

# An Integrated Model of Gay Men's Depressive Symptoms

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A model of depressive symptoms in gay men is tested that links gender-related personality traits (agency and unmitigated communion) to peer harassment, self-discrepancies in agency, and cold-submissive interpersonal behavior, all of which were reported in previous research to contribute to depression. A sample of 510 gay men was recruited through the Internet. The integrated model was tested using half of the sample and validated with the other half. Significant zero order

correlations between the gender-related personality traits and depressive symptoms were mediated by unassured-submissive behavior and self-discrepancies in agency. Recalled peer harassment was linked directly with depressive symptoms and indirectly through unassured-submissive interpersonal behavior.

**Keywords:** gay men; depressive symptoms; depression; gender-related personality traits; peer harassment

Gay men are at elevated risk for depressive symptoms relative to heterosexual men (e.g., Herrell et al., 1999; Sandfort, de Graaf, Bijl, & Schnabel, 2001). Although researchers have begun to explore men's depression (Cochran & Rabinowitz, 2003; Oliver & Whiffen, 2003), an empirically validated model for understanding the specific risk to gay men is lacking. An initial point of analysis is existing models of depression.

Depression researchers have begun to develop models that integrate cognitive and interpersonal factors (e.g., Gotlib & Hammen, 1992; Sacco, 1999). For instance, Ingram, Miranda, and Segal (1998) suggested that through the experience of distressing interpersonal events in childhood, negative cognitions about self and others develop and, when activated in adulthood, can lead to depression. Ingram et al. proposed that their model accounts for the elevated rates of depression that have been demonstrated in women, and are suspected for ethnic minorities, in that the frequency of distressing interpersonal events in childhood is greater in social groups that are given less status.

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In this article, the authors propose and evaluate a model of depressive symptoms in gay men that integrates cognitive, interpersonal, and developmental factors. It is proposed that many gay men develop less agentic and more communal (specifically, unmitigated communion) personality traits, which puts them at risk for harassment and bullying during childhood and adolescence. Furthermore, the authors propose that bullying leads gay men to perceive themselves as insufficiently agentic and promotes the development of submissive interpersonal behavior. It is these cognitions about self and interpersonal behaviors that are associated ultimately with adult depression.

## Gender-Related Personality Traits

The gender-related personality trait of agency has been defined as an orientation toward the self and individualization. In contrast, communion refers to an orientation toward others and connection, and unmitigated communion to an extreme degree of communion in which there is a focus on others at the expense of one's own needs (Helgeson, 1994). In relating agency and communion to previous research in gender-related personality, it is helpful to note that they have evolved from the broader constructs of masculinity and femininity (Helgeson, 1994). Extensive research indicates that depression and

depressive symptoms are associated negatively with agency (Helgeson & Fritz, 1999; Whitley, 1984) and positively with unmitigated communion (Helgeson & Fritz, 1999; Whiffen, Thompson, & Aube, 2000). There is strong evidence that, on average, gay men develop more feminine and more androgynous personality traits than do heterosexual men (Bailey, Kim, Hills, & Linsenmeier, 1997; Pillard, 1991). Thus, gender role personality traits may play a role in an elevated risk for depression among gay men.

Two previous studies examined the link between gender-related personality and depressive symptoms in samples of gay men. Carlson and Baxter (1984) reported that in gay but not heterosexual men, high levels of depressive symptoms were associated with low levels of self-reported masculinity and high levels of femininity. In a similar study, Carlson and Steuer (1985) reported that masculinity was associated with well-being in both gay and heterosexual men. Thus, consistent with the general research, gay men's depressive symptoms are negatively related to masculinity or agency. The association of unmitigated communion with depressive symptoms, however, has not been explored in gay men, despite findings that gay men self-report more feminine personality traits than do heterosexual men. In the present study, it is hypothesized that there is a link between depressive symptoms and the gender-related personality traits of both agency and unmitigated communion. In addition, it is hypothesized that the association between gender-related personality traits and depression would be mediated by the following three variables also associated with depression: peer harassment in adolescence, self-discrepancies in agency, and cold/submissive interpersonal behavior.

### Peer Harassment in Adolescence

Peer harassment in childhood has been associated with higher levels of depressive symptoms in school children (Bond, Carlin, Thomas, Rubin, & Patton, 2001; Hawker & Boulton, 2000). Research also has identified that men who were bullied in junior high school report more depressive symptoms and lower self-esteem than do non-bullied men (Olweus, 1993). Bond et al. (2001) reported that prior emotional problems were not significantly related to future victimization, which suggests that victimization gives rise to depressive symptoms, not vice versa.

The harassment of gay, lesbian, and bisexual youth is well established (D'Augelli, 1998). Studies of

gay, lesbian, and bisexual youth in high school indicate that more than half of participants report verbal abuse directed at them because of their sexual orientation and 11% indicate they have been physically assaulted (D'Augelli, Pilkington, & Hershberger, 2002). Furthermore, there is evidence of a relationship between this harassment and difficulties with mental health during adolescence (Hershberger & D'Augelli, 1995). The emotional distress that results from this bullying may endure into adulthood. Rivers (2001) reported that more than 50% of lesbian, gay, bisexual, and transgendered adults who were bullied at school had contemplated self-harming behaviors or suicide, with 40% making one or more suicide attempts. These participants also exhibited higher levels of depressive symptoms than did non-bullied lesbian, gay, bisexual, and transgendered people who served as comparisons.

The extent to which youth can conceal their sexual identity plays a role in the degree to which they are victimized (Pilkington & D'Augelli, 1995). Clearly, one way in which youth might be perceived as being gay is through gender-related personality traits. In a recent study of masculinity in 11- to 14-year-olds, boys considered it important to be able to present themselves as masculine in order to avoid being bullied (Phoenix, Frosh, & Pattman, 2003).

Thus, in the present study, it was hypothesized that the gender-related personality traits of low agency and high unmitigated communion would be associated with higher levels of bullying during childhood and adolescence. Furthermore, as described below, it was proposed that bullying would be associated with boys' perceptions of themselves as insufficiently masculine and with cold and submissive behaviors.

### Self-Discrepancies in Agency

Individuals have multiple conceptions of self, including ideas about who they are and who they might ideally become (Markus & Nurius, 1986). With such multiple selves comes the possibility of discrepancies among conceptions of self. Higgins's (1987) self-discrepancy theory predicts that specific types of self-discrepancies are associated with particular types of psychological distress. Discrepancies in who a person believes himself to be and who he ideally would like to be are proposed to result in depression (Higgins, Bond, Klein, & Strauman, 1986). This hypothesis has been confirmed in samples of college

students (Scott & O'Hara, 1993) and clinically depressed adults (Fairbrother & Moretti, 1998). However, not all research has supported the hypothesis (Tangney, Niedenthal, Covert, & Barlow, 1998). Higgins (1999) explained the failure to replicate this association by proposing that self-discrepancies will be most strongly associated with depression when the discrepancy is highly salient to the individual.

Self-discrepancies in agency may be highly salient to gay men. Although gay men self-report greater femininity than do heterosexual men (Zucker & Bradley, 1995), they also report positive biases toward masculine behavior, traits, and appearance (Bailey et al., 1997). Self-discrepancies in agency are of particular interest in gay men because as a minority group they must construct and maintain a sense of self in the presence of a majority who do not reflect, or may even actively stigmatize, their experience of self (see, for example, Cox & Gallois, 1996).

Two previous studies explored the link between self-discrepancies in gender-related personality traits and depressive symptoms. The first identified that a discrepancy in actual versus ideal agency was a better predictor of both men's and women's depressive symptoms than was agency alone (Grimmell & Stern, 1992). In the second study, these results were replicated for women but not for men (Grimmell, 1998). Studies with gay men have not been published. In the present study, it was hypothesized that bullying during childhood and adolescence would be associated with self-discrepancies in agency, which ultimately would contribute to gay men's risk for depression.

### **Cold-Submissive Interpersonal Behaviors**

Depression and depressive symptoms have been associated with problematic interpersonal behaviors in a wide range of samples (see, for example, Whiffen, Thompson, et al., 2000). In a review of this literature, Gotlib and Whiffen (1991) suggested that the interpersonal behavior of depressed persons can be characterized as hostile or cold. More recently, Whiffen, Aube, Thompson, and Campbell (2000) reported that depressive symptoms were associated specifically with cold-submissive behavior, such as being unresponsive to others' overtures and withdrawing from attention. Similarly, Fritz and Helgeson (1998) reported an association between depressive symptoms and interpersonal behavior characterized as unassertive or selfless. Furthermore, the latter researchers reported

that the association between unmitigated communion and depressive symptoms was partially mediated by nonassertive and overly nurturing interpersonal behavior.

Olweus (1994) observed that boys who were bullied tended to be more cautious, sensitive, and quiet; to have a negative attitude toward violence; and to be physically weak, behaviors that appear to coincide with the submissive behaviors that are associated with depression. In the present study, it was hypothesized that bullying during early adolescence would be associated with higher levels of submissive interpersonal behaviors and that these behaviors would be associated in turn with depressive symptoms.

### **Summary and Integrated Model**

To summarize, the authors proposed an integrated model of depressive symptoms in gay men that follows from Ingram et al.'s (1998) general model. It was proposed that gender-related personality traits are associated with depression through three mediators: bullying during early adolescence, self-discrepancies in agency, and cold-submissive interpersonal behavior (see Figure 1). This study evaluated the empirical support for this model in a large sample of gay men who completed questionnaires over the Internet. Half of the sample was used to test the proposed model, which was respecified on the basis of the initial analyses and reevaluated in the second half of the sample.

## **Method**

### **Participants and Procedure**

Participants were gay identified males aged 18 years and over, recruited through Internet sites, news groups, e-mail lists, and printed advertisements in gay community newspapers in three large Canadian cities. Individuals were provided with an Internet address where they could find the survey and information about participation and confidentiality. Participants were informed that to submit their completed survey, they needed to press the button marked "submit now" at the end of the survey, and that doing so would indicate their consent to use their information. To ensure confidentiality, no identifying information was requested and the participants' responses were downloaded directly into an SPSS data file. The use of the Internet to gather

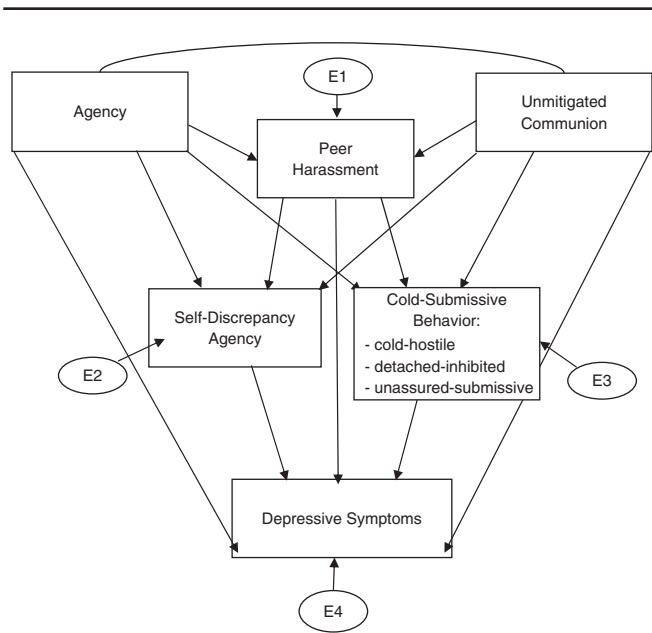


Figure 1. The hypothesized model.

Note: E1 to E4 are error terms signifying the existence of variability aside from what the variables in the model can explain.

data in this manner was explored extensively by Gosling, Vazire, Srivastava, and John (2004) who concluded that this method is as valid as traditional methods.

Of the 555 respondents to the survey, 510 met the criteria of being gay identified males over 18 years of age. The data provided by 45 participants could not be used, as they did not indicate an age ( $n = 18$ ); identified as female ( $n = 2$ ), transgendered ( $n = 4$ ), or bisexual ( $n = 17$ ); did not report gender ( $n = 17$ ); or were under 18 years of age ( $n = 1$ ). Two participants had not completed several measures, and their data were deleted from the analyses. Of the remaining 508 respondents, 254 (Sample A) were randomly selected to test the hypothesized model. The results of these analyses were used to respecify the model, and the data from the remaining 254 (Sample B) participants were used to validate the respecified model.

On average, the men were in their late 30s, and the majority lived in North America (89%). Employment, income, and education levels suggested this was an affluent sample. Seventy percent had at least a college diploma, 71% were employed, and more than half (55%) reported an annual income greater than the median income for Canadian families. Approximately half of the men reported being in a relationship, and just over a fifth responded positively to the question, "Do you identify as a member of a visible minority group?" Demographic data are

presented in Table 1. No significant differences in demographic information were found between the randomly selected subsamples.

## Measures

**Extended Personal Attributes Questionnaire.** The Extended Personal Attributes Questionnaire (EPAQ) measures socially desirable and undesirable gender-related personality traits (Spence, Helmreich, & Holahan, 1979). In the present study, only the agency subscale, which consists of eight personality traits that are considered socially desirable in both genders but which are more likely to be endorsed by men, was used. Participants rate the traits as self-descriptive on a 5-point scale, ranging from 0 (*not at all*) to 4 (*very*). Convergent validity for the agency subscale was demonstrated through correlations with the Bem Sex Role Inventory and other measures of gender-related personality (Spence & Buckner, 2000).

Ideal agency was measured by asking participants to respond again to the EPAQ subscale for agency but "this time from the perspective of the kind of person you would like to be—your personal ideal." Participants were prompted to "think about your hopes and aspirations for who you ideally would like to be." Following from the self-discrepancy research of Grimmell (1998), their rating on each actual item was subtracted from their ideal rating and summed. Therefore, positive scores indicate that the participant wanted to be more agentic, whereas negative scores indicate that the participant perceived himself to be too agentic.

Initially, the alpha coefficient for ideal agency was unacceptable ( $\alpha = .61$  for the full sample). By deleting two items measuring competitiveness and superiority, the alpha was improved to .66 for the total sample and .67 in Sample A and .62 in Sample B. These two items had to be deleted from the measure of agency to calculate self-discrepancies. Deleting these items had no impact on the alphas for agency, which were .76 for the full sample and .73 in Sample A and .74 in Sample B.

**Unmitigated Communion Scale.** The Unmitigated Communion Scale (UCS) is a nine-item self-report measure of the tendency to place others' needs before one's own needs and to experience distress over concern for others (Helgeson, 1993). The items are rated on a 5-point scale from *strongly disagree* to *strongly agree*. The UCS has demonstrated divergent and convergent validity, correlating with related

**Table 1.** Demographic Characteristics of Participants—Samples A and B and Comparison

| Variable                                      | Sample A               |             |          | Sample B               |       |          | Comparison |
|---|------------------------|-------------|----------|------------------------|-------|----------|------------|
|   | <i>M</i> ( <i>SD</i> ) | Range       | <i>N</i> | <i>M</i> ( <i>SD</i> ) | Range | <i>N</i> | <i>t</i>   |
|   | 38.33 (10.70)          | 18-65       | 233      | 38.22 (11.28)          | 18-67 | 237      | 0.11       |
| Age   |                        | % of Sample | <i>N</i> | % of Sample            |       | <i>N</i> | <i>z</i>   |
| Relationship status                           |                        |             |          |                        |       |          | 1.39       |
| Single  |                        | 46.8        | 109      | 52.7                   |       | 125      |            |
| Partnered                                     |                        | 53.2        | 124      | 46.4                   |       | 110      |            |
| Identify as visible minority                  |                        |             |          |                        |       |          | 0.74       |
| Yes   |                        | 21.5        | 50       | 18.6                   |       | 44       |            |
| No  |                        | 76.0        | 177      | 78.1                   |       | 185      |            |
| Country of residence                          |                        |             |          |                        |       |          | 0.34       |
| Canada  |                        | 54.5        | 127      | 54.9                   |       | 130      |            |
| United States                                 |                        | 33.5        | 78       | 35.0                   |       | 83       |            |
| Australia                                     |                        | 6.9         | 16       | 7.2                    |       | 17       |            |
| Other   |                        | 4.3         | 10       | 1.6                    |       | 4        |            |
| Educational level                             |                        |             |          |                        |       |          | 0.10       |
| High school                                   |                        | 8.2         | 19       | 3.8                    |       | 9        |            |
| Some postsecondary                            |                        | 18.9        | 44       | 25.3                   |       | 60       |            |
| College/Bachelor's                            |                        | 45.9        | 107      | 43.4                   |       | 103      |            |
| Master's/PhD                                  |                        | 25.3        | 59       | 26.2                   |       | 62       |            |
| Other   |                        | 1.7         | 4        | 1.30                   |       | 3        |            |
| Employment status                             |                        |             |          |                        |       |          | 0.43       |
| Currently employed                            |                        | 70.4        | 164      | 72.2                   |       | 171      |            |
| Unemployed                                    |                        | 15.5        | 23       | 12.3                   |       | 29       |            |
| Student                                       |                        | 7.7         | 18       | 9.7                    |       | 23       |            |
| Retired                                       |                        | 6.4         | 15       | 5.5                    |       | 13       |            |
| Estimated income for Canadians <sup>a</sup>   |                        |             | 126      |                        |       | 123      | 0.41       |
| Under \$45,000                                |                        | 42.5        | 54       | 47.2                   |       | 58       |            |
| Over \$45,000                                 |                        | 56.7        | 72       | 52.8                   |       | 65       |            |
| Estimated income for Americans <sup>a</sup>   |                        |             | 78       |                        |       | 80       | 2.52*      |
| Under \$29,000                                |                        | 51.3        | 40       | 51.3                   |       | 24       |            |
| Over \$29,000                                 |                        | 48.7        | 38       | 48.7                   |       | 56       |            |
| Estimated income for Australians <sup>a</sup> |                        |             | 16       |                        |       | 17       | 0.32       |
| Under \$45,000                                |                        | 37.6        | 6        | 41.2                   |       | 7        |            |
| Over \$45,000                                 |                        | 62.6        | 10       | 58.8                   |       | 10       |            |

a. Dollar amounts in currency of the country.

\* $p < .05$ .

constructs such as a communal orientation to relationships, and not correlating with unrelated constructs such as social desirability, state-trait anxiety, or self-esteem (Helgeson, 1993). Test-retest reliability with a 6-week delay has yielded a score of  $r = .78$  (Helgeson, 1993). In the present study, the alpha coefficients were .76 in the full sample and .79 in Sample A and .73 in Sample B.

*Olweus Bully/Victim Questionnaire for Students—Revised.* The Olweus Bully/Victim Questionnaire for Students—Revised (OBVQ-R) is a 20-item self-report questionnaire that measures the frequency both of bullying and of being bullied (Olweus, 1996). In the

present study, participants rated only the 10 items about being bullied. First, respondents are given a definition of bullying, and then they are asked to indicate how often they have been bullied in the recent past. The bully/victim questionnaire correlates highly with peer and teacher reports of bullying (Olweus, 1991).

Following Olweus's (1991) procedure to assess recollected bullying during late childhood, the prompt was changed to, "As you recall, during the period including grades 7-9, were you bullied? If yes how often?" The response to each item is rated from 0 (*I was not bullied*) to 4 (*several times a week*). In a longitudinal study, Olweus (1994) examined peer

harassment in boys from grades 7 to 9 and then at age 23 when they were asked to "recall grade 9" and indicate if they had been victimized at that time. Although Olweus has not published the specific value of the correlation between time 1 and time 2, he has reported that the correlation was "substantial" (Olweus, 1994, p. 104). In the present study, the alpha coefficients were .91 for the full sample and both subsamples A and B.

*Checklist of Interpersonal Transactions—Revised.* The Checklist of Interpersonal Transactions—Revised (CLOIT-R; Kiesler, 1984) is a 96-item checklist of overt interpersonal behaviors derived from Kiesler's Interpersonal Circle (Kiesler, 1983). The Interpersonal Circle is a classification system for interpersonal behavior that is based on two orthogonal, bipolar axes: hostile-friendly and dominant-submissive. Participants are asked to check each item that describes an action typically exhibited by them in their interactions with close others. Checked items are scored on a present/absent basis and summed.

Following from Kiesler, Goldston, and Schmidt (1991), adjacent dimensions were combined to produce "octants" defined by 12 items. Of the 12 items, 6 measure mild to moderate levels of behavioral intensity and 6 measure extreme levels of intensity. Mild-moderate items receive a score of 1, and extreme items receive a score of 2. The range of scores for an octant is therefore 0 to 18. The CLOIT-R has good construct validity as demonstrated by its association with the related Interpersonal Adjective Scales—Revised (Tracey & Schneider, 1995) and its ability to significantly differentiate the quadrants of the Interpersonal Circle (Kiesler et al., 1991).

In the present study, three octants of the CLOIT-R were examined because they are located in the cold-submissive sector of the interpersonal circle: cold-hostile, detached-inhibited, and unassured-submissive. These subscales had alpha coefficients of .73, .74, and .77, respectively, for the full sample, and .69, .75, and .77 for subsample A and .71, .71, and .77 for subsample B.

*Center for Epidemiological Studies Depression Scale—Short Form.* The Center for Epidemiological Studies—Depression Scale—Short Form (CES-D-Short Form) was developed to assess the severity of depressive symptoms in adults residing in the community (Radloff, 1977). The original CES-D consisted of 20 items. Analysis of the measure by Santor and Coyne (1997) revealed that depressed individuals could be

identified with a nine-item scale. Items are rated on a 4-point scale according to the frequency with which depressive symptoms were experienced during the preceding week (from 0 = *rarely or none of the time* to 4 = *mostly or all of the time*). Like the original measure, the nine-item version has been reported to demonstrate good construct validity in that it correlates strongly with related measures such as the Beck Depression Inventory (Santor & Coyne, 1997). The alpha coefficients for the full sample and the two subsamples were .91.

## Results

### Sample A—The First 254 Randomly Selected Participants

#### *Data Screening*

Data screening followed the procedures outlined by Tabachnick and Fidell (1996) and was conducted to comply with the assumptions of parametric statistics. The authors identified three multivariate outliers whose data were deleted from the analysis, and one univariate outlier whose data point was adjusted by substituting a score 1 unit larger than the next most extreme score in the distribution. Removing and adjusting outliers had no impact on the correlations among the variables in the model. Examination of the scatter plot for self-discrepancies in agency and depressive symptoms identified that the overwhelming majority of participants ( $n = 233$ ; 93%) reported they were not as agentic as their ideal, consistent with the authors' model. There was no theoretical reason to believe that perceiving oneself as too agentic would be associated with depressive symptoms, and given the small number of participants with self-discrepancies in this direction ( $n = 18$ ; 7%), the authors were not able to test this possibility empirically. Therefore, the latter participants were removed from Sample A. Analyses were run on the data from the remaining 233 participants.

#### *Correlations Among the Study Variables*

The means and standard deviations on the study variables for both samples are reported in Table 2. The zero-order correlations among the study variables for both samples are reported in Table 3. As hypothesized, each of the variables correlated significantly and in the expected direction with depressive symptoms. Depressive symptoms were associated with higher

levels of unmitigated communion, self-discrepancies in agency, bullying, and interpersonal behavior in the cold-submissive sector of the interpersonal circle. Depressive symptoms were also associated with low levels of agency.

All three octants in the cold-submissive sector of the CLOIT-R were associated with depressive symptoms. The octants also correlated significantly with each other. The authors determined which of the octants was uniquely associated with depressive symptoms by constructing a multiple regression equation to predict depressive symptoms from the three octants. The equation was significant,  $F(3, 226) = 19.45, p < .001$ . Inspection of the  $t$  values indicated that only unassured-submissive interpersonal behavior contributed uniquely to the prediction of depressive symptoms ( $\beta = .37, p < .01$ ). The model (see Figure 1) to be tested was modified accordingly.

### *Analysis of the Model*

The adequacy of the model was assessed using the Structural Equation Modeling (SEM) package, Analysis of Moments Structures (AMOS; Arbuckle, 1994). Four fit indices were examined: chi-square ( $\chi^2$ ), Comparative Fit Index (CFI), the Expected Cross Validation Index (ECVI), and the Root Mean Square Error of Approximation (RMSEA).

The chi-square statistic ( $\chi^2$ ) is a measure of absolute fit (Byrne, 1990). When the probability associated with the  $\chi^2$  value is greater than .05, the model fits the data. CFI (Bentler, 1990) values range from 0 to 1.00, with a value above 0.9 indicating an acceptable fit to the data and higher values indicating increasingly better fit.

The ECVI evaluates the likelihood of cross-validation. The ECVI for the model being tested is compared with that of the "independence model" and the "saturated model." The independence model stipulates complete independence among the variables in the model, thus representing a baseline level of fit that any model is expected to exceed. In contrast, the saturated model represents a perfect fit (Loehlin, 1992). The closer the ECVI value is to that of the saturated model, and the farther it is from that of the independence model, the greater the potential for model replication.

Finally, the RMSEA assesses how well the model would fit the population covariance matrix if it were available. Values less than 0.06 indicate a good fit (Hu & Bentler, 1999), values between 0.08 and 0.10 represent a mediocre fit, and values greater than 0.10 indicate a poor fit (Byrne, 1990).

Testing of the model revealed a very good degree of fit, with  $\chi^2(1) = .023, p = .880$ ; CFI = 1.0; ECVI = .176 (saturated model = .184; independence model = 2.228); RMSEA = .000. Examination of the standardized estimates identified four nonsignificant paths. Three of these were removed: from unmitigated communion to peer harassment, from agency to depressive symptoms, and from peer harassment to self-discrepancies in agency. The fourth path, from unmitigated communion to depressive symptoms, approached significance, and given the exploratory nature of the study and the plan to retest the model in a second sample, this path was left in. The respecified model showed a good degree of fit to the data, with  $\chi^2(4) = 2.769, p = .597$ ; CFI = 1.0; ECVI = .161 (saturated model = .184; independence model = 2.228); RMSEA = .000.

## **Sample B—Validating the Model With the Data From the Remaining 254 Participants**

### *Data Screening*

Four multivariate outliers were identified whose data were deleted from the analyses. Two univariate outliers, both on ideal agency, were handled by raising their values to 1 below the next largest value. Again, only 13 participants indicated that ideally they wanted to be less agentic, and these participants' data were deleted. The final sample consisted of 237 participants.

### *Test of the Respecified Model*

The respecified model did not fit as well as it had in Sample A,  $\chi^2(4) = 10.926, p = .027$ ; CFI = .984; ECVI = .196 (saturated model = .183; independence model = 2.068); RMSEA = .087. However,  $\chi^2$  is affected by sample size and it is more difficult to obtain model fit with larger samples (Byrne, 1990). Kline's (1998) procedure for determining  $\chi^2$  significance in large samples (i.e.,  $\chi^2/\text{degrees of freedom}$ ) yielded a value less than 3 ( $10.926/4 = 2.73$ ), which suggests the data fit the model. The RMSEA is not under .06 but falls in the range between .08 and .1, demonstrating a mediocre fit (Byrne, 1990). The CFI is well above .90 indicating a good fit. Finally, the ECVI value indicates a good fit.

The final model is shown in Figure 2 with path coefficients for Sample B in parentheses. Considering only the paths that are reliable because they were

**Table 2.** Means and Standard Deviations of Variables for Samples A and B and Comparison

| Measure                         | Sample A <sup>a</sup> |           | Sample B |           | <i>t</i> |
|---------------------------------|-----------------------|-----------|----------|-----------|----------|
|                                 | <i>M</i>              | <i>SD</i> | <i>M</i> | <i>SD</i> |          |
| 1. Agency                       | 15.09                 | 3.84      | 15.72    | 3.88      | 1.78     |
| 2. Unmitigated communion        | 20.25                 | 6.60      | 20.22    | 6.11      | 0.06     |
| 3. OBVQ-R                       | 11.16                 | 9.29      | 10.64    | 9.05      | 0.55     |
| 4. Ideal agency                 | 20.79                 | 2.53      | 21.39    | 2.21      | 1.29     |
| 5. Agency discrepancy           | 6.02                  | 3.96      | 5.67     | 3.95      | 1.02     |
| 6. CLOIT 3 Cold/Hostile         | 1.06                  | 2.00      | 1.11     | 2.10      | 0.44     |
| 7. CLOIT 4 Detached/Inhibited   | 2.04                  | 2.92      | 2.33     | 2.90      | 1.05     |
| 8. CLOIT 5 Unassured/Submissive | 3.33                  | 3.59      | 3.18     | 3.56      | 0.50     |
| 9. CES-D                        | 17.74                 | 6.91      | 16.61    | 6.69      | 1.78     |

Note: 1. Agency from the Extended Personal Attributes Questionnaire (EPAQ). 2. Unmitigated Communion from the Unmitigated Communion Scale. 3. Victim scale of the Olweus Bully/Victim Questionnaire-Revised. 4. Ideal agency from revised EPAQ. 5. Agency discrepancy = Ideal minus Actual agency. 6-8. Three octants from the Checklist of Interpersonal Transactions-Revised (for ease of comparison, means are given on untransformed values). 9. Center for Epidemiological Studies-Depression Scale-Short Form.

a. Sample A is composed of 254 randomly selected participants from the overall sample of 508. Sample B is composed of the remaining 254 participants.

**Table 3.** Correlations Among Variables (Pearson Coefficients)

|           | 1     | 2     | 3     | 4    | 5     | 6    | 7     | 8     | 9    |
|-----------|-------|-------|-------|------|-------|------|-------|-------|------|
| 1. CES-D  | 1.0   | -.36* | .30*  | .05  | .38*  | .29* | .30*  | .40*  | .26* |
| 2. Agency | -.50* | 1.0   | -.22* | .26* | -.84* | -.16 | -.44* | -.50* | -.01 |
| 3. UnCm   | .27*  | -.17  | 1.0   | .04  | .24*  | .09  | .19*  | .30*  | .12  |
| 4. IdAg   | .09   | .25*  | .08   | 1.0  | .32*  | -.01 | -.07  | .02   | -.06 |
| 5. AgDis  | .53*  | -.82* | .21*  | .35* | 1.0   | .16  | .39*  | .50*  | -.02 |
| 6. C/H-3  | .33*  | -.22* | -.01  | .11  | .28*  | 1.0  | .41*  | .32*  | .09  |
| 7. D/I-4  | .38*  | -.39* | .13   | -.03 | .36*  | .43* | 1.0   | .51*  | .07  |
| 8. U/S-5  | .51*  | -.55* | .27*  | -.12 | .47*  | .25* | .54*  | 1.0   | .16  |
| 9. OBVQ-R | .32*  | -.23* | .07   | .04  | .25*  | .22* | .26*  | .26*  | 1.0  |

Note: Values below the diagonal are for Sample A. Values above the diagonal are for Sample B. Sample A is composed of 254 randomly selected participants from the overall sample of 508. Sample B is composed of the remaining 254 participants. 1. Center for Epidemiological Studies-Depression Scale-Short Form. 2. Agency from the Extended Personal Attributes Questionnaire (EPAQ). 3. Unmitigated Communion from the Unmitigated Communion Scale. 4. Ideal agency from revised EPAQ. 5. Agency discrepancy = Ideal minus Actual agency. 6. Cold/Hostile octant from the Checklist of Interpersonal Transactions-Revised (CLOIT-R) (logarithm transformation). 7. Detached/Inhibited octant from the CLOIT-R (logarithm transformation). 8. Unassured/Submissive octant from the CLOIT-R (logarithm transformation). 9. Victim scale of the Olweus Bully/Victim Questionnaire-Revised.

\* $p < .006$ .

significant in both samples, the final model indicates that, in gay men who are less agentic than their ideal, agency and unmitigated communion are not directly related to depression. Instead, less agentic men reported greater self-discrepancies in agency, which in turn predicted higher levels of depressive symptoms. In addition, less agentic men and those who focused more on the needs of others reported more unassured-submissive interpersonal behavior, which in turn predicted higher levels of depression. Peer harassment was associated both directly with depressive symptoms and indirectly through unassured-submissive interpersonal behavior.

## Discussion

The goal of this study was to determine whether the gender-related personality traits of agency and unmitigated communion are associated with depressive symptoms in gay men, and to explore three potential mediators of these associations: self-discrepancies in agency, cold-submissive interpersonal behavior, and a history of peer harassment in adolescence. Only those associations that are reliable because they were replicated across samples will be discussed.

At the level of the zero-order correlations, these results replicate those of previous research. Higher

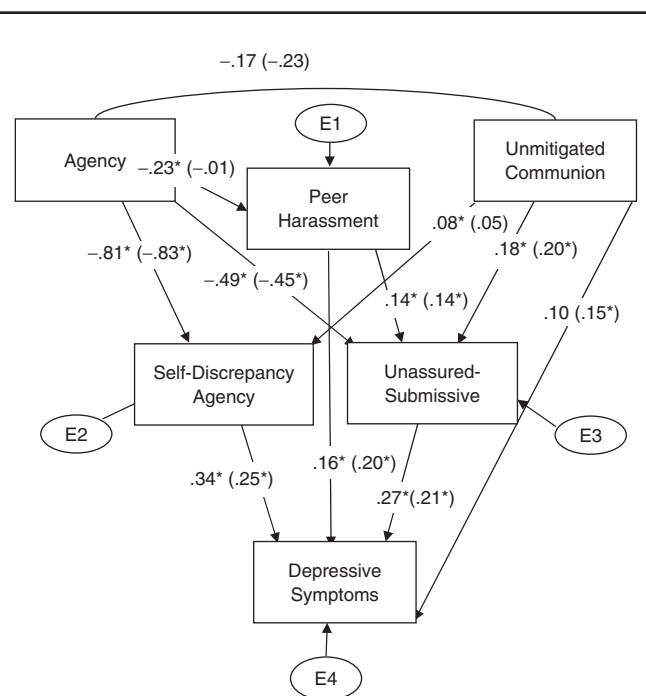


Figure 2. Respecified model with path values for both Samples A and B.

Note: Path coefficient for sample B in parentheses; \* indicates significance at  $p < .05$ . E1 to E4 are error terms signifying the existence of variability aside from what the variables in the model can explain.

levels of depressive symptoms were associated with lower levels of agency, a finding that has been reported previously using the historically related construct of masculinity, both in the general population (Whitley, 1984) and in two samples of gay men (Carlson & Baxter, 1984; Carlson & Steuer, 1985). Thus, less agentic gay men also are more depressed. However, the association between agency and depressive symptoms was mediated by self-discrepancies in agency. Thus, gay men who were less agentic also tended to perceive themselves as insufficiently agentic, and it was this self-discrepancy that was associated with feelings of depression.

This finding mirrors the results from general samples of college students (Grimmell & Stern, 1992), particularly for women (Grimmell, 1998). Grimmell (1998) speculated that self-discrepancies in personality traits characterized as masculine are likely to be highly salient among female college students because an academic setting draws attention to such instrumental traits as independence and self-confidence. Self-discrepancies in agency also may be highly salient for gay men because they are caught in an inherent contradiction: while they value masculinity

(e.g., Bailey et al., 1997), they perceive themselves as more androgynous or feminine than do heterosexual men (Zucker & Bradley, 1995). Not surprisingly, many gay men experience self-discrepancies in agency. In this sample, the overwhelming majority of men wanted to be more agentic than they perceived themselves to be.

Depressive symptoms were associated with unmitigated communion, a result that mirrors previous findings in the general population (Helgeson & Fritz, 1999). Thus, gay men who reported putting the needs of others ahead of their own were more depressed. Again this link was mediated, in this case by unassured-submissive interpersonal behavior, a variable that has been linked previously to depression in a range of samples (e.g., Whiffen, Aube, et al., 2000). Thus, gay men who put the needs of others ahead of their own and behave in unassured-submissive ways in close relationships may increase their risk for depressive symptoms. This finding is consistent with that reported by Fritz and Helgeson (1998). In the present study, the link between unassured-submissive behavior and agency was stronger than the link with unmitigated communion. This suggests that in gay men this interpersonal style is more strongly related to low agency than to high levels of unmitigated communion.

Taken together, these findings suggest that gay men who are less agentic and high in unmitigated communion are at risk for depressive symptoms, in part because they do not meet self-standards about agency and in part because they behave in unassured-submissive ways in close relationships. This finding is consistent with the results of an empirical study of gender role conflict in gay men. In that study, gay men who experienced less conflict about expressing emotions and sharing affection tended to be less depressed (Simonsen, Blazina, & Watkins, 2000). Gay men are less likely to conform to traditional gender-related personality traits than are heterosexual men, while at the same time valuing masculinity, a contradiction that may explain in part why they are at an elevated risk for depressive symptoms.

A positive association between recollected bullying during early adolescence and depressive symptoms in adulthood was found, as was reported previously in both general (Olweus, 1993) and gay (Rivers, 2001) samples of men. Bullying was associated both directly with depressive symptoms and indirectly, through unassured-submissive behavior. Interpersonal theory predicts that unassured-submissive behavior will pull for such dominant-hostile behavior as criticism in

interaction partners (Kiesler, 1983). Expressed criticism, particularly in romantic relationships, is strongly predictive of depression in the person to whom the criticism is directed (Coiro & Gottesman, 1996). Thus, a history of bullying may predispose gay men to interact in ways that set them up for further harassment.

In addition, it is possible that unassured-submissive behavior reflects an internal experience of shame. Andrews (1998) proposed that shame is an emotion associated with subordination and defeat, and that it results specifically from being victimized. The finding that unassured-submissive behavior partially mediates the association between bullying and adult depressive symptoms may be consistent with other research that suggests that shame mediates the link between childhood abuse and depressive symptoms (Andrews, 1995). The role of shame in the experience of gay men has been explored conceptually (Kaufman & Raphael, 1996) but has not been assessed empirically.

Peer harassment also was associated directly with depressive symptoms. It is possible that this association is mediated by factors not examined in the present study. For instance, Hershberger and D'Augelli (1995) reported that family support and self-acceptance in gay youth partially mediated the association between peer harassment and mental health. Similarly, Waldo, Hesson-McInnis, and D'Augelli (1998) reported that self-esteem mediated the impact of victimization on mental health in gay youth. Uncovering other mediators, or alternatively, resiliency factors, could be an important step in reducing the negative psychological outcomes that result from peer harassment.

The model proposed in this study was based on research conducted primarily with participants whose sexual orientation was unknown. Thus, it is worthwhile considering what aspects of the model help to understand depression generally and what factors seem to be particularly relevant to depression in gay men. One way of doing so is to compare the strength of the associations obtained with those found in previous research. The strength of the associations between depressive symptoms and peer harassment, unmitigated communion, and unassured-submissive behavior is similar to that published for general samples of men and women. In contrast, the associations between depressive symptoms and both agency and self-discrepancies in agency were stronger in the present study than has been reported in general samples. Thus, both low agency and high self-discrepancies in

agency may be unique to the development of depressive symptoms in gay men.

In addition to the expected results, this study produced a couple of unexpected results. For instance, self-discrepancies in agency did not mediate the association between peer harassment and depressive symptoms. It was hypothesized that being targeted for harassment would influence perceptions of the self as sufficiently masculine, but there was no consistent support for this prediction in the present study. Also in contrast to what was hypothesized, peer harassment did not mediate the associations between the gender-related personality traits and depressive symptoms. Given that boys fear being labeled gay (Phoenix et al., 2003) and that previous researchers have reported a link in gay youth between gender-role typicality and harassment (D'Augelli et al., 2002; Waldo et al., 1998), it was hypothesized that low levels of agency and high levels of unmitigated communion would be associated with peer harassment.

Several possible explanations for the null results can be considered. Most significantly, agency and unmitigated communion may not capture the way gender nonconformity is displayed by boys targeted for peer harassment. A measure of gender-related behaviors may have shown this association. For instance, D'Augelli et al. (2002) developed a measure to capture how often in childhood one thought or acted in a manner typically associated with the opposite sex. Behaviors such as not liking sports or having feminine interests may be more likely to result in boys being targeted for peer harassment.

It also is possible that this study did not find the expected associations because it was assumed that the level of agency during adulthood would reflect the adolescent's level of agency. Many gay men undergo a process of becoming increasingly masculine in adulthood (Bailey et al., 1997). In addition, research on gender-related personality traits suggests they may not be stable from adolescence to adulthood (Parker & Aldwin, 1997). Clearly, longitudinal research in this area would be beneficial. Finally, the authors had to eliminate items from the agency scale because the item set lacked internal consistency in this sample. Although eliminating the items increased reliability, this procedure also may have compromised the validity of the measure.

These findings have implications for the treatment of depressive symptoms in gay men, a subject about which very little is written. Of the factors examined in the present study, the most important topic to

discuss would appear to be the client's acceptance of the degree to which they are agentic. Shernoff (1998) argued that chronic low-grade depression in gay men seeking therapy can be related to childhood feelings of being different or bad. Shernoff offered a process for retelling life stories and externalizing homophobia through narrative exercises. Such a process also could be used to externalize fears and negative judgments about gender-related personality traits.

In addition, it may be important to examine patterns of interpersonal behavior characterized as unassured-submissive, and their sources in gender-related personality traits and peer harassment. Finally, given the high percentage of gay men who reported peer harassment in adolescence, it is important to inquire about such harassment whenever a gay man requests treatment for depression.

This study has several methodological limitations. Although causal modeling statistical techniques were used, the data were cross-sectional, so it can only be concluded that the findings are consistent with the causal model proposed. For instance, the placement of unassured-submissive behavior between peer harassment and depressive symptoms was based on Ingram et al.'s (1998) model, but it also is possible that their order could be reversed, with unassured-submissive behavior predicting peer harassment. Longitudinal data are needed to determine whether the variables are ordered causally in the manner proposed here.

Second, as in most surveys with participants who identify as gay, this was not a random sample. However, the authors believe that by conducting the study over the Internet, they achieved a more representative sample of gay men than is often the case. A large number of gay men participated in the study, and they were diverse in relationship status, age, income, and their identification as a visible minority. The sample was restricted to those who had access to the Internet. However, in Canada, this is not a strong limitation as 61% of Canadian households have at least one regular Internet user (Statistics Canada, 2002). Finally, the participants' demographics suggested that the education level may be higher than the general population. This is not an uncommon finding in studies of gay men (see, for example, Solarz, 1999) and suggests that those who are prepared to identify as gay and respond to a survey may have more education and perhaps more economic resources.

The vast majority of men in our sample reported being less agentic than their ideal. However, the opposite was true for a few men, a reminder that although there is a tendency to speak of "gay men" as

a group, there is diversity within that group. Some of the men who reported being more agentic than their ideal also reported depressive symptoms, and future studies could explore further the nature of their distress. As well, comparative studies with heterosexual and bisexual men and women would help to determine if the associations observed in the present study differ from those reported in other groups.

## References

- Andrews, B. (1995). Bodily shame as a mediator between abusive experiences and depression. *Journal of Abnormal Psychology, 104*, 277-285.
- Andrews, B. (1998). Shame and childhood abuse. In P. Gilbert & B. Andrews (Eds.), *Shame: Interpersonal behavior, psychopathology, and culture* (pp. 176-190). New York: Oxford University Press.
- Arbuckle, J. L. (1994). AMOS: Analysis of moment structures. *Psychometrika, 59*, 135-137.
- Bailey, J. M., Kim, P. Y., Hills, A., & Linsenmeier, J. A. W. (1997). Butch, femme, straight acting? Partner preferences of gay men and lesbians. *Journal of Personality and Social Psychology, 73*, 960-973.
- Bentler, P. (1990). Comparative fit indexes in structural models. *Psychological Bulletin, 107*, 238-246.
- Bond, L., Carlin, J., Thomas, L., Rubin, K., & Patton, G. (2001). Does bullying cause emotional problems? A prospective study of young teenagers. *British Medical Journal, 323*, 480-485.
- Byrne, B. (1990). *Structural equation modeling with LISREL, PRELIS and SIMPLIS: Basic concepts, applications and programming*. Hillsdale, NJ: Lawrence Erlbaum.
- Carlson, H. M., & Baxter, L. A. (1984). Androgyny, depression, and self-esteem in Irish homosexual males and females. *Sex Roles, 10*, 457-467.
- Carlson, H. M., & Steuer, J. (1985). Age, sex-role categorization, and psychological health in American homosexual and heterosexual men and women. *The Journal of Social Psychology, 125*, 203-211.
- Cochran, S., & Rabinowitz, F. E. (2003). Gender-sensitive recommendations for assessment and treatment of depression in men. *Professional Psychology: Research & Practice, 34*, 132-140.
- Coiro, M. J., & Gottesman, I. I. (1996). The diathesis and/or stressor role of expressed emotion in affective illness. *Clinical Psychology, Science & Practice, 3*, 310-322.
- Cox, S., & Gallois, C. (1996). Gay and lesbian identity development: A social identity perspective. *Journal of Homosexuality, 30*, 1-30.
- D'Augelli, A. R. (1998). Developmental implications of victimization of lesbian, gay, and bisexual youths. In G. M. Herek (Ed.), *Stigma and sexual orientation: Understanding prejudice against lesbians, gay men, and bisexuals. Psychological perspectives on lesbian and gay issues, Vol. 4.* (pp. 187-210). Thousand Oaks, CA: Sage.

- D'Augelli, A. R., Pilkington, N. W., & Hershberger, S. L. (2002). Incidence and mental health impact of sexual orientation victimization of lesbian, gay, and bisexual youths in high school. *School Psychology Quarterly*, 17, 148-167.
- Fairbrother, N., & Moretti, M. (1998). Sociotropy, autonomy, and self-discrepancy: Status in depressed, remitted depressed, and control participants. *Cognitive Therapy and Research*, 22, 279-296.
- Fritz, H. L., & Helgeson, V. S. (1998). Distinctions of unmitigated communion from communion: Self-neglect and over-involvement with others. *Journal of Personality and Social Psychology*, 75, 121-140.
- Gosling, S. D., Vazire, S., Srivastava, S., & John, O. P. (2004). Should we trust web-based studies? A comparative analysis of six preconceptions about internet questionnaires. *American Psychologist*, 59, 93-104.
- Gotlib, I. H., & Hammen, C. L. (1992). *Psychological aspects of depression: Toward a cognitive-interpersonal integration*. Toronto: John Wiley & Sons.
- Gotlib, I. H., & Whiffen, V. E. (1991). The interpersonal context of depression: Implications for theory and research. *Personal Relationships*, 3, 177-206.
- Grimmell, D. (1998). Effects of gender-role self-discrepancy on depressed mood. *Sex Roles*, 39, 203-214.
- Grimmell, D., & Stern, G. S. (1992). The relationship between gender role ideals and psychological well-being. *Sex Roles*, 27, 487-497.
- Hawker, D., & Boulton, M. J. (2000). Twenty years' research on peer victimization and psychosocial maladjustment: A meta-analytic review of cross-sectional studies. *Journal of Child Psychology & Psychiatry & Allied Disciplines*, 41, 441-455.
- Helgeson, V. (1993). Implications of agency and communion for patient and spouse adjustment to a first coronary event. *Journal of Personality and Social Psychology*, 64, 807-816.
- Helgeson, V. (1994). Relation of agency and communion to well-being: Evidence and potential explanations. *Psychological Bulletin*, 116, 412-428.
- Helgeson, V., & Fritz, H. L. (1999). Unmitigated agency and unmitigated communion: Distinctions for agency and communion. *Journal of Research in Personality*, 33, 131-158.
- Herrell, R., Goldberg, J., True, W., Ramakrishnan, V., Lyons, M., Eisen, S., et al. (1999). Sexual orientation and suicidality: A co-twin control study in adult men. *Archives of General Psychiatry*, 56, 867-874.
- Hershberger, S. L., & D'Augelli, A. R. (1995). The impact of victimization on the mental health and suicidality of lesbian, gay and bisexual youths. *Developmental Psychology*, 31, 65-74.
- Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, 94, 319-340.
- Higgins, E. T. (1999). When do self-discrepancies have specific relations to emotions? The second-generation question of Tangney, Niedenthal, Covert, and Barlow (1998). *Journal of Personality and Social Psychology*, 77, 1313-1317.
- Higgins, E. T., Bond, R. N., Klein, R., & Strauman, T. (1986). Self-discrepancies and emotional vulnerability: How magnitude, accessibility, and type of discrepancy influence affect. *Journal of Personality and Social Psychology*, 51, 5-15.
- Hu, L., & Bentler, P. M. (1999). Cut-off criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 1-55.
- Ingram, R. E., Miranda, J., & Segal, Z. V. (1998). *Cognitive vulnerability to depression*. New York: Guilford.
- Kaufman, G., & Raphael, L. (1996). *Coming out of shame: Transforming gay and lesbian lives*. New York: Doubleday.
- Kiesler, D. (1983). The 1982 Interpersonal Circle: A taxonomy for complementarity in human transactions. *Psychological Review*, 90, 185-214.
- Kiesler, D. (1984). *Checklist of Interpersonal Transactions (CLOIT) and Checklist of Psychotherapy Transactions (CLOPT)*. Richmond: Virginia Commonwealth University.
- Kiesler, D., Goldston, C. S., & Schmidt, J. A. (1991). *Manual for the Checklist of Interpersonal Transactions-Revised (CLOIT-R)*. Richmond: Virginia Commonwealth University.
- Kline, R. B. (1998). *Principles and practice of structural equation modeling*. New York: Guilford.
- Loehlin, J. (1992). *Latent variable models*. Hillsdale, NJ: Lawrence Erlbaum.
- Markus, H., & Nurius, P. (1986). Possible selves. *American Psychologist*, 41, 954-969.
- Oliver, L. E., & Whiffen, V. E. (2003). Perceptions of parents and partners and men's depressive symptoms. *Journal of Social and Personal Relationships*, 20, 621-635.
- Olweus, D. (1991). Bully/victim problems among schoolchildren: Basic facts and effects of a school based intervention program. In D. J. Pepler & K. H. Rubin (Eds.), *The development and treatment of childhood aggression* (pp. 411-448). Hillsdale, NJ: Lawrence Erlbaum.
- Olweus, D. (1993). Victimization by peers: Antecedents and long-term outcomes. In K. H. Rubin & J. B. Asendorpf (Eds.), *Social withdrawal, inhibition and shyness in childhood* (pp. 315-342). Hillsdale, NJ: Lawrence Erlbaum.
- Olweus, D. (1994). Annotation: Bullying at school: Basic facts and effects of a school based intervention program. *Journal of Child Psychology and Psychiatry*, 35, 1171-1190.
- Olweus, D. (1996). *The Revised Olweus Bully/Victim Questionnaire*. Bergen, Norway: Mimeo, Research Centre for Health Promotion, University of Bergen.
- Parker, R. A., & Aldwin, C. M. (1997). Do aspects of gender identity change from early to middle adulthood? Disentangling age, cohort and period effects. In M. E. Lachman & J. B. James (Eds.), *Multiple paths of midlife development. Studies on successful midlife development* (pp. 67-107). The John D. and Catherine T. MacArthur Foundation series on mental health and development. Chicago, IL: University of Chicago Press.
- Phoenix, A., Frosh, S., & Pattman, R. (2003). Producing contradictory masculine subject positions: Narratives of threat, homophobia and bullying in 11-14 year old boys. *Journal of Social Issues*, 59, 179-195.
- Pilkington, N. W., & D'Augelli, A. R. (1995). Victimization of lesbian, gay, and bisexual youth in community settings. *Journal of Community Psychology*, 23, 34-56.
- Pillard, R. C. (1991). Masculinity and femininity in homosexuality: "Inversion" revisited. In J. C. Gonsiorek &

- J. D. Weinrich (Eds.), *Homosexuality: Research implications for public policy* (pp. 32-43). London: Sage.
- Radloff, L. S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1, 385-401.
- Rivers, I. (2001). The bullying of sexual minorities at school: Its nature and long-term correlates. *Educational and Child Psychology*, 18, 32-46.
- Sacco, W. P. (1999). A social-cognitive model of interpersonal processes in depression. In T. Joiner & J. Coyne (Eds.), *The interactional nature of depression: Advances in interpersonal approaches* (pp. 329-362). Washington, DC: American Psychological Association.
- Sandfort, T. G. M., de Graaf, R., Bijl, R. V., & Schnabel, P. (2001). Same-sex sexual behavior and psychiatric disorders: Finding from the Netherlands Mental Health Survey and Incidence Study. *Archives of General Psychiatry*, 58, 85-91.
- Santor, D., & Coyne, J. C. (1997). Shortening the CES-D to improve its ability to detect cases of depression. *Psychological Assessment*, 9, 233-243.
- Scott, L., & O'Hara, M. W. (1993). Self-discrepancies in clinically anxious and depressed university students. *Journal of Abnormal Psychology*, 102, 282-287.
- Shernoff, M. (1998). Individual practice with gay men. In G. P. Mallon (Ed.), *Foundations of social work practice with lesbian and gay persons* (pp. 77-103). Binghampton, UK: Haworth.
- Simonsen, G., Blazina, C., & Watkins, C. E. (2000). Gender role conflict and psychological well-being among gay men. *Journal of Counselling Psychology*, 47, 85-89.
- Solarz, A. L. (1999). *Lesbian health: Current assessment and directions for the future*. Washington, DC: National Academy Press.
- Spence, J. T., & Buckner, C. E. (2000). Instrumental and expressive traits, trait stereotypes, and sexist attitudes: What do they signify? *Psychology of Women Quarterly*, 24, 44-62.
- Spence, J. T., Helmreich, R. L., & Holahan, C. K. (1979). Negative and positive components of psychological masculinity and femininity and their relationships to self-reports of neurotic and acting out behaviors. *Journal of Personality and Social Psychology*, 37, 1673-1682.
- Statistics Canada. (2002). *Household Internet Use Survey*. CANSIM, table 358-0002 Catalogue no. 56F004MIE. Ottawa: Statistics Canada.
- Tabachnick, B., & Fidell, L. (1996). *Using multivariate statistics* (3rd ed.). New York: Harper Collins.
- Tangney, J. P., Niedenthal, P. M., Covert, M. V., & Barlow, D. H. (1998). Are shame and guilt related to distinct self-discrepancies? A test of Higgins' (1987) hypotheses. *Journal of Personality and Social Psychology*, 75, 256-268.
- Tracey, T. J. G., & Schneider, P. L. (1995). An evaluation of the circular structure of the Checklist of Interpersonal Transactions and the Checklist of Psychotherapy Transaction. *Journal of Counselling Psychology*, 42, 496-507.
- Waldo, C. R., Hesson-McInnis, M. S., & D'Augelli, A. R. (1998). Antecedents and consequences of victimization of lesbian, gay, and bisexual young people: A structural model comparing rural university and urban samples. *American Journal of Community Psychology*, 26, 307-334.
- Whiffen, V. E., Aube, J., Thompson, J. M., & Campbell, T. L. (2000). Attachment beliefs and interpersonal contexts associated with dependency and self-criticism. *Journal of Social and Clinical Psychology*, 19, 184-205.
- Whiffen, V. E., Thompson, J. M., & Aube, J. (2000). Mediators of the link between childhood sexual abuse and adult depressive symptoms. *Journal of Interpersonal Violence*, 15, 1100-1120.
- Whitley, B. E., Jr. (1984). Sex-role orientation and psychological well-being: Two meta-analyses. *Sex Roles*, 12, 207-225.
- Zucker, K. J., & Bradley, S. J. (1995). *Gender identity disorder and psychosexual problems in children and adolescents*. New York: Guilford.