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## The Contribution of School to the Feeling of Acceptance and the Risk of Suicide Attempts among Austrian Gay and Bisexual Males

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School-related factors contributing to the suicidality of lesbian, gay, and bisexual individuals are understudied, especially in German-speaking Europe. Among our web-based sample of 468 Austrian gay or bisexual adults, 18% attempted suicide and about half of them reported that hard times at school related to one's homosexuality partly or mainly caused the attempt. Such suicide attempts were associated with a lack of acceptance at school and harassment experiences. In contrast to suicide attempts, acceptance at school was significantly associated with protective factors such as teachers intervening against homophobia or presence of openly homosexual teachers or peers. These findings may be important for consideration in school-based suicide prevention programs.

Keywords: Sexual orientation – Homosexuality – Gay – Bisexual – Adolescents – School – Suicide – Suicide attempt – Suicidality

## ***INTRODUCTION***

The time spent in school is a critical period in the development of gay, lesbian, and bisexual (LGB) individuals. Most LGB become aware of homosexual attraction and their sexual orientation in late childhood and early adolescence (Fox, 1995; Watzlawik, 2004), i.e., when most of them are still in school. Isolation and stress are frequent during this developmental stage (e.g. Cass, 1974; Little, 2001; Martin & Hetrick, 1988; Radkowsky & Siegel, 1997) and may cause mental health problems and suicidality (Hazler & Denham, 2002; Meyer, 2003). Many studies report an increased incidence of suicide attempts among homosexual adolescents compared to their heterosexual counterparts (Bagley & Tremblay, 2001; King et al., 2008; McDaniel, Purcell, & D'Augelli, 2001). Most suicide attempts take place after becoming aware of one's homosexual feelings (D'Augelli, Hershberger & Pilkington, 2001), and around half of gay youth state that their sexual orientation was related to their suicide attempt (D'Augelli et al., 2001, 2005).

Homophobia is a likely cause of increased harassment experiences of sexual minority youth, which, in return, is associated with suicidality. For example, harassment in school or on the way to school is much more prevalent in LGB youth compared to heterosexual youth, as reported in Reis & Saewycs' (1998) review of representative US Youth Risk Behavior Surveys. It is thus not surprising that sexual minority youths' sense of belonging to school is lower than that of heterosexuals (Galliher, Rostosky, & Hughes, 2004; Russell, Seif, & Truong, 2001). A recent replication study from the UK (Ellis & How, 2004) hints that homophobic harassment is on the rise: compared to the original study by Trenchard & Warren (1984), the problems LGB students experienced in school increased substantially from 1984 to 2001 with respect to verbal abuse (8 vs. 37%), teasing (5 vs. 31%), ostracism (3 vs. 14%), and physical assaults (5 vs. 15%).

Numerous studies reported the association between homophobic harassment and suicidality (e.g., Bontempo & D'Augelli, 2002; Reis & Saewyc, 1998). For example, in the 1997 Wisconsin Youth

Risk Behavior Survey, 13% of those being threatened or hurt because somebody thought they were LGB attempted suicide, compared to 3% of those without such experiences (Reis & Saewyc, 1998). In addition, homophobia in school likely has long-term consequences, because 17% of gay adults who reported homophobic bullying at school had clinically relevant symptoms of post-traumatic stress (Rivers, 2004). Homophobia and harassment based on gender atypicality seem to be intertwined, and even young children consider gender atypical behavior in boys as a marker for homosexuality and as a reason for harassment (Plummer, 2000; Renold, 2002). Gender nonconformity is associated with victimization and mental health problems, including suicidality (Friedman, Koeske, Silvestre, Korr, & Sites, 2006; Harry, 1983a, 1983b; Plöderl & Fartacek, 2009; Remafedi, 1991; Skidmore, Linsenmeier, & Bailey, 2006; Young & Sweeting, 2004).

The reactions of the staff at school to LGB youth and to homophobia may be crucial. In US survey of LGB youth, almost half of the participants reported that faculty or staff were present most of the time or always when homophobic remarks were made, but less than one fifth reported that faculty or staff intervened most or all of the time whilst being present at the time such remarks were made (Kosciw, 2004; Kosciw, Diaz, & Greytak, 2008). On the other hand, having more supportive faculty or staff in school was associated with a greater likelihood of reporting incidents of harassment or assault to school officials: 33% of those with more than 10 supportive staff members compared to 21% with up to five such members (Kosciw, 2004). Support from teachers ( $r = .55$ ) and being in a school that is less excluding of lesbian and gay youth ( $r = .71$ ) were strongly associated with sense of belonging among LGB youth (Murdock & Bolch, 2005). Moreover, a sense of belonging to school was associated with self-esteem ( $r = .35$ ) and lower depression ( $r = -.28$ ) (Galliher et al., 2004). A LGB-supportive school climate may also be associated with decreased suicide risk. To investigate this was one goal of our study.

LGB role models are assumed very important in the developmental process of LGB youth (Hetrick, & Martin, 1987; Morrison & L'Heureux, 2001). Indeed, LGB youth who reported

supportive or openly LGB or transsexual staff were more likely to have felt a sense of belonging in their schools (61% with those more than 10 LGB or transsexual teachers compared to 31-34% with up to five such teachers) (Kosciw, 2004, Fig. 85). In this paper we investigate if the presence of LGB role models at school is associated with greater acceptance at school and lower suicidality among LGB individuals.

The cited evidence suggests that the school climate can harm but also protect LGB individuals, yet the association of “school climate” and suicidality of LGB individuals has rarely been researched. Moreover, there are no published studies on the issue of homosexuality in Austrian schools, and the topic has rarely been explored in the other German-speaking European countries. In short, the goal of this paper is to investigate whether school-related risk and protective factors discussed in the literature affect acceptance at school and suicidality among Austrian gay and bisexual men. Rather than testing a specific hypothesis, we explored a wide range of risk and protective factors descriptively. We explored these issues retrospectively with a sample of Austrian gay and bisexual men. We did not sample lesbian and bisexual women because of lack of resources.

## ***METHOD***

### ***Participants***

A hyperlink on the Austrian interface of [gayromeo.com](http://gayromeo.com) to the online questionnaire was accessible for 10 days in December 2005. “gayromeo.com” is the most popular meeting point for gay men in German-speaking Europe, with 14,000 registered Austrian users during the study period. Austria has a rural population structure, and, by using the web, we expected to reach a much wider range of participants than by sampling from LGB venues such as bars in urban areas or address lists of LGB organizations. Of 754 individuals who accessed the electronic questionnaire, 550 completed it. We

excluded individuals from foreign countries ( $n = 49$ ), those aged 46 or above ( $n = 10$ ), and those aged 17 or below ( $n = 23$ ). The final sample consisted of 468 individuals. To explore age differences, the sample was divided in “young” participants, aged 18 to 26 ( $n = 267$ , 57%) and “older” participants, aged 27 to 45 ( $n = 201$ , 43%).

Most participants identified as homosexual (89%), few as bisexual (10%), and 1% were unsure of their sexual orientation. About one third resided in Vienna, the capital of Austria (33%). One third (33%) dropped out from school or finished regular school, 40% achieved Matura (equivalent to German Abitur or the British A-level), and 27% had a university-level education. The two highest levels of education were combined for the analysis.

### *Measures*

Suicide attempts were solicited with the item “Have you ever attempted suicide?”, with possible responses “Yes, but I did not need medical treatment”, “Yes, and I required medical treatment”, and “No”. Those who reported a suicide attempt received two follow-up questions: First, to separate suicide attempts from instrumental suicidal behavior (O’Carroll, Berman, Maris, Moscicki, & Silverman, 1996), suicidal intent was measured with the item “Did you really want to die when you attempted suicide?” (absolutely/ probably yes/ probably not/ definitely not). Those who chose the “definitely not” category were assumed to have lacked suicidal intent, all other suicide attempters were assumed to have some non-zero intent to die. Second, to assess if school contributed to attempting suicide, attempters were asked “Did you attempt suicide because your homosexuality caused such a hard time at school?”, with the three options “1. Yes, this was the main reason”, “2. Yes, but this was not the main reason”, “3. No, school was not related to this at all”. If participants chose the first two options, then the attempt was categorized as a school-related suicide attempt.

Acceptance at school was assessed with a single item “At my school, I was totally/probably/probably

not/not accepted”.

Risk and protective factors in school: School-related risk and protective factors were selected from an informal literature review and included coming out at school, reasons for remaining closeted, and expected reactions (to be completed by “closeted” participants only), reactions of peers and teachers to disclosure (for those who actually came out), presence of out gay/lesbian peers or teachers, anti-gay verbal abuse experienced by the participants, verbal abuse because of gender role nonconformity, interventions of teachers against verbal homophobia targeted at the participants or general homophobic expressions, presence of peers/teachers/school doctors/school psychologists to whom participants could talk about their homosexuality, presence of books or brochures about homosexuality, having homosexuality addressed in the classroom, subjective importance of addressing homosexuality in the classroom, invitation of gay/lesbian speakers, and perceived association of the participants sexual orientation with success at school. The content of each item is given in Table 1, the item wordings can be obtained upon request.

### *Data Analysis*

Data were analyzed with R 2.7.0 (R Development Core Team, 2008). Odds ratios and 95% median-unbiased confidence intervals were calculated with the “epitools” package (Aragon, 2007).

## **RESULTS**

### *Suicidality*

Eighteen percent ( $n = 82$ ) of the total sample reported having attempted suicide at least once in their lifetime. About a quarter (26%) of those who attempted suicide received medical treatment, and

only few of the attempters (9%) reported that they did definitely not want to die. Few ( $n = 4$ , 5%) suicide attempters reported difficulties at school related to their homosexuality were the main reason for the suicide attempt, 39% ( $n = 32$ ) stated that school contributed at least somewhat to their suicide attempt, and 56% ( $n = 46$ ) stated that school was not at all related to their suicide attempt. Thus, nearly half ( $n = 36$ , 44%) of the suicide attempters reported that hard times at school related to one's homosexuality partly or mainly caused their act of self-harm. The results remained practically the same if we excluded those participants who were still unaware of their homosexuality whilst they were at school. There were only marginal, nonsignificant differences between younger and older participants. Medical treatment was equally likely for suicide attempts related to school or not (25 vs. 26%, respectively). Similarly, suicidal intent was equal in suicide attempts related to school and those unrelated to school (92 vs. 91%). However, suicidal intent as an ordinal variable was higher among those who related their suicide attempt to school,  $MD = 3$  (3, 4) vs.  $MD = 3$  (2, 3), quartiles in brackets,  $W = 1021.5$ ,  $p = .05$ .

### ***Acceptance at school***

About one third (35%) of participants felt that they were not or probably not accepted at school. Fewer younger men thought that they were not or probably not accepted ( $W = 22509$ ,  $p < .01$ ).

### ***Risk or protective factors***

#### ***Descriptive Results***

Table 1 describes potential risk and protective factors. More than two thirds (69%) of participants remained closeted in school. The most frequently mentioned reason for remaining closeted was fear of verbal abuse by peers, followed by shame, fear of parents' reactions, having not been aware of

one's homosexuality, fear of physical violence, and fear of teachers' reactions. Of those who remained closeted in school, 72% expected negative or very negative reactions to a hypothetical coming out. In contrast, much fewer participants who actually came out at school reported that peers (14%) or teachers (7%) reacted negatively to their coming out. On the other hand, only 18% reported positive reactions by teachers. About a quarter (28%) of the participants were aware of openly gay or lesbian peers. Eleven percent were aware of out gay or lesbian teachers at school. One third of the participants (31%) experienced homophobic harassment by peers. Fewer were harassed by teachers (3%) or others (4%). About two thirds (67%) of the participants never experienced verbal homophobic harassment at school. Harassment is associated with being out at school: 50% of those who disclosed to most others, 54% of those who disclosed to only few and 24% of closeted participants experienced verbal homophobic harassment at school,  $\chi^2 (2) = 34.95, p < 0.001$ . Sixteen percent of the participants who were targets of antigay abuse by peers reported that teachers intervened. There were similar results for teachers intervening against general anti-gay or homophobic actions directed at other peers. Nearly one quarter of the study participants were blamed for being effeminate.

About one quarter (26%) reported that there was somebody at school to talk to about homo- or bisexuality. For the majority (89%) these were peers to whom they could talk. Substantially fewer (13-15%) felt that they could talk to their class teacher, to a female or male teacher, or to their school psychologist or school doctor. Thus, based on the total sample, only around 3% reported that they had staff at school to talk to about issues surrounding homosexuality. Few reported that there were brochures (4%) or books (6%) available at school. About two thirds considered it to be a must to have homosexuality addressed thoroughly in school, yet about 11% felt that, as a gay student, it would be very stressful to participate in a lecture about homosexuality and therefore were against addressing homosexuality in the classroom. About one third (34%) reported that homo- or bisexuality were topics in the classroom. Few (5%) of the participants remembered that lesbian or

gay speakers were invited to lecture in the classroom.

Most (83%) study participants declared that their homosexuality did not influence their school performance and some reported a negative (8%) or a positive (9%) influence.

*Association of risk and protective factors with feeling of acceptance at school*

Risk factors significantly associated with a perceived lack of acceptance at school were: harassment by peers or teachers, harassment based on gender nonconformity, negative reactions of teachers to disclosure, and perceived negative or perceived positive influence of one's homosexuality on school performance (Table 2). The strongest associations ( $ORs > 4.00$ ) were found for harassment, negative reactions from teachers to disclosure, and the feeling that sexual orientation improved performance at school.

Protective factors that significantly reduced the risk of lacking acceptance were: higher level of education, coming out to most at school, positive hypothetical reactions to coming out, positive actual reactions to coming out by peers, presence of openly gay/lesbian peers or teachers, not having experienced anti-gay harassment, interventions of teachers against personally experienced antigay harassment, having somebody to talk to about one's homosexuality at school, having peers to talk to about homosexuality, having books about homosexuality in the library, feeling that brief mention of homosexuality in the school curriculum is enough, and actually discussing homosexuality in the classroom. The strongest associations ( $ORs < 0.26$ ) were found for coming out to most others, positive reactions to coming out by peers, and having peers to talk to.

*Association of risk and protective factors with suicide attempts*

The incidence of school-related suicide attempts significantly increased if the following risk factors applied: coming out to few others (but not for coming out to most others, with having been closeted as reference category), homophobic harassment by peers, harassment based on gender

atypicality, feeling that homosexuality should not be addressed at school, feeling of not being accepted at school, and feeling that school performance increased because of one's homosexuality. The strongest associations ( $ORs > 4.00$ ) were found for harassment by peers, harassment based on gender atypicality, and a lack of acceptance at school.

School-related suicide attempt risk decreased with positive reactions of peers to coming out and not having experienced anti-gay harassment at school. The strongest association ( $OR < 0.25$ ) was found for not having experienced homophobic harassment at school.

Suicide attempts not related to school were only more frequent among those who were sometimes accused of being effeminate ( $OR = 2.87, CI = 1.30-6.20$ ) and felt that they were probably not accepted at school ( $OR = 3.70, CI = 1.57-9.85$ ).

In order to weigh their relative importance, significant risk factors in Table 1 were entered as predictors in a logistic regression with school-related suicide attempts as the dependent variable. Participants with suicide attempts not related to school were excluded. Acceptance at school and harassment based on gender atypicality were treated as continuous variable, and importance of discussing homosexuality in the classroom was dichotomized (“is stressful” vs. all other response options). In this multivariate model, only feeling of acceptance ( $\beta = 0.89, SE = 0.25, z = 3.61, p < .01$ ), coming out to few (vs. remaining disclosed,  $\beta = 1.53, SE = 0.48, z = 3.20, p < .01$ ) and perceiving that discussing homosexuality in the classroom is stressful ( $\beta = 0.96, SE = 0.48, z = 2.01, p < .05$ ) remained significant predictors.

## ***DISCUSSION***

### ***Acceptance at school and suicide attempts***

About one third of our sample of gay and bisexual participants felt that they were not accepted at

school and about half who came out at school experienced harassment based on their sexual orientation. Moreover, about one out of five participants already attempted suicide (18%), which is comparable with results from other Austrian, German, and international Studies (Dannecker & Reiche, 1974; Plöderl & Fartacek, 2005; Plöderl, Kralovec, & Fartacek, 2010). In our study, near half of suicide attempters reported that hard times at school related to one's homosexuality partly or mainly caused their act of self-harm. Furthermore, suicidal intent was higher among those who related the suicide attempt to school. These results point at an alarming situation of gay and bisexual youth at Austrian schools and at the necessity of LGB students as target populations in suicide prevention programs. We believe that this has not been sufficiently realized because studies on the increased suicide risk of LGB individuals are sometimes completely ignored, even in current high-standard textbooks of suicidology (e.g., Wasserman & Wasserman, 2009). Similarly, in a recent paper in the journal "School Psychology Review" (Miller & Eckert, 2009, p. 157), it is stated that "although it has been suggested that gay and lesbian youth may be at higher risk for suicidal behaviour than heterosexual youth, research on this issue is complicated by a number of factors, including a lack of accurate youth suicide rates specific to the gay and lesbian population." This gives the impression that there is not enough data or no valid data about the increased suicide risk (suicide ideation, suicide attempts) of LGB individuals, despite many existing studies (reviewed in Bagley & Tremblay, 2001; King et al., 2008; McDaniel et al., 2001). Estimation of suicide rates among the LGB population is very hard to investigate empirically. Up to now, data from two psychological autopsy studies are cited that found no significantly elevated risk, but they have major methodological problems (McDaniel et al., 2001). Data from Denmark, where suicide rates were linked to same-sex registered couples, found an increased suicide risk for men living in same-sex partnerships (Mathy, Cochran, Olsen, & Mays, 2009). This additionally hints at the fact that the suicide rate is really increased, at least among homosexual men. It is surprising that the association of homosexuality and suicidality is still so heavily questioned for methodological reasons, given the

Danish data and the improved methods in more recent studies, such as using birth cohorts, twin registries, prospective designs, representative and large-scaled adolescent surveys, or matching LGB individuals with their heterosexual siblings. We are not aware of other fields in suicidology with such heavy methodological requirements. Perhaps the doubt on the data is driven by a fear of stigmatizing LGB individuals by pointing out their increased suicide risk, but we believe that this actually harms LGB individuals, because it hinders policy makers from incorporating LGB issues in suicide prevention programs.

### ***Risk and protective Factors***

The descriptive results of the risk and protective factors likely give some insight into the school climate that LGB individuals experience in Austria. Near half of students who remained closeted at school feared negative reactions by their peers. On the other hand, “only” less than one fifth of those who actually came out experienced negative reactions by peers, students, or other persons at school. Students who remain disclosed may have an unrealistically strong fear of negative reactions, described as “distal minority stress” by Meyer (2003). However, our study participants may base their decision to come out on valid perceptions of the situation at school: In the Plöderl (2005) study, the likelihood of coming out to members of the social network corresponded to actual reactions to the coming out. Only longitudinal studies can reliably disentangle expected and actual reactions to coming out. Coming out at school has its costs, because far more who came out reported having been victims of homophobic harassment. On the other hand, a substantial proportion of participants who remained closeted or were not aware of their homosexuality experienced homophobic harassment. This could be explained by the fact that perpetrators of homophobic violence use gender nonconforming traits – which may be more apparent among gay/bisexual youth – as cues for the victims’ homosexuality (Renold, 2002) or because of a high-base rate of homophobia in schools

(e.g., Buston & Hart, 2001; Thurlow, 2001), whereby almost everybody can be a potential victim.

Less than one fifth of the participants reported that teachers reacted positively to their coming out. For most, the reactions were neutral or even negative. Furthermore, similar to the Kosciw et al. (2008) study, less than one fifth of participants experienced teachers intervening against homophobic incidences. This may be devastating, as pointed out by Hazler & Denam (2002, p. 404): “By their failure to intervene and their presence as a passive audience, bystanders further isolate victims of abuse from support and increase the level of abuse by making the victim’s mistreatment a public spectacle.”

Only a minority (about one third) reported that homosexuality was addressed in the classroom, and LGB speakers were rarely invited in the classroom. One explanation may be that teachers are not prepared to deal with sexual-minority issues. In a Swiss study, two thirds of the teachers judged themselves as not being competent enough to teach about homosexuality (Wyrsh, 2001). Furthermore, teachers who address homosexuality in school or who challenge homophobic language may fear to be perceived as lesbian or gay (Treadway & Yoakam, 1992). Another problem is that including homosexuality in school-based mental health programs may lead to a rejection of the whole program, as suggested by evaluation studies of the “Mind Matter” curriculum that includes a module about homosexuality (Commonwealth of Australia, 2001). A simple intervention to support LGB youth would be to place books and brochures about homosexuality in schools, but in our study, less than 7% of the participants reported having had such media at school.

Only about a quarter of participants had somebody to talk to about homosexuality or bisexuality in school. Furthermore, only a minority of participants were aware of out LGB peers or teachers and it is likely that only a fraction of these participants had personal contact with them. Only a very small minority (3%) felt that teachers, school psychologists, or school doctors were potential persons to talk to about homo- or bisexuality. Thus, the feeling of isolation so typical for LGB youth (Cass, 1974; Little, 2001) is understandable and it seems unrealistic that health care professionals can fill

this gap, as assumed by Elisabeth Gehrler (2005), the former Austrian minister for education:

School psychologists and school doctors are the primary contact persons for students in case of personal, achievement-related or behavioral problems. Because they are at school regularly, because of frequent one-on-one interviews, and because of medical confidentiality, students and school doctors have an especially trusting relationship (p. 2, translated by the authors).

Our results disprove this claim. In addition, in a US study, most school psychologists were not educated in gay/lesbian issues (Savage, Prout, & Chart, 2004). Besides a feeling of isolation, the lack of having LGB role models in school and the associated negative effect on the identity development and mental health (Cass, 1974; Hazler & Denham, 2002; Little, 2001; Martin & Hetrick, 1988; Meyer, 2003; Radkowsky & Siegel, 1997) is worrisome. The descriptive findings of this study point out that school is not likely to be a safe place for LGB individuals in Austria because of actual or feared homophobia, lack of protection against homophobia and of social support, and missing LGB-specific information. As mentioned in the introductory section, the coming-out period – which is often a challenge – occurs during school age in many LGB individuals. Safe spaces and support would be especially important in the coming out phase. Given that our results represent the Austrian situation, school seems not to provide safety and support to sexual minorities. Potential consequences for the suicide risk, likely mediated by the feeling of being accepted at school, are discussed below.

### ***Associations of risk/protective factors with acceptance at school***

Not surprisingly, homophobic harassment (actual or expected), harassment based on gender nonconformity, or negative reactions to coming out were associated with lack of acceptance at school. A variety of protective factors were evident: Participants more likely felt accepted if there were peers available to talk to about homosexuality, or if there were openly LGB peers or teachers at school. Social support and role models thus seem to be crucial for developing a feeling of acceptance

at school. The item we used was: “Were or are there openly (!) homosexual teachers at your school?”, which may have included LGB teachers who were in fact (for whatever reasons) no role models for LGB students. Still, the protective effect of this variable was significant, pointing out the importance of teachers who are open about their LGB orientation at school. Qualitative studies could reveal what would make openly LGB teachers role models and would therefore be valuable, even more so because there is a lack of research about LGB teachers in general (Duke, 2008). Notable exceptions are the Rofes (2005) and the Macgillivray (2008) studies, where the authors demonstrate their impact as openly gay teachers on their LGB and heterosexual students.

Interestingly, coming out to most others was a protective factor, whereas there was no significant difference between closeted participants and those who came out to few others. Students who do not feel accepted at school (e.g., because of a homophobic environment) may remain closeted or may only come out very cautiously, whereas students who feel accepted may feel free to come out. The causal direction may also be reversed: those who came out to few may have experienced negative reactions and stopped coming out, or they observed negative reactions to other out LGB youth and therefore remained closeted, whereas those who experienced positive reactions continued to come out and thus developed the feeling of being accepted. Indeed, the association of the coming-out-status with actual reactions to coming out by teachers was significant ( $r = -.32, p < .01$ ), whereas there was only a weak nonsignificant association with peer reactions ( $r = -.08, p = .31$ ). Thus, reactions of teachers to disclosure likely have a substantial impact on the identity development of sexual minority youth.

Having homosexuality addressed in school or having books about homosexuality in school also had positive effects on the feeling of acceptance. Higher levels of education were associated with an increased feeling of being accepted, indicating that schools providing higher educational levels also provide a more LGB-friendly climate. There seems to be a likely interplay between such protective factors which may all contribute more or less to a general “GLB-friendly school climate” factor.

An important result was that participants who felt that they were not accepted at school tried harder to perform better at school because of their homo- or bisexual orientation. Notably, this effect was one of the strongest. Further analyses revealed that compared to students who felt no influence of their sexual orientation on school performance, those who performed better because of being gay/bisexual reported more homophobic harassment by peers (52 vs. 30%,  $OR = 5.05$ ,  $CI = 2.36-11.46$ ). Thus, trying to be more successful at school may be a coping mechanism against a homophobic situation at school, especially among harassed gay/bisexual students in higher-level schools. Similarly, Treadway and Yoakam (1992) discuss that LGB students may become “super-achievers” to divert attention from their sexual orientation. To our knowledge, our study result is the first empirical finding on this problem.

#### *Associations of risk/protective factors with school related suicide attempts*

Homophobic harassment by peers and harassment based on gender atypicality increased the risk for attempting suicide, as already known from other studies (Friedman et al., 2006; Harry, 1983b; Reis & Saewyc, 1998). Furthermore, suicide attempts were more frequent among those who did not feel accepted at school. The risk for school-related suicide attempts was also increased among those who came out to few others, compared to closeted participants or those who were out to most others. As already mentioned above, expected or actual negative reactions to coming out may make students prone to suicidal behavior. Indeed, in our sample, positive reactions of peers to coming out and not having experienced homophobic harassment decreased the suicide attempt-risk. Notably, homophobia in school seems to harm youth of all sexual orientations: Even self-identified heterosexual youth who are targets of homophobic harassment at school have suicide attempt incidences comparable to LGB youth (Reis & Saewyc, 1998, Table 4).

A result not yet reported in the literature was that participants who reported school-related suicide

attempts more likely thought that homosexuality should not be addressed at school because it would be stressful. Moreover, this association was independent of other risk-factors such as harassment or lack of acceptance. Therefore, discussing sexual minority issues in the classroom may be problematic for suicidal gay or bisexual students. Possible stressors may be shame (e.g., as a result of internalized homophobia) or an increased likelihood of exposure (e.g., searching for gays in the classroom). Analogously, students who had already attempted suicide rated educational programs about suicide more negatively than other students (Shaffer et al., 1990).

Another important result not reported elsewhere was that students who felt that they successfully tried to perform better at school because of their homo- or bisexual orientation were more likely to report suicide attempts. As described above, LGB students may try to perform above average in order to cope with homophobia at school or to divert attention from being LGB. School personnel should keep in mind that, for sexual-minority students, good school performance may not indicate well-being but distress, or that extraordinary efforts to perform well at school may indicate problems with sexual orientation issues.

The results suggest that acceptance at school is likely influenced by both proximal factors (e.g., homophobic harassment) and distal factors (e.g., LGB role models, books about homosexuality in the library), whereas suicidality is moderated rather by proximal stressors (e.g., harassment, lack of acceptance). A recent interpersonal-psychological theory of suicidal behavior (Joiner, 2005, 2009) may help explain the relationship between the feeling of acceptance and suicidality. According to this theory, the desire to kill oneself is a result of two co-occurring interpersonal states of mind: perceived burdensomeness and failed belongingness. If, for example, a school visibly supports teachers who are open about their sexual orientation, then this may be a signal for belongingness for LGB students, even if they are still in the closet. Similarly, if teachers discuss homosexuality as a valuable expression of sexuality (and not as a deviance), then this may counteract the feeling of being a burden. Many of our findings fit this the interpersonal-psychological theory of suicide.

Unfortunately, we did not assess perceived burdensomeness and failed belongingness directly in our study, but it seems justified to assume that the feeling of acceptance at school is likely related to these two constructs. Therefore, the significant associations of risk factors as well as protective factors together with a feeling of acceptance are essential in school suicide prevention efforts.

### *Limits and strengths*

By using the Internet, we expected to achieve more anonymity and thus a more diverse sample than by recruiting from address lists of LGB organizations. Indeed, compared to a recent Austrian study (Plöderl, 2005), we had more participants who were not out to their friends or families. Even so, our method may not have produced a sample that is representative of Austrian gay/bisexual males. Probability samples are needed to possibly correct this bias.

Memory biases may have compromised the reliability of the self-reports. Additionally, distressed participants could be more prone to bias their school memories in a negative direction. However, the validity of such retrospective self-reports is supported by the fact that school-related factors were almost exclusively associated with school-related suicide attempts, but not with suicide attempts unrelated to school. If all participants who attempted suicide were distressed and simply biased their reports in a negative direction, then there should have been similar associations of risk factors with both suicide attempts related and unrelated to school. We did not assess the exact timing of the suicide attempts, and some of the attempts that were perceived as school-related may have taken place after school. It is likely that this may have obscured or biased some associations, and cross-sectional or prospective studies would be necessary to obtain more valid data.

The wide age range of the participants may give a biased view on the actual current situation of gay and bisexual males at school. Indeed, for many variables, older participants tended to view their situation at school worse than younger participants. However, for critical variables (suicide attempts,

expectance of negative consequences of a coming out, actual harassment experiences, actual reactions to coming out) there were no significant age differences, and harassment based on gender nonconformity was significantly more frequent among younger than older participants (data not reported, obtainable upon request).

Furthermore, we might have uncovered more significant relationships by using psychometric established scales for the variable “acceptance at school,” and as mentioned above, it would have been better to use recent scales that assess perceived burdensomeness and failed belongingness because of their close association with suicidality.

Finally, it is unclear if these findings translate to lesbian and bisexual women. For example, there is generally more acceptance of homosexuality and also gender nonconformity among women than among men (Kite & Whitley, 1996; McCreary, 1994). Therefore, we would expect the problem to be less strong among lesbian and bisexual women. However, only future studies that include both sexual minority men and women can clarify this issue.

Despite certain methodological shortcomings, our study is the first that explored a wide range of school-related risk factors and protective factors that may contribute to the suicide risk of sexual minority youth. Investigating protective factors is an improvement to previous related studies, which had their focus mostly on the risk-side and did not assess resiliency (Russell, 2005). School-based suicide prevention programs are beginning to incorporate sexual minority issues (e.g., Commonwealth of Australia, 2001) and studies such as ours will provide empirical evidence for the potential effectiveness of protective factors and thus may guide the further development of such programs.

***Implications for schools, teachers, policy makers***

Given the amount of data pointing out at an increased suicide risk, LGB students should be target populations in suicide prevention programs. Policy makers are often unaware of these facts and should be provided with more information.

Many LGB students do not feel accepted at school. A lack of belongingness at school is an important contributing factor for suicidality. Therefore, we recommend interventions that provide LGB students with a sense of belongingness at school and that they are not a burden but instead a valuable part of the school community, like all others. Our study suggests that counteracting certain risk factors and enhancing protective factors will likely increase acceptance at school and reduce suicidality among LGB students.

Positive reactions by students to their LGB peers should be encouraged. In some countries, health promotion programs incorporate diversity management principles, and some have already included LGB individuals as a minority (e.g., Commonwealth of Australia, 2001). This would not only benefit LGB students, but all students, because diversity competence is an important life skill.

Similarly, teachers should be prepared for situations where students come out, or even more important, are outed involuntarily by peers. From our experiences in school-workshops, we found that some teachers lack basic diversity competencies and knowledge about homosexuality. For example, there are teachers who are unaware that the expression “schwul” (German “gay”) is officially not a prerogative term but a correct way to refer to self-identified homosexual men. Diversity skills and supervision should be provided for teachers. Addressing homosexuality in the classroom is perceived as important for most LGB students. Unfortunately, homosexuality issues are not mentioned in any Austrian curriculum, including curriculums of teacher education. Thus it is no surprise that many teachers do not feel to have the proper training and information in order to address homosexuality issues in the classroom and therefore avoid the topic. Furthermore, some students,

especially those at the highest risk for suicidality, may perceive addressing homosexuality in the classroom as stressful. Thus, such interventions need to be well-planned and teachers should be taught the necessary skills.

Alternatively, many local gay/lesbian organizations offer workshops for students and teachers. It should be kept in mind that a single lesson about homosexuality may be less efficient compared to interventions that change the school climate permanently (e.g., visible posters or policies against homophobia).

Coming out at school can both be risky (e.g., being exposed to perpetrators) and also beneficial (obtaining support). LGB students should not be left alone when they balance the costs and benefits of disclosure. Teachers and the school administration should take the responsibility for guaranteeing such a supportive climate, for example by providing counseling, support groups, or at least by making helpful information accessible.

It is important to keep in mind that, for LGB students, counselors and other adults in school are the least likely persons that may be sought out for help. Peer programs or the internet may be more acceptable to LGB students. Effective, modern suicide prevention programs focus on peers and their role as potential helpers (e.g., Aseltine, 2007), however, ways for making students sensitive to homosexuality issues has yet to be incorporated in such programs. Generally, it is important to let LGB students feel that they are welcome and that the school cares about them. This can be easily realized by providing posters, symbols, books, and brochures that are easily available, widely visible, and protected from vandalism. In addition, students who are open about their sexual minority status and who are valued in school can make helpful contributions and they can also be important role models for other LGB students.

Similarly, teachers who come out at school may serve as role models as well and should receive backing from the school administration as well as other teachers. This kind of support is not granted, demonstrated by the following bad example: We were made aware of a teacher who was seen in a

gay bar by students who then asked him in the classroom if he was gay. He simply came out to the students, causing a lot of discussions among them. Instead of backing this teacher, his colleagues as well as the school administration suggested that his sexuality be considered a private issue not to be addressed in the classroom.

Schools should have policies against homophobia, similar to policies against racism or sexism. This could help teachers to respond in case of expressed homophobia. Gender nonconformity is often used as cue for a homosexual orientation, irrespective of a person's actual sexual orientation. Therefore, homophobia and discrimination based on gender nonconformity go hand in hand. Counteracting the latter should be as important as fighting homophobia.

## REFERENCES

- Aragon, T. (2007). epitools: Epidemiology tools [Computer software manual]. Available from <http://www.epitools.net> (R package version 0.4-9).
- Aseltine, R. H., James, A., Schilling, E. A., & Glanovsky, J. (2007). Evaluating the SOS suicide prevention program: A replication and extension. *BMC Public Health*, 7, 161-167. [doi:10.1186/1471-2458-7-161](https://doi.org/10.1186/1471-2458-7-161)
- Bagley, C., & Tremblay, P. (2000). Elevated rates of suicidal behavior in gay, lesbian, and bisexual youth. *Crisis*, 21, 111-117. [doi:10.1027//0227-5910.21.3.111](https://doi.org/10.1027//0227-5910.21.3.111)
- Bailey, J. M., & Zucker, K. J. (1995). Childhood sex-typed behavior and sexual orientation: A conceptual analysis and quantitative review. *Developmental Psychology*, 31, 43-55. [doi:10.1037/0012-1649.31.1.43](https://doi.org/10.1037/0012-1649.31.1.43)
- Bontempo, D. E., & D'Augelli, A. R. (2002). Effects of at-school victimization and sexual orientation on lesbian, gay, or bisexual youths health risk behavior. *Journal of Adolescent Health*, 30, 364-374. [doi:10.1016/S1054-139X\(01\)00415-3](https://doi.org/10.1016/S1054-139X(01)00415-3)
- Buston, K., & Hart, G. (2001). Heterosexism and homophobia in Scottish school sex education: exploring the nature of the problem. *Journal of Adolescence*, 24, 95-109. [doi:10.1006/jado.2000.0366](https://doi.org/10.1006/jado.2000.0366)
- Cass, V. C. (1979). Homosexual identity formation: A theoretical model. *Journal of Homosexuality*, 4, 219-235. [doi:10.1300/J082v04n03\\_01](https://doi.org/10.1300/J082v04n03_01)
- Commonwealth of Australia (2001). *Community matters. Working with diversity for well-being*. Retrieved January 19, 2010, from [http://www.mindmatters.edu.au/verve/resources/comm\\_matters\\_complete.pdf](http://www.mindmatters.edu.au/verve/resources/comm_matters_complete.pdf)
- D'Augelli, A. R., Grossman, A. H., Salter, N. P., Vasey, J. J., Starks, M. T., & Sinclair, K. O. (2005). Predicting the suicide attempts of lesbian, gay, and bisexual youth. *Suicide and Life-Threatening Behavior*, 35, 646-660. [doi:10.1521/suli.2005.35.6.646](https://doi.org/10.1521/suli.2005.35.6.646)
- D'Augelli, A. R., Hershberger, S. L., & Pilkington, N. W. (2001). Suicidality patterns and sexual orientation-related factors among lesbian, gay, and bisexual youths. *Suicide and Life-Threatening Behavior*, 31, 250-264. [doi:10.1521/suli.31.3.250.24246](https://doi.org/10.1521/suli.31.3.250.24246)
- Dannecker, M., & Reiche, R. (1974). *Der gewöhnliche Homosexuelle*. Frankfurt, Germany: Fischer.
- Duke, T. S. (2008). Hidden, invisible, marginalized, ignored: A critical review of the professional and empirical literature (or lack thereof) on gay and lesbian teachers in the United States. *Journal of Gay & Lesbian Issues in Education*, 4, 19-38.
- Ellis, V., & High, S. (2004). Something more to tell you: gay, lesbian or bisexual young people's experiences of secondary

- schooling. *British Educational Research Journal*, 30, 213-225. [doi:10.1080/0141192042000195281](https://doi.org/10.1080/0141192042000195281)
- Fox, R. C. (1995). Bisexual identities. In A. R. D'Augelli & C. P. Patterson (Eds.), *Lesbian, gay, and bisexual identities over the lifespan. Psychological perspectives*. New York: Oxford University Press.
- Friedman, M. S., Koeske, G. F., Silvestre, A. J., Korr, W. S., & Sites, E. W. (2006). The impact of gender-role nonconforming behavior, bullying, and social support on suicidality among gay male youth. *Journal of Adolescent Health*, 38, 621-631. [doi:10.1016/j.jadohealth.2005.04.014](https://doi.org/10.1016/j.jadohealth.2005.04.014)
- Galliher, R. V., Rostosky, S. S., & Hughes, H. K. (2004). School belonging, self-esteem, and depressive symptoms in adolescents: An examination of sex, sexual attraction status, and urbanicity. *Journal of Youth and Adolescence*, 33, 235-245. [doi:10.1023/B:JOYO.0000025322.11510.9d](https://doi.org/10.1023/B:JOYO.0000025322.11510.9d)
- Gehrer, E. (2005). *Schriftliche Beantwortung der Anfrage Nr. 2320/J-BR/2005*. Bundesministerium für Bildung, Wissenschaft und Kultur. Retrieved April, 3, 2007, from [http://www.konvent.gv.at/pls/portal/docs/page/PG/DE/BR/AB-BR/AB-BR\\_02127/imfname\\_047130.pdf](http://www.konvent.gv.at/pls/portal/docs/page/PG/DE/BR/AB-BR/AB-BR_02127/imfname_047130.pdf)
- Harry, J. (1983a). Parasuicide, gender, and gender deviance. *Journal of Health and Social Behavior*, 24, 350-361. [doi:10.2307/2136401](https://doi.org/10.2307/2136401)
- Harry, J. (1983b). Defeminization and adult psychological well-being among male homosexuals. *Archives of Sexual Behavior*, 12, 1-19. [doi:10.1007/BF01542112](https://doi.org/10.1007/BF01542112)
- Hazler, R. J., & Denham, S. A. (2002). Social isolation of youth at risk: Conceptualizations and practical implications. *Journal of Consulting & Development*, 80, 403-409.
- Hetrick, E. S., & Martin, A. D. (1987). Developmental issues and their resolution for gay and lesbian adolescents. *Journal of Homosexuality*, 14, 25-43. [doi:10.1300/J082v14n01\\_03](https://doi.org/10.1300/J082v14n01_03)
- Joiner, T. E. (2005). *Why people die by suicide*. Cambridge, MA: Harvard University Press.
- Joiner, T. E. (2009). Suicide prevention in schools as viewed through the interpersonal-psychological theory of suicidal behavior. *School Psychology Review*, 38, 244-248.
- King, M., Semlyen, J., Tai, S. S., Killaspy, H., Osborn, D., Popelyuk, D., et al. (2008). A systematic review of mental disorder, suicide, and deliberate self harm in lesbian, gay and bisexual people. *BMC Psychiatry*, 8. Advance online publication. doi: 10.1186/1471-244X-8-70
- Kite, M. E., & Whitley, B. E. (1996). Sex differences in attitudes toward homosexual persons, behaviors, and civil rights. A meta-analysis. *Personality and Social Psychology Bulletin*, 22, 336-353. [doi: 10.1177/0146167296224002](https://doi.org/10.1177/0146167296224002)
- Kosciw, J. G. (2004). *The 2003 national school climate survey: The school-related experiences of our nation's lesbian, gay, bisexual and transgender youth*. New York: GLSEN.

- Kosciw, J. G., Diaz, E. M., & Greytak, E. A. (2008). *The 2007 national school climate survey: The experiences of lesbian, gay, bisexual and transgender youth in our nation's schools*. New York: GLSEN
- Little, J. N. (2001). Embracing gay, lesbian, bisexual, and transgendered youth in school-based settings. *Child & Youth Care Forum, 30*, 99-110. [doi:10.1023/A:1011681218718](https://doi.org/10.1023/A:1011681218718)
- Martin, A. D., & Hetrick E. S. (1988), The stigmatization of the gay and lesbian adolescent. *Journal of Homosexuality, 15*, 163-183. [doi:10.1300/J082v15n01\\_12](https://doi.org/10.1300/J082v15n01_12)
- Mathy, R. M., Cochran, S. D., Olsen, J., & Mays, V. M. (2009, Dec.). The association between relationship markers of sexual orientation and suicide: Denmark, 1990-2001. *Social Psychiatry and Psychiatric Epidemiology*. Advance online publication. [doi 10.1007/s00127-009-0177-3](https://doi.org/10.1007/s00127-009-0177-3)
- McCreary, D. R. (1994). The male role and avoiding femininity. *Sex Roles, 31*, 517-530.
- McDaniel, J. S., Purcell, D., & D'Augelli, A. R. (2001). The relationship between sexual orientation and risk for suicide: Research findings and future directions for research and prevention. *Suicide and Life Threatening Behavior, 31*, 84-105. [doi:10.1521/suli.31.1.5.84.24224](https://doi.org/10.1521/suli.31.1.5.84.24224)
- Macgillivray, I.K. (2008). My former students' reflections on having an openly gay teacher in high school. *Journal of LGBT Youth, 5*, 72-91. [doi:10.1080/19361650802223045](https://doi.org/10.1080/19361650802223045)
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin, 129*, 674-697. [doi:10.1037/0033-2909.129.5.674](https://doi.org/10.1037/0033-2909.129.5.674)
- Morrison, L. L., & L'Heureux, J. (2001). Suicide and gay/lesbian/bisexual youth: implications for clinicians. *Journal of Adolescence, 24*, 39-49. [doi:10.1006/jado.2000.0361](https://doi.org/10.1006/jado.2000.0361)
- Murdock, T. B., & Bolch, M. B. (2005). Risk and protective factors for poor school adjustment in lesbian, gay, and bisexual (LGB) high school youth: Variable and person-centered analysis. *Psychology in the schools, 42*, 159-172. [doi:10.1002/pits.20054](https://doi.org/10.1002/pits.20054)
- O'Carroll, P. W., Berman, A. L., Maris, R. W., Moscicki, E. K., Tanney, T. B., & Silverman, M. M. (1996). Beyond the tower of babel: a nomenclature for suicidology. *Suicide and Life Threatening Behavior, 26*, 237-252.
- Plöderl, M. (2005). *Sexuelle Orientierung, psychische Gesundheit und Suizidalität*. Weinheim: Beltz-Verlag.
- Plöderl, M., & Fartacek, R. (2005). Suicidality and associated risk factors among lesbian, gay, and bisexual compared to heterosexual Austrian adults. *Suicide and Life-Threatening Behavior, 35*, 661-670. [doi:10.1521/suli.2005.35.6.661](https://doi.org/10.1521/suli.2005.35.6.661)
- Plöderl, M., & Fartacek. (2009). Childhood gender nonconformity and childhood harassment as predictors of suicidality among gay, lesbian, bisexual, and heterosexual Austrians. *Archives of Sexual Behavior, 38*, 400-410. [doi: 10.1007/s10508-007-9244-6](https://doi.org/10.1007/s10508-007-9244-6)

- Plöderl, M., & Kralovec, K., & Fartacek, R. (2010). The relation between sexual orientation and suicide attempts in Austria. *Archives of Sexual Behavior*. Advance online publication. [doi 10.1007/s10508-009-9597-0](https://doi.org/10.1007/s10508-009-9597-0)
- Plummer, D. C. (2001). The quest for modern manhood: masculine stereotypes, peer culture and the social significance of homophobia. *Journal of Adolescence*, 24, 15-23. [doi:10.1006/jado.2000.0370](https://doi.org/10.1006/jado.2000.0370)
- Radkowski, M., & Siegel, L. J. (1997). The gay adolescent: stressors, adaptations, and psychosocial interventions. *Clinical Psychology Review*, 17, 191-216. [doi:10.1016/S0272-7358\(97\)00007-X](https://doi.org/10.1016/S0272-7358(97)00007-X)
- R Development Core Team. (2008). R: A language and environment for statistical computing [Computer software manual]. Retrieved March 20, from <http://www.R-project.org>
- Reis, B., & Saewyc, E. (1999). *Eighty-three-thousand youth: Selected findings of eight population based studies as they pertain to anti-gay harassment and the safety and well-being of sexual minority students*. The Safe Schools Coalition of Washington. Retrieved March 30, 2003, from <http://www.safeschools-wa.org>.
- Remafedi, G. J. (1991). Risk factors for attempted suicide in gay and bisexual youth. *Pediatrics*, 87, 869-875.
- Renold, E. (2002). Presumed innocence. (Hetero)sexual, heterosexist and homophobic harassment among primary school girls and boys. *Childhood*, 9, 415-434. [doi:10.1177/0907568202009004004](https://doi.org/10.1177/0907568202009004004)
- Rivers, I. (2004). Recollections of bullying at school and their long-term implications for lesbians, gay men, and bisexuals. *Crisis*, 25, 169-175. [doi: 10.1027/0227-5910.25.4.169](https://doi.org/10.1027/0227-5910.25.4.169)
- Rofes, E. (2005). *A radical rethinking of sexuality and schooling: Status quo or status queer?* Oxford: Rowman & Littlefield.
- Russell, S. T., Seif, H., & Truong, N. L. (2001). School outcomes of sexual minority youth in the United States: Evidence from a national study. *Journal of Adolescence*, 24, 111-127. [doi:10.1006/jado.2000.0365](https://doi.org/10.1006/jado.2000.0365)
- Russell, S. T. (2005). Beyond risk: Resilience in the lives of sexual minority youth. *Journal of Gay & Lesbian Issues in Education*, 2, 5-18. [doi:10.1300/J367v02n03\\_02](https://doi.org/10.1300/J367v02n03_02)
- Savage, T. A., Prout, H. T., Chard, K. M. (2004). School psychology and issues of sexual orientation: Attitudes, beliefs, and knowledge. *Psychology in the schools*, 41, 201-210. [doi:10.1002/pits.10122](https://doi.org/10.1002/pits.10122)
- Shaffer, D., Vieland, V., Garland, A., Rojas, M., Underwood, M., & Busner, C. (1990). Adolescent suicide attempters: response to suicide-prevention programs. *Journal of the American Medical Association*, 264, 3151-3155. [doi:10.1001/jama.264.24.3151](https://doi.org/10.1001/jama.264.24.3151)
- Skidmore, W. C., Linsenmeier, J. A., & Bailey, J. M. (2006). Gender nonconformity and psychological distress in lesbians and gay men. *Archives of Sexual Behavior*, 35, 685-697. [doi:10.1007/s10508-006-9108-5](https://doi.org/10.1007/s10508-006-9108-5)
- Thurlow, C. (2001). Naming the “outsider within”: homophobic pejoratives and the verbal abuse of lesbian, gay and

- bisexual high-school pupils. *Journal of Adolescence*, 24, 25-38. [doi: 10.1006/jado.2000.0371](https://doi.org/10.1006/jado.2000.0371)
- Treadway, L., & Yoakam, J. (1992). Creating a safer school environment for lesbian and gay students. *Journal of School Health*, 62, 352-357. [doi: 10.1111/j.1746-1561.1992.tb01255.x](https://doi.org/10.1111/j.1746-1561.1992.tb01255.x)
- Trenchard, L., & Warren, H. (1984) *Something to tell you*. London, London Gay Teenage Group.
- Wasserman, D., & Wasserman, C. (Eds) (2009). *Oxford textbook of suicidology and suicide prevention: A global perspective*. New York: Oxford University Press.
- Watzlawik, M. (2004). Experiencing same-sex attraction: A comparison between American and German adolescents. *Identity*, 171-186. [doi:10.1207/s1532706xid0402\\_4](https://doi.org/10.1207/s1532706xid0402_4)
- Wyrsh, M. (2001). *Homo- und Bisexualität - Ein Thema in der Schule?* Unpublished master's thesis, Universität Freiburg, Germany.
- Young, R., & Sweeting, H. (2004). Adolescent bullying, relationships, psychological well-being, and gender-atypical behavior: A gender diagnosticity approach. *Sex Roles*, 50, 525-537. [doi:10.1023/B:SERS.0000023072.53886.86](https://doi.org/10.1023/B:SERS.0000023072.53886.86)

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Table 1.

Associations of school related suicide attempts and acceptance at school with risk and protective factors

Risk or Protective Factor (Reference Category in Brackets)	Suicide Attempt Related to School		Not Accepted at School <sup>e</sup>	
	<i>n</i> <sup>e</sup> (%)	OR (95% CI)	OR	(95% CI)
Level of education (less than Matura)	156 (33)			
Matura or higher	312 (67)	0.63 (0.31-1.29)	0.46	(0.31-0.69) **
Coming Out at school (closeted)	324 (69)			
To few others	70 (15)	3.51 (1.56-7.65)**	0.61	(0.34-1.06)
To most others	74 (16)	1.29 (0.41-3.38)	0.25	(0.12-0.48) **
Hypothetical reactions to coming out (negative or very negative), <i>N</i> = 324	234 (72)			
neutral or positive <sup>a</sup>	90 (28)	0.72 (0.19-2.07)	0.33	(0.19-0.56) **
Peer reaction to coming out (negative or very negative <sup>a</sup> ), <i>N</i> = 144	25 (17)			
Neutral, positive, or very positive <sup>a</sup>	119 (83)	0.27 (0.09-0.85) *	0.11	(0.04-0.29) **
Teacher reactions to coming out (neutral), <i>N</i> = 144	106 (74)			
negative or very negative <sup>a</sup>	11 (8)	0.62 (0.02-3.71)	6.82	(1.84- 29.27) **
positive or very positive <sup>a</sup>	27 (19)	0.56 (0.08-2.25)	0.72	(0.19-2.16)
Open gay/lesbian peers (no)	335 (72)			
yes	133 (28)	0.98 (0.43-2.04)	0.26	(0.16-0.43) **
Open gay/lesbian teachers (no)	417 (89)			
yes	51 (11)	1.00 (0.28-2.70)	0.31	(0.13-0.65) **
Homophobic harassment - peers (no)	321 (69)			
Yes	147 (31)	4.04 (2.02-8.46)**	2.31	(1.55-3.47) **
Homophobic harassment - teachers (no)	453 (97)			
yes	15 (3)	- <sup>b</sup>	5.14	(1.70-19.41) **
Never experienced homophobic harassment (no)	154 (33)			
yes	314 (67)	0.24 (0.11-0.48)**	0.40	(0.27-0.59) **

Table 1 (continued)

Risk or Protective Factor (Reference Category in Brackets)	n <sup>e</sup> (%)	Suicide Attempt Related to School		Not Accepted at School <sup>e</sup>	
		OR	(95% CI)	OR	(95% CI)
Harassment based on gender atypicality (never)	265 (57)				
rarely	92 (20)	2.45	(0.95-6.08)	1.47	(0.89-2.42)
sometimes	81 (17)	2.99	(1.15-7.47) *	1.82	(1.09-3.05) *
often	30 (6)	5.86	(1.84-17.1)**	3.56	(1.64-7.99) **
Teacher intervention against antigay harassment towards participant (no), N = 147	124 (84)				
yes	23 (16)	0.49	(0.07-1.92)	0.32	(0.11-0.83) *
Teacher intervention against general antigay statements or antigay harassment towards others (no)	393 (84)				
Yes	75 (16)	0.67	(0.19-1.79)	0.67	(0.38- 1.14)
Having somebody to talk to in school about homosexuality (no)	345 (74)				
Yes	123 (26)	1.54	(0.71-3.16)	0.27	(0.15-0.44) **
Persons to talk to in school (no), N = 123	- <sup>dc</sup>				
Class Teacher	17 (14)	- <sup>b</sup>		0.32	(0.01-1.77)
Female Teacher	19 (15)	3.45	(0.79-13.2)	0.99	(0.20-3.46)
Male Teacher	16 (13)	- <sup>b</sup>		0.75	(0.10-3.06)
Peers	109 (89)	0.56	(0.12-4.46)	0.14	(0.04-0.47) **
School Psychologist/Doctor	16 (13)	- <sup>b</sup>		1.26	(0.25-4.52)
Others	16 (13)	2.34	(0.44-9.46)	1.26	(0.25-4.52)
Brochures about homosexuality (no)	450 (96)				
yes	18 (4)	1.79	(0.25-6.24)	0.92	(0.31-2.44)
Books about homosexuality (no or don't know <sup>a</sup> )	440 (94)				
yes	28 (6)	0.99	(0.14-3.58)	0.39	(0.13-0.97) *

Table 1 (continued)

Risk or Protective Factor (Reference Category in Brackets)	<i>n</i> <sup>e</sup> (%)	Suicide Attempt Related to School		Not Accepted at School <sup>e</sup>	
		OR	(95% CI)	OR	(95% CI)
Importance of Homosexuality in education (a must)	324 (69)				
Mentioning it briefly	47 (10)	0.59	(0.09-2.13)	0.40	(0.15-0.76) **
I am against this because it is stressful	53 (11)	2.86	(1.16-6.52) *	1.13	(0.62- 2.05)
I don't care	44 (9)	0.66	(0.09- 2.37)	1.19	(0.62-2.27)
Homosexuality addressed in education (no)	308 (66)				
yes	160 (34)	0.62	(0.27- 1.32)	0.48	(0.31-0.73) **
Gay/lesbian speakers invited (no), N = 160	152 (95)	-.b		-.b	
yes	8 (5)				
Acceptance at school (totally accepted)	132 (28)				
probably accepted	170 (36)	2.42	(0.69-11.7)		
probably not accepted	136 (29)	7.19	(2.33-32.7) **		
not accepted	30 (6)	11.07	(2.62-59.2) **		
Effect of sexual orientation on school achievement (no effect)	389 (83)				
Negative	37 (8)	1.17	(0.26-3.60)	2.66	(1.34-5.34) **
Positive	42 (9)	2.82	(1.05-6.79) *	4.05	(2.10-8.11) **

*Note:*

Odds-Ratios larger than one indicate an increased risk for suicide attempts or lack of acceptance. Associations with harassment by others were not calculated because of insufficient cell entries.

<sup>a</sup>Collapsed to achieve enough cell entries.

<sup>b</sup>Calculation not possible because of empty cell entries.

<sup>c</sup>To save space, only the frequency of the "yes" answers are given; the frequency of the corresponding "no" answers can be calculated by subtracting the frequency of the "yes" answers from 123 (the number of participants who had somebody to talk to).

<sup>d</sup>Frequencies are based on the total sample (N = 468) if not given otherwise in the first column.

<sup>e</sup>The "probably not accepted" and "not accepted" category were collapsed, and so were the "probably accepted" and "totally accepted" category.

OR: Odds-Ratio; 95% CI: 95-Percent Confidence Interval

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