

Same-Sex Sexual Orientation, Childhood Sexual Abuse, and Suicidal Behavior in University Students in Turkey

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This questionnaire study investigated the prevalence of, and interrelationships among, self-reported same-sex sexual orientation, childhood sexual abuse, and suicidal behavior in 1262 university students in Turkey. Approximately 7% of the sample reported lifetime or current same-sex sexual attractions, 5% reported that they engaged in same-sex sexual behavior, and almost 2% self-identified as either homosexual or bisexual. Overall, almost 10% of the sample acknowledged some form of a same-sex sexual orientation. Twenty-eight percent of the participants reported at least one instance of sexual abuse during their childhood. Almost 42% of the students reported suicidal ideation during the past 12 months or lifetime, and 7% reported that they attempted to kill themselves during their lifetime or in the past 12 months. Five hypotheses about the interrelationships among same-sex sexual orientation, childhood sexual abuse, and suicidal behavior were developed and tested in the study. Self-reported childhood sexual abuse was associated with same-sex sexual behavior. Participants who engaged in same-sex sexual behavior and those who identified themselves as homosexual or bisexual perceived more distance between themselves and their fathers than those who did not. Being sexually abused by someone of one's own sex was related to same-sex sexual orientation in male participants but not in female participants. Childhood sexual abuse was found to be an independent predictor of both suicidal ideation and attempts during the past 12 months. Only identifying oneself as homosexual or bisexual was associated with an increased risk for suicidal ideation during the past 12 months.

KEY WORDS: same-sex sexual orientation; childhood sexual abuse; suicidal behavior; Turkey.

INTRODUCTION

Homosexuality is no longer classified as a mental disorder but individuals with such an orientation are subjected to a variety of stresses. Studies investigating different aspects of homosexual sexual orientation and associated features within diverse cultural contexts may illuminate not only the homosexual sexual orientation per se but also the effects of contextual factors on the lives of gay, lesbian, or bisexual individuals. Stigmatization is the most common experience for almost all individuals

identifying themselves as lesbian and gay (Martin & Hetrick, 1988). Studies have shown that violence, verbal abuse, rejection, and isolation are common experiences of gay and lesbian people (Pilkington & D'Augelli, 1995; Rosario, Schrimshaw, Hunter, & Gwadz, 2002; Russell, Franz, & Driscoll, 2001; Savin-Williams, 1994). A recent study by D'Augelli (2002) indicated that gay, lesbian, and bisexual (GLB) youth are subjected to greater social stress than a control group of heterosexual youth. For example, more than 75 percent of GLB youth reported having been verbally abused and 15 percent reported physical abuse because of their sexual orientation. Further, more than one-third said that they had lost friends because of their sexual orientation.

Due to stigmatization, isolation, abuse, and violence, psychological problems are more common among persons whose sexual orientation is homosexual (Sandfort, de Graaf, Bijl, & Schnabel (2001). For example, Welch, Collins, and Hoden-Chapman (2000), in a lesbian sample

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in New Zealand, found that 80% had used mental health services sometime in their lives. Depression, for instance, was found to be more frequent among lesbian than among heterosexual women (Matthews, Hughes, Johnson, Razzano, & Cassidy, 2002). Likewise, Gilman et al. (2001) documented a general elevated risk for anxiety, mood, and substance abuse disorders in persons having same-sex sexual partners. Among high school students, Orenstein (2001) found that adolescents with consistent homosexual preferences had higher rates of substance use than their heterosexual peers. Homosexuality was also found to be related to eating disorders in men (Russell & Keel, 2002). A study by Russell, Driscoll, and Truong (2002) indicated that a bisexual sexual orientation carried a greater risk for substance abuse than a homosexual sexual orientation.

One of the most frequent mental health problems among persons with a homosexual sexual orientation is suicidal behavior. Research shows that young people with a same-sex sexual orientation are at greater risk for suicide than those with an opposite-sex sexual orientation (Herrell et al., 1999; Remafedi, 2002; Russell & Joyner, 2001; Sandfort et al., 2001). Using data from the third National Health and Nutrition Examination Survey, Cochran and Mays (2000) investigated the association between sexual orientation and suicidal behavior in men aged 17 to 39 years. They found that 53.2% of homosexually experienced men reported at least one suicidal symptom in their lifetime compared to 33.2% of heterosexual men. In another study with 2881 men who have sex with men, Paul et al. (2002) found that 21% had made a suicide plan and 12% had attempted to kill themselves. In a study with Norwegian adolescents, Wichstrom and Hegna (2003) found that only same-sex sexual behavior was predictive of suicidal attempts but not same-sex sexual attraction or identity. According to Savin-Williams (2001a, 2001b) and Udry and Chantala (2003), attention should be paid to both measurement and population issues when studying the association between sexual orientation and suicide. In line with previous studies, it is hypothesized, in this study, that same-sex sexual orientation will be related to an increased risk for suicidal behavior.

Childhood sexual abuse (CSA) is a serious problem which has social and psychological consequences. CSA is related to a homosexual sexual orientation. The sexual abuse of male children and adolescents was linked to a confusion over gender identity and a homosexual sexual orientation (Green, 1994; Myers, 1989; Watkins & Bentovim, 1992). CSA experiences were reported to be more frequent in homosexual and bisexual persons (Cameron et al., 1986; Duncan, 1990). In one study with 1,001 adult homosexual men, Doll et al. (1992)

found that 37% of participants said that they had been encouraged or forced to have sexual contact before age 19 with older or powerful persons, of whom 94% were men. Therefore, the present study assumes that CSA is related to same-sex sexual orientation. CSA is associated with not only same-sex sexual orientation but also with mental health problems. For instance, gay men who felt sexually abused during childhood were found to have more alcohol problems than those who did not feel abused (Dolezal & Carballo-Dieiguez, 2002). Empirical evidence have shown that CSA is a risk factor for suicidal ideation and attempts (Anderson, Tiro, Price, Bender, & Kaslow, 2002; Esposito & Clum, 2002; Nelson et al., 2002). Based on these observations, the present study also assumes that CSA is a risk factor for suicidal behavior.

Not only childhood sexual abuse per se, but also the sex of the abuser was found to be associated with a same-sex sexual orientation. That is, having been abused sexually by someone of one's own sex was found to be related to a same-sex sexual orientation. Studies have shown that childhood homosexual molestation among gay/lesbian minority people was frequent. For instance, a recent study conducted by Tomeo, Templer, Anderson, and Kotler (2001) found that 46% of homosexual men in contrast to 7% of heterosexual men reported homosexual molestation during their childhood. In a similar fashion, 22% of lesbian women in contrast to 1% of heterosexual women reported childhood homosexual molestation. In a study with adult homosexual men, Doll et al. (1992) found that of those who were sexually abused before age 19, 94% of the perpetrators were men. Therefore, it is assumed here that having been abused sexually by a same-sex person during childhood is related to a same-sex sexual orientation.

Sexual orientation is associated with different levels of perceived parental closeness. Empirical investigations yielded support for male and female homosexuals' negative, frustrating, and distant relationships with their fathers (Bene, 1965; Evans, 1969). For Mills (1990), persons with a same sex sexual orientation have problematic relationships with their fathers. The work of Freund and Blanchard (1983) showed that fathers' intolerant attitude towards the son's atypical gender identity and behavior was related to greater distance between fathers and their homosexual sons. Therefore, the present study predicts that perceived paternal closeness will be related to a same-sex sexual orientation in both men and women but not perceived maternal closeness.

Most research on sexual orientation has been conducted in industrialized Western democracies where sexual minorities have earned important rights. Therefore, there is an urgent need for research conducted in

non-Western cultural contexts. Homosexuality is strictly and explicitly prohibited in Islam (Ateş, 1975). It is not prohibited in Turkey by law but societal attitudes towards homosexual sexual orientation are mainly negative and this has been exemplified by the attitudes of the Turkish police towards homosexuals (Yuzgun, 1993). During the past two decades, human rights violations against sexual minorities by the Turkish police have been well documented in the media. Probably due to these attitudes, scientific investigations on the subject are extremely rare. Homosexuality is mainly understood as male homosexuality in Turkey. Female homosexuality is not even recognized. For instance, the terms “homo,” “ibne,” and “top” all meaning homosexual are used as insults for men. It is important to note that there are no equivalent words in Turkish for women.

The Turkish equivalent for “homosexual” is “eşcinsel,” for “bisexual,” “biseksüel,” and, for “heterosexual,” it is “karşıcinsel.” Although homosexuality and homosexual sexual practices existed in Turkey long before, the importation of Western concepts is new. That is probably why there is no Turkish equivalent for bisexuality yet. Historically, Ottoman Emperors and high-ranked officials were known for their sexual preference for young male lovers. This is reflected in conceptual approaches to homosexuality. For instance, males having an “active position” in their homosexual relationships do not identify themselves as homosexual but heterosexual. This poses problems for measurement. Having an active position in a sexual relationship, a man may not self-identify as homosexual when asked whether he is homosexual or not. This study adopts an operational definition of sexual orientation in three components: desire, behavior, and identity, which avoids the above mentioned problem to a certain extent.

To recapitulate, this study investigated same-sex sexual orientation, CSA, and suicidal behavior in university students in Turkey. The first aim of the study was to investigate the prevalence of same-sex sexual orientation, childhood sexual abuse, and suicidal behavior in university students. Concerning the legal situation of CSA, both the Turkish Penal Law and the Civic Code prohibit sexual abuse of minors (Asma, 1998). The second aim of the study was to investigate the interrelationships among same-sex sexual orientation, childhood sexual abuse, and suicidal behavior. Deduced from previous work on the interrelationships among these three phenomena, five hypotheses were developed and tested in this study. They were:

1. Persons having experienced childhood sexual abuse are more likely to report a same-sex sexual

orientation than persons not having experienced such abuse.

2. Persons having a same-sex sexual orientation perceive a greater distance between themselves and their fathers than those with a heterosexual sexual orientation.
3. Having been sexually abused by someone of one's own sex during childhood is related to having a same-sex sexual orientation.
4. Persons having experienced childhood sexual abuse are at greater risk for suicidal behavior than persons who have not experienced childhood sexual abuse.
5. Persons having a same-sex sexual orientation are at greater risk for suicidal behavior than persons having a heterosexual sexual orientation.

METHOD

Participants

Participants in this study were 683 women and 579 men ($N = 1262$) who were Turkish university students from seven universities located in Istanbul, Izmir, Ankara, and Aydin, of which two were private universities. Mean age of the sample was 21.0 years ($SD = 2.2$) with a range from 17 to 43 years. Men were significantly older ($M = 21.5$, $SD = 2.2$) than women ($M = 20.5$, $SD = 2.2$), $t(1260) = 7.6$, $p < .0001$.

A total of 416 students (34.7%) were first year, 25.8% second year, 20.4% third year, 16.1% fourth, and 3.0% were fifth and sixth (students of medicine and veterinary science) year students. A total of 118 (9.4%) students were from private universities. Participants were enrolled in diverse fields with a total of 76 academic fields represented. A majority (81.6%) of the sample indicated that they had an urban background. On the average, students had 2 ($SD = 2.0$) siblings. Fathers had a higher level of education (number of school years, $M = 10.2$ years, $SD = 4.3$) than mothers ($M = 7.9$ years, $SD = 4.5$), $t(1227) = 21.9$, $p < .0001$.

Measures

Sociodemographics

There were questions about students' sex, age, class, number of siblings, whether mother and father were alive and living together or not, parental education (number of school years), and where they grew up (urban vs. rural).

A question asked students' religious beliefs (What is the depth of your religious belief?), which they rated on a 7-point Likert scale ranging from "None whatsoever" to "Very strong."

Sexual Orientation

There were five questions about sexual orientation: two questions were about same-sex sexual attraction, two questions were about same-sex sexual behavior, and the last question asked students about predominant sexual orientation. The response alternatives for the first three questions were "Yes," "No," and "Do not remember." The English translations of these five questions are as follows:

1. Have you ever felt a sexual desire for someone of your own sex?
2. Do you feel a sexual desire for someone of your own sex right now?
3. Have you ever been intimate with someone of your own sex which resulted in sexual arousal?
4. Have you ever had a relationship with someone of your own sex which resulted in sexual orgasm?
5. How would you consider yourself?
 - a. I consider myself as someone who only feels sexually attracted to the opposite sex (heterosexual).
 - b. I consider myself as someone who only feels sexually attracted to persons from my own sex (homosexual).
 - c. I consider myself as someone who feels sexually attracted to both sexes (bisexual).

Perceived Parental Closeness

Two questions were designed to assess perceived parental closeness. The two questions asked students about how close they felt to their parents which they rated on 7-point scales ranging from "I do not feel close at all" to "I feel very close." The English translation of these questions are as follows:

1. How close do you feel to your father?
2. How close do you feel to your mother?

Childhood Sexual Abuse

Five items from the sexual abuse factor of the Childhood Trauma Questionnaire (CTQ) developed by Bernstein et al. (1994) were used to assess participants' recollections of childhood sexual abuse. The CTQ was translated into Turkish by Aslan and Alparslan (1999).

Psychometric properties of the Turkish version of the questionnaire were tested on 744 university students and the results showed that it had excellent internal consistency coefficients. Cronbach's alpha was 0.96 for the total CTQ and alphas ranged from 0.94 to 0.96 for the factors of the CTQ. The response alternative for CTQ items were "Yes = 1" or "No = 0." To obtain a CSA score, the responses to these five questions were totaled. Thus, CSA scores ranged from 0 to 5. For each item, the sex of the perpetrator was also asked about. Thus, in this section the occurrence or non-occurrence of abuse and the sex of the abuser were gathered. The five items are as follows:

1. When I was child, I had a sexual relationship with an adult person.
2. When I was child, someone tried to touch me in a sexual way or tried to make me touch them.
3. When I was child, someone threatened to hurt me or tell lies about me unless I did something sexual with them.
4. When I was child, someone tried to make me do sexual things or watch sexual things.
5. When I was child, I believe that I was sexually abused.

Suicidal Behavior

There were two questions about suicidal ideation during one's lifetime and within the past 12 months and another two questions were about suicidal attempts during one's lifetime and within the past 12 months. The response alternatives were "Yes" or "No." The English translations of these questions are as follows:

1. Have you ever thought of killing yourself?
2. Have you, during the past 12 months, thought of killing yourself?
3. Have you ever made an attempt to kill yourself?
4. Have you, during the past 12 months, made an attempt to kill yourself?

Procedure

Faculty members from six universities outside of Aydin were contacted for their possible participation for the data collection. The study was introduced to participants as "research investigating people's sexual and mental health, and parental attitudes." Students were asked by the faculty to fill in the questionnaire during regular class hours. Participation in the study was voluntary and this was written and underlined on the first page of the questionnaire. Students were not required to write either

Table I. Prevalence of the Different Dimensions of Same-Sex Sexual Orientation

Dimensions of sexual orientation	Men		Women		Total	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Life time same-sex sexual attraction	30	5.5	41	6.5	71	6.0
Current same-sex sexual attraction	15	2.6	18	2.7	33	2.7
Lifetime or current same-sex sexual attraction	37	6.5	48	7.1	85	6.8
Same-sex sexual intimacy resulting in arousal	29	5.2	27	4.1	56	4.6
Same-sex sexual relationship resulting in orgasm	16	2.8	9	1.3	25	2.0
Same-sex sexual arousal or orgasm	32	5.6	30	4.5	62	5.0
Self-identified same-sex sexual orientation						
Homosexual	4	0.7	1	0.1	5	0.4
Bisexual	7	1.2	11	1.6	18	1.5
Homosexual or bisexual	11	1.9	12	1.8	23	1.9

their name or address. Six questionnaires were discarded due to incomplete information. The faculty who collected the data were all psychologists and did not report any negative experience during the data collection. According to their reports, no student declined participation.

RESULTS

Prevalence of Same-Sex Sexual Orientation

Numbers and percentages of students reporting different dimensions of same-sex sexual orientation are given in Table I by sex. Eighty five (6.8%) students reported lifetime or current same-sex sexual attractions. A total of 62 (5.0%) students reported having engaged in some form of same-sex sexual behavior. Twenty-three (1.9%) students considered themselves homosexual or bisexual. Overall, 118 (9.5%) students acknowledged some form of a homosexual sexual orientation (desire, behavior, or identity). None of the three dimensions of same-sex sexual orientation were related significantly to the participant's sex.

The three dimensions of same-sex sexual orientation (desire, behavior, and identity) were significantly related to one another. The correlation coefficient (phi-coefficient) between current same-sex sexual attraction (homosexual attraction = 1, heterosexual attraction = 0) and same-sex sexual behavior (homosexual sexual

Table II. Prevalence of Self-Reported Childhood Sexual Abuse and the Sex of the Perpetrator

Forms of sexual abuse and perpetrator's sex	Participants' sex			
	Men		Women	
	<i>N</i>	%	<i>N</i>	%
1. Someone tried to touch me in a sexual way or tried to make me touch them	111	19.8	173	26.0
Perpetrator's sex: Men	25	22.5	155	90.6
Women	86	77.5	16	9.4
2. Someone tried to make me do sexual things or watch sexual things.	53	9.5	54	8.1
Perpetrator's sex: Man	36	67.9	42	80.8
Woman	17	32.1	10	19.2
3. I believe that I was sexually abused by someone.	31	5.5	60	9.0
Perpetrator's sex: Man	14	46.7	55	93.2
Woman	16	53.3	4	6.8
4. I had a sexual relationship with an adult person.	51	9.1	6	0.9
Perpetrator's sex: Man	5	9.8	6	100
Woman	46	90.2	0	0.0
5. Someone threatened to hurt me or tell lies about me unless I did something sexual with them.	13	2.3	17	2.6
Perpetrator's sex: Man	6	46.2	15	93.8
Woman	7	53.8	1	6.3

behavior = 1, heterosexual behavior = 0) was .24, $p < .0001$ and the correlation coefficient between current same-sex sexual attraction and self-identified same-sex sexual orientation (homosexual or bisexual = 1, heterosexual = 0) was .37, $p < .0001$. Similarly, the correlation coefficient between current same-sex sexual behavior and self-identified same-sex sexual orientation was .36, $p < .0001$.

Prevalence of Childhood Sexual Abuse

The prevalence of different forms of childhood sexual abuse and the sex of the perpetrator are given in Table II by participant's sex. A total of 347 (28.1%) students reported that they experienced at least one instance of childhood sexual abuse. On average, students reported 0.46 ($SD = 0.89$) instances of abuse.

Male and female participants did not differ in their CSA total scores, but they differed significantly on three of the five CTQ items. More males (9.1%) than females (0.9%) reported that they had had a sexual relationship with an adult person, $\chi^2 = 46.1$, $df = 1$, $p < .0001$. More females (26.0%) than males (19.8%) reported that

someone tried to touch them and to have themselves touched for sexual purposes, $\chi^2 = 6.6$, $df = 1$, $p < .05$. Similarly, more females (9.0%) than males (5.5%) reported that when they were a child, they were sexually abused, $\chi^2 = 5.5$, $df = 1$, $p < .05$.

In order to identify the independent sociodemographic predictors of CSA, a linear regression analysis was performed by taking the total CSA score as the criterion variable. Age, paternal and maternal education (number of years), number of siblings, parent's marital status (separate = 1, together = 0), urban vs. rural background (urban = 1, rural = 0), parent's living or not (alive = 1, dead = 0), type of university (private = 1, public = 0), perceived paternal and maternal closeness, and religiosity were taken as predictor variables. Parents' marital status ($\beta = -0.08$, $t = 2.30$, $p < .05$), paternal education ($\beta = 0.07$, $t = 1.77$, $p < .10$), and maternal education ($\beta = -0.08$, $t = 1.76$, $p < .10$) were found to be marginally related to CSA scores.

Prevalence of Suicidal Ideation and Attempts

The frequency of suicidal ideation and attempts are presented in Table III by participants' sex. It can be seen that 525 (41.7%) students reported that they had had thoughts of killing themselves either in their lifetime or during the past 12 months. Eighty seven students (6.9%) reported that they made attempts to kill themselves either in their lifetime or during the past 12 months. Lifetime suicidal ideation and attempts were more common in female than in male participants ($\chi^2 = 11.4$, $df = 1$, $p < .005$ and $\chi^2 = 9.1$, $df = 1$, $p < .005$, respectively). Suicidal ideation and attempts during the past 12 months were equally common in men and women.

Table III. Prevalence of Suicidal Behavior

Suicidal behavior	Men		Women		Total	
	N	%	N	%	N	%
Suicide ideation						
Life time	210	36.3	310	45.7	520	41.3
Past 12 months	74	12.8	105	15.5	179	14.3
Lifetime or past 12 months	212	36.6	313	46.0	525	41.7
Suicide attempts						
Life time prevalence	26	4.5	60	8.8	86	6.8
Past 12 months	6	1.0	10	1.5	16	1.3
Lifetime or past 12 months	27	4.7	60	8.8	87	6.9

Predictors of Same-Sex Sexual Orientation

In order to identify the independent predictors of same-sex sexual orientation, and to test the first and the second hypotheses, three stepwise logistic regression analyses were performed. Three dimensions of same-sex sexual orientation (current same-sex sexual attraction; same-sex sexual behavior; and self-identified homosexual sexual identity) were taken as criterion variables. Participants' sex (male = 1, female = 0), age, paternal and maternal education, number of siblings, parents' marital status, urban vs. rural background, parents' living or not, type of university, perceived paternal and maternal closeness, CSA scores, and religiosity were the predictor variables.

Results of the three logistic regression analyses are presented in Table IV. It can be seen that, age was the only independent predictor of current same-sex sexual attraction. Students feeling currently sexually attracted to persons of their own sex were older than students not reporting such attractions. Older age, low paternal closeness, childhood sexual abuse, having parents who separated, and having an urban background emerged as independent predictors of same-sex sexual behaviors. Low paternal closeness was the only independent predictor of self-identified same-sex sexual orientation.

The third hypothesis was that having been abused sexually by a same-sexed person would be related to a same-sex sexual orientation. To test this hypothesis, correlation coefficients (phi-coefficients) between the sex of the perpetrator for each form of CSA and three forms of sexual orientation were computed for men and women separately. The correlation coefficients are given in Table V. It can be seen that sex of the perpetrator was significantly related to same-sex sexual behavior on all forms of sexual abuse for male participants. Similarly,

Table IV. Predictors of Self-Reported Same-Sex Sexual Attractions, Behaviors, and Self-Identified Sexual Orientation

Criterion/Predictor variables	B	SE	Wald	p	e ^B
Current same-sex sexual attractions					
Constant	-6.17	1.32	21.64	<.0001	
Age	0.12	0.06	4.04	<.05	1.13
Same-sex sexual behavior					
Constant	-5.33	1.10	23.63	<.0001	
Age	0.14	0.05	9.00	<.005	1.15
Paternal closeness	-0.21	0.08	6.76	<.01	0.81
Childhood sexual abuse	0.33	0.13	6.50	<.02	1.39
Parents' marital status	1.04	0.44	5.50	<.02	2.81
Rural vs. urban background	1.72	0.74	5.46	<.02	0.19
Self-identified same-sex sexual orientation					
Constant	-2.75	0.44	39.82	<.0001	
Paternal closeness	-0.31	0.12	6.91	<.01	0.73

Table V. Correlation Coefficients Between Same-Sex Sexual Orientation and Perpetrator’s Sex According to Participant’s Sex

Forms of sexual abuse and Perpetrator’s sex (Male = 1, Female = 0)	Participants’ sex					
	Male			Female		
	Attr.	Beh.	S.side.	Attr.	Beh.	S.side.
1. Tried to touch me in a sexual way or tried to make me touch them.	0.18*	0.18*	0.20*	-0.05	-0.17*	-0.11
2. Tried to make me do sexual things or watch sexual things.	0.10	0.23*	0.14	0.07	-0.02	— ^a
3. I believe that I was sexually abused by someone.	0.03	0.43*	0.15	— ^a	0.08	0.04
4. I had a sexual relationship with an adult person.	0.27*	0.39*	0.32*	— ^a	— ^a	— ^a
5. Threatened to hurt me or tell lies about me unless I did something sexual with them.	— ^a	0.23*	— ^a	— ^a	0.08	— ^a

Note. Attr. = Current same-sex sexual attraction, Beh. = Same-sex sexual behavior, S.iden. = Self-identified same-sex sexual orientation.

^aIndicates that a coefficient can not be computed.

*Coefficients significant at $p < .10$.

sex of the perpetrator was significantly related to reporting same-sex sexual attraction and self-identified homosexual sexual orientation on two forms of CSA for men. But, the sex of the perpetrator was related significantly in a predicted direction to reporting same-sex sexual behavior only on one form of sexual abuse for female participants.

Predictors of Suicidal Behavior

In order to identify independent predictors of suicidal behavior, and to test the fourth and the fifth hypotheses, two stepwise logistic regression analyses were done. Suicidal ideation and suicidal attempts during the past 12 months were taken as criterion variables. Participants’ sex, age, paternal and maternal education, number of siblings, parents’ marital status, urban vs. rural background, parents’ living or not, type of university, perceived paternal

and maternal closeness, religiosity, CSA scores, current same-sex sexual attractions, same-sex sexual behaviors, and self-identified same-sex sexual orientation were taken as predictor variables.

Results of these two logistic regression analyses are given in Table VI. It can be seen that low perceived paternal closeness, self-identified same-sex sexual orientation, and instances of childhood sexual abuse were independent predictors of suicidal ideation during the past 12 months. Childhood sexual abuse was the only independent predictor of suicidal attempts during the past 12 months.

DISCUSSION

This study examined the prevalence of self-reported same-sex sexual orientation and its relationship to

Table VI. Predictors of Self-Reported Suicidal Ideation and Attempts During the Past 12 Months

Criterion/Predictor variables	B	SE	Wald	p	e ^B
Suicidal ideation in the past 12 months					
Constant	-0.01	0.52	0.001	ns	
Paternal closeness	-0.17	0.05	11.12	<.001	0.84
Self-identified sexual orientation	1.27	0.50	6.35	<.02	0.28
Childhood sexual abuse	0.22	0.09	6.29	<.02	1.25
Suicidal attempts in the past 12 months					
Constant	-5.51	0.51	117.55	<.0001	
Childhood sexual abuse	0.74	0.21	11.95	<.001	2.10

childhood sexual abuse, sex of the perpetrator, and suicidal behavior in university students in Turkey. Five hypotheses were tested. According to the results, almost 10 percent (students who reported same-sex sexual attractions, engaged in same-sex sexual behavior, or those who self-identified as homosexual or bisexual) of the young people enrolled in higher education in Turkey reported some form of a same-sex sexual orientation. The findings from this study indicated that the prevalence of same-sex sexual orientation was similar to the prevalence rates observed in other nations (e.g., Fergusson, Horwood, & Beautrais, 1999; Sell, Wells, & Wypij, 1995; Smith, Lindsay, & Rosenthal, 1999).

The findings from this study showed that CSA was a relatively common experience for university students in Turkey. A total of 28% of the sample had experienced at least one instance of sexual abuse during their childhood. The most frequent forms of abuse involved touching in a sexual way and forcing to do or to watch sexual things. This finding is consistent with results from other studies. For instance, in a nationally representative random sample of 1,442 persons, Briere and Elliott (2003) found that 14.2% of U.S. men and 32.3% of women reported that they had experienced childhood sexual abuse. Another study by Edwards, Holden, Felitti, and Anda (2003) of 8,667 adult members of a health maintenance organization in the U.S. found that 21.6% of the sample was sexually abused during childhood. Having parents who separated or had higher paternal but lower maternal education was associated with increased levels of CSA. It seems that parental, especially competent maternal, supervision is protective against CSA.

Although suicidal mortality rates in Turkey are lower compared to other nations (Eskin, 2003), the frequencies of adolescent suicidal ideation and attempts are found to be equally common in Turkey and in Sweden where suicidal mortality rates are high (Eskin, 1993, 1995, 1996, 1999). Forty-two percent of the sample said that they entertained thoughts of killing themselves. Further, 7% of this sample said that they made at least one attempt to kill themselves. Thus, in line with previous research, these figures show clearly that suicidal behavior among young people in Turkey is a serious mental health problem despite intolerant cultural attitudes towards suicide.

The first hypothesis stated that persons having experienced CSA would be more likely to report a same-sex sexual orientation than persons not having experienced such abuse. Instances of past sexual abuse have usually been implicated in the development of a same-sex sexual orientation. Previous work on the relation between childhood sexual abuse and sexual orientation showed that instances of CSA were more prevalent in gay men,

lesbians, and bisexuals than heterosexuals (e.g., Cameron et al., 1986; Doll et al., 1992; Duncan, 1990). The findings from this study partially supported the hypothesis. Results from the three logistic regression analyses presented in Table IV showed that CSA experiences were predictive of same-sex sexual behaviors, but not attractions or identity. Students who experienced CSA were more likely to have engaged in sexual behavior with same-sexed persons than those who did not experience CSA.

The second hypothesis stated that participants with a homosexual sexual orientation would perceive greater distance between themselves and their fathers than those with a heterosexual sexual orientation. According to the results of the logistic regression analyses, perceived paternal closeness was related to homosexual behavior and identity. Students reporting same-sex sexual behavior and self-identifying as homosexual or bisexual felt greater distance between themselves and their fathers than those who did not report homosexual behavior or identity. Perceived closeness to the mother was unrelated to sexual orientation. This finding is consistent with the findings from a study by Öztürk and Kozacıoğlu (1996). Comparing a group of 50 male homosexuals with a matched control group of 50 male heterosexuals in Istanbul, they found that 78% of the homosexual but only 16% of the heterosexual group described their relationship with their fathers as negative or had no relationship with their fathers at all. Their finding was restricted to men but the finding obtained from this study extends it to women as well.

There are at least two explanations for a greater perceived distance between fathers and students with a homosexual sexual orientation. First, this finding may be showing the role of fathers in the development of same-sex sexual orientation in boys and girls alike. Indeed, the work of Bene (1965) with 30 lesbian and 80 heterosexual women found that lesbian women were often hostile towards and afraid of their fathers. Second, perceived distance between students with same-sex sexual orientation and their fathers may be due to paternal intolerance for atypical gender identity or behavior in children. A study by Freund and Blanchard (1983) showed, in fact, that the greater distance between adult homosexual males and their fathers was related to the son's atypical gender identity or behavior rather than his same-sex sexual orientation *per se*.

The third hypothesis posited that persons being sexually abused by same-sexed persons during childhood would be more likely to report same-sex sexual orientation than persons abused by opposite sexed perpetrators. Studies by Doll et al. (1992) and Tomeo et al. (2001) have shown that childhood homosexual molestation was far more common among gay men and lesbian women

than among heterosexual men and women. Results from this study concerning the association between the sex of the perpetrator and sexual orientation supported previous research findings for males only. That is, the sex of the abuser was related to same-sex sexual orientation in male participants. Male students abused sexually during childhood by male perpetrator(s) said that they felt sexually attracted to and engaged in sexual behavior with someone of their own sex, and self-identified themselves as homosexual or bisexual to a greater extent than those who had been abused by someone of the opposite gender. Only one coefficient was significant for female participants.

The fourth hypothesis predicted that individuals who were sexually abused during childhood would be at greater risk for suicidal behavior than persons not having experienced CSA. Results from the two logistic regression analyses confirmed this hypothesis. As Table VI shows, childhood sexual abuse was found to be a predictor of both suicidal ideation and attempts within the past 12 months. In other words, students who experienced sexual abuse during their childhood reported having thought and attempted to kill themselves to a greater extent than students who had not reported instances of sexual abuse.

Being in a society with a homosexual sexual orientation can be regarded as a source of constant stress for the individual. Besides this, the homophobic attitudes of society are internalized by the very individual who does have a same-sex sexual orientation. Thus, internalized homophobia is a source of stress in itself. Therefore, many individuals with a same-sex sexual orientation live in "a closet." One can assume that these individuals live in a double-bind situation. That is, if they "come out" they meet the rejecting attitude of their social surroundings, but if they do not "come out" they may feel that their lives are meaningless, empty, and unfulfilled. Due to rejecting attitudes towards one's differentness from the majority, these individuals may develop mental health problems. Some may even engage in destructive behaviors such as suicide.

Accordingly, the fifth hypothesis predicted that persons who have a same-sex sexual orientation were at greater risk for suicidal behavior than persons having a heterosexual sexual orientation. Results from the two logistic regression analyses presented in Table VI partially supported this hypothesis. Unlike previous work (Herrell et al., 1999; McDaniel, Purcell, & D'Augelli, 2001; Remafedi, 2002; Russell & Joyner, 2001; Sandfort et al., 2001) same-sex sexual attractions and behavior were not related to suicidal ideation and attempts. Only identifying oneself as homosexual or bisexual was related to suicidal ideation during the past 12 months. This may reflect the

role of negative societal attitudes towards homosexuality. It is likely that these attitudes do not exert an influence upon one's emotional life until the person acknowledges that he/she is homosexual or bisexual consciously.

Overall, the study identified several important findings. First, it demonstrated that the estimated prevalence rates of same-sex sexual orientation in Turkey were similar to the rates obtained in Western countries where most research on the subject has been done. Second, 28% of the sample reported that they experienced at least one instance of sexual abuse when they were child. Third, despite condemnatory religious attitudes towards suicide, the rates of nonfatal suicidal behavior were high in young people in Turkey, which is in line with previous research. Fourth, childhood sexual abuse was related to same-sex sexual behavior. Fifth, students with a same-sex sexual orientation perceived their fathers as distant but not their mothers. Sixth, having been abused sexually during childhood by someone of one's own sex was related to a same-sex sexual orientation in male but not in female participants. Seventh, instances of childhood sexual abuse were associated with an increased risk for suicidal ideation and attempts. Finally, identifying oneself as homosexual or bisexual was related to suicidal ideation.

The current findings, however, should be approached with caution in making generalizations for several reasons. The first reason is related to the measurement of same-sex sexual orientation. From a developmental perspective, same-sex sexual attractions may not be taken as a valid indication of sexual orientation but as an indicator of self-exploration. The second reason is related to the correlational nature of the study. Associations obtained between sexual orientation and childhood sexual abuse on the one hand and suicidal behavior on the other should not be taken as an indication of causality. To better understand these issues, longitudinal data are needed. Third, although the study sample was relatively large, it could hardly be taken as representative of the youth population in Turkey. The majority of the participants had an urban background. Thus, they can not be taken as representative of the young rural, non-student population.

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