normal part of life": Sexuality in emerging adulthood. In J. J. Arnett & J. L. Tanner (Eds.), *Emerging adults in America: Coming of age in the 21st century* (pp. 235–255). Washington: American Psychological Association.
- Leichter, J. S., Chandra, A., Liddon, N., Fenton, K. A., & Aral, S. O. (2007). Prevalence and correlates of heterosexual anal and oral sex in adolescents and adults in the United States. *The Journal of Infectious Diseases*, *196*, 1852–1859. doi:10.1086/522867.
- Leigh, B. C. (1989). Reasons for having and avoiding sex: Gender, sexual orientation, and relationship to sexual behavior. *Journal of Sex Research*, *26*, 199–209.
- Leigh, B. C., Gillmore, M. R., & Morrison, D. M. (1998). Comparison of diary and retrospective measures for recording alcohol consumption and sexual activity. *Journal of Clinical Epidemiology*, *51*, 119–127. doi:10.1016/S0895-4356(97)00262-X.
- Lewis, M. A., Granato, H., Blayney, J. A., Lostutter, T. W., & Kilmer, J. R. (2011). Predictors of hooking up sexual behaviors and emotional reactions among U.S. college students. *Archives of Sexual Behavior*, Online First. doi:10.1007/s10508-011-9817-2.
- Lindberg, L. D., Jones, R., & Santelli, J. S. (2008). Noncoital sexual activities among adolescents. *Journal of Adolescent Health*, *43*, 231–238. doi:10.1016/j.jadohealth.2007.12.010.
- Malacad, B. L., & Hess, G. C. (2010). Oral sex: Behaviors and feelings of Canadian young females and implications for sex education. *The*

- European Journal of Contraception and Reproductive Health Care*, 15, 177–185. doi:10.3109/13625181003797298.
- McAuliffe, T. L., DiFranceisco, W., & Reed, B. R. (2007). Effects of question format and collection mode on the accuracy of retrospective surveys of health risk behavior: A comparison with daily sexual activity diaries. *Health Psychology*, 26, 60–67. doi:10.1037/0278-6133.26.1.60.
- McKay, A. (2004). Oral sex among teenagers: Research, discourse, and education. *The Canadian Journal of Human Sexuality*, 13, 201–203.
- Meston, C. M., & Buss, D. M. (2007). Why humans have sex. *Archives of Sexual Behavior*, 36, 477–507. doi:10.1007/s10508-007-9175-2.
- Morrison, T. G., Bearden, A., Ellis, S. R., & Harriman, R. (2005). Correlates of genital perceptions among Canadian post-secondary students. *Electronic Journal of Human Sexuality*, 8. Retrieved from <http://mail.ejhs.org/volume8/GenitalPerceptions.htm>.
- Nebenzahl, D. (2003). When sex isn't sex. *Montreal Gazette*, p. A4.
- Ott, M. A., Millstein, S. G., Ofner, S., & Halpern-Felsher, B. L. (2006). Greater expectations: Adolescents' positive motivations for sex. *Perspectives on Sexual and Reproductive Health*, 38, 84–89. doi:10.1363/3808406.
- Patrick, M. E., & Lee, C. M. (2008). Sexual motivations and engagement in sexual behavior during the transition to college. *Archives of Sexual Behavior*, 39, 674–681. doi:10.1007/s10508-008-9435-9.
- Patrick, M. E., Morgan, N., Maggs, J. L., & Lefkowitz, E. S. (2011). "I got your back": Friends' understandings regarding college student spring break behavior. *Journal of Youth and Adolescence*, 40, 108–120. doi:10.1007/s10964-010-9515-8.
- Paul, E. L., McManus, B., & Hayes, A. (2000). 'Hookups': Characteristics and correlates of college students' spontaneous and anonymous sexual experiences. *Journal of Sex Research*, 37, 76–88. doi:10.1080/00224490009552023.
- Pharo, H., Sim, C., Graham, M., Gross, J., & Hayne, H. (2011). Risky business: Executive function, personality, and reckless behaviour during adolescence and emerging adulthood. *Behavioral Neuroscience*, 125, 970–978. doi:10.1037/a0025768.
- Prinstein, M. J., Meade, C. S., & Cohen, G. L. (2003). Adolescent oral sex, peer popularity, and perceptions of best friends' sexual behavior. *Journal of Pediatric Psychology*, 28, 243–249. doi:10.1093/jpepsy/jsg012.
- Reinholtz, R. K., & Muehlenhard, C. L. (1995). Genital perceptions and sexual activity in a college population. *Journal of Sex Research*, 32, 155–165. doi:10.1080/00224499509551785.
- Ronis, S., & O'Sullivan, L. F. (2011). A longitudinal analysis of predictions of male and female adolescents' transitions to intimate sexual behavior. *Journal of Adolescent Health*, 49, 321–323.
- Simon, W., & Gagnon, J. (1984). Sexual scripts. *Society*, 22, 53–60. doi:10.1007/BF02701260.
- Simon, W., & Gagnon, J. (1987). A sexual scripts approach. In J. Geer & W. H. Donohue (Eds.), *Theories of human sexuality* (pp. 363–383). New York: Plenum.
- Simon, W., & Gagnon, J. H. (2003). Sexual scripts: Origins, influences, and changes. *Qualitative Sociology*, 26, 491–497. doi:10.1023/B:QUAS.0000005053.99846.e5.
- Tolman, D. L. (2005). *Dilemmas of desire: Teenage girls talk about sexuality*. Cambridge, MA: Harvard University Press.
- 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.
- Zickuhr, K. (2010). *Generations 2010*. Retrieved from the Pew Internet & American Life Project website: http://www.pewinternet.org/~media/Files/Reports/2010/PIP_Generations_and_Tech10.pdf.

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