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# Social Support and Well-Being Among Lesbian and Heterosexual Women: A Structural Modeling Approach

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*The authors examined the types of social support that lesbian and heterosexual women receive from their social networks and the link between support and psychological well-being. Participants were White, middle-class, single and coupled women. Using Robert Weiss's typology of social provisions, the authors found that lesbian and heterosexual women reported receiving equivalent overall amounts of support from their social networks. Relationship status was related to well-being; coupled women reported greater well-being than did single women. Using structural equation modeling, the authors found a strong association between social support and psychological well-being for all women. Beyond this general association, lesbian women's well-being was also associated with reassurance-of-worth support, whereas heterosexual women's well-being was linked with guidance support. These results support the usefulness of latent variable models for examining social support and demonstrate that lesbians, like their heterosexual counterparts, benefit from supportive networks.*

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Studies investigating social support have demonstrated a link between perceived availability of support and psychological well-being (Cohen & Wills, 1985). However, such conclusions have been based primarily on the lives of heterosexuals. Thus models of social support derived from this literature most likely characterize lives structured around male/female bonds. To broaden the understanding of social support and well-being, it would be valuable to compare heterosexual patterns to those of women such as lesbians, whose lives do not center around male partners. Such a comparison would also fill a gap in the existing social support literature, which ignores the experiences of lesbians, and would test the applicability of current conceptual models of social sup-

port to lesbians. The present study provides a systematic comparison of the social support lesbian and heterosexual women reported receiving and investigates the links between social support and psychological well-being in these two groups of women.

Several typologies of social support have been developed. Weiss (1974) identified six categories that he termed the *provisions of social support*. *Attachment* support, supplied primarily by close and committed relationships (e.g., spouse, close friend), provides an individual with a sense of security through emotional closeness and caring. *Social integration* provides a sense of belonging to a group and sharing activities and interests with friends, coworkers, neighbors, and so forth. *Reassurance of worth* provides feelings of competence from relationships with people who know and appreciate the individual's abilities and social roles. *Guidance* support is provided by relationships with trustworthy people who can offer advice or information. *Reliable-alliance* support usually comes from family members or other close relationships that provide tangible assistance. Finally, the *opportunity for nurturance* is a specialized form of support that adults experience when they have responsibilities such as caring for a child that create a sense of being needed.

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Together, these six provisions offer a comprehensive framework for assessing social support that parallels other widely used classification schemes (see reviews by Cutrona & Russell, 1987, 1990; Wortman & Dunkel-Schetter, 1987).

The first goal of this research was to compare the social support experiences of lesbian and heterosexual women. Lesbian women have often been depicted as lonely and socially isolated, an image evoked by the title of Hall's (1928) classic novel about lesbian life, *The Well of Loneliness*. Based on such depictions, one might presume that lesbian women receive less support than do heterosexual women. In recent years, however, social science research has seriously challenged this negative stereotype. Studies have shown, for example, that many lesbians are in committed dyadic relationships and that lesbian couples are similar to heterosexual couples in measures of love and relationship quality (see reviews by Kurdek, 1988; Peplau, 1991). Rejection by the larger society may instead lead lesbians to create their own alternative social communities, with active and supportive networks. Furthermore, given the common gender socialization of all American women to emphasize love and relationships (Cancian & Gordon, 1988), lesbians may also be energetic in creating close relationships. Whether lesbian and heterosexual women actually differ in the receipt of social support is an unexamined question.

Different types of support may be of special importance to different groups (Wortman & Dunkel-Schetter, 1987). Whereas a single mother may benefit most from child care assistance, a new graduate student might benefit most from academic guidance. Similarly, there may be differences between the most salient social needs of heterosexual women, whose social life typically involves male companionship and whose lifestyle is socially approved, and lesbians, whose social life does not typically include male partners and whose lifestyle is highly stigmatized. One might speculate, for instance, that lesbian women might be more eager than heterosexual women to receive social support for their personal identity and lifestyle, what Weiss (1974) would deem reassurance of worth. On the other hand, one could argue an opposite position—that heterosexual women are more dependent on others (notably men) for their sense of identity and personal worth than are lesbians. Similarly, one could argue that the social stigma of homosexuality may estrange many lesbians from their families, making reliable alliance less available. Alternatively, one might speculate that a lesbian, especially those in large urban communities, may create new alternative "families" to provide assistance if she cannot count on her family of origin. Given the lack of scientific research on lesbian women's experiences, there is no solid basis for making

specific predictions about the amounts of various types of social support received by lesbian and heterosexual women or the impact of different types of support on psychological well-being. This study contributes to providing an empirical basis for formulating specific hypotheses in the future.

The second research goal was to investigate whether a woman's relationship status affects the receipt of social support. Do coupled women receive more social support overall or more of each specific support provision than do single women? Previous research has suggested that intimate relationships are especially likely to provide social support (Gove, Hughes, & Style, 1983; Hobfoll, Nadler, & Lieberman, 1986). Intimate relationships often give the participants a feeling of being cared for, understood, and validated (Reis & Shaver, 1988). Reis and Shaver (1988) also found that among heterosexuals, being involved in a close relationship resulted in receiving more guidance and social integration. Thus we expected that regardless of sexual orientation, coupled women would report receiving greater amounts of attachment, social-integration, reassurance-of-worth, and guidance support than single women.

The third goal was to examine whether a woman's psychological well-being is affected by her sexual orientation and/or by her relationship status. Since the 1960s, more than 100 studies have shown that homosexual individuals fall into the normal range of psychological adjustment and that homosexuality bears no necessary association to psychological well-being (for reviews, see Garnets & Kimmel, 1991; Gonsiorek, 1982, 1991; Ross, Paulsen, & Stalstrom, 1988). Lesbian and heterosexual single women have been found to be equivalent in terms of psychological adjustment (Oberstone & Sukonek, 1976; Thompson, McCandless, & Strickland, 1971). Thus we hypothesized that lesbian and heterosexual women would not differ in levels of psychological well-being. In general, research has suggested that coupled individuals—typically indexed by marriage—are happier and better adjusted than single individuals (see Brehm, 1992, for a review). There is some evidence that this may be the case regardless of sexual orientation. In a study of both heterosexual and homosexual women, Kurdek and Schmitt (1987) found that individuals in a committed relationship were less distressed than those not in a relationship. Consequently, we predicted that regardless of sexual orientation, coupled women would score higher than single women on psychological well-being.

The fourth goal was to assess the association between receipt of social support and psychological well-being among lesbian and heterosexual women. In broad terms, is the relationship between social support and well-being equivalent for lesbian and heterosexual

women, or is this link stronger among one group than the other? Research with heterosexuals has found that greater levels of perceived support are associated with more positive psychological adjustment (Cohen & Syme, 1985; Cohen & Wills, 1985; Wortman & Dunkel-Schetter, 1987). Virtually no empirical studies of social support and well-being among lesbian women have been conducted. Kurdek (1988) found that greater social support was associated with reporting fewer symptoms of psychological distress among lesbians in committed relationships. Among a small sample of rural lesbians, women who were well integrated into a supportive social network reported being satisfied with their lives, their communities, and their support network (D'Augelli, Collins, & Hart, 1987). Thus we hypothesized that the association between social support and psychological well-being would be similar among lesbian and heterosexual women, with greater social support predicting better psychological adjustment. In addition, we investigated whether any of the specific support provisions were especially important to the well-being of lesbian and heterosexual women.

To pursue this goal, we needed an analytic strategy that could assess both the general component of social support common to all the support provisions and also the possible unique contribution to well-being of each specific provision. Structural equation modeling offers an appropriate method, enabling us to examine the impact of general social support (captured as a latent variable) and the unique impact the different social provisions have on well-being. This statistical approach is described in detail later in this article.

The final question was whether the link between social support and well-being was moderated by relationship status. Is the association between the receipt of social support and well-being greater among coupled women than it is among single women? We examined the correlation between social support and well-being separately among four groups: single and coupled lesbian and heterosexual women. Taken together, these questions provided the bases for a systematic examination of social support and psychological well-being among lesbians and heterosexual women.

## METHOD

This article is based on secondary analyses of a large questionnaire study of more than 600 lesbian and heterosexual women conducted in Southern California during the mid-1980s by Aura (1985). A total of 664 women (391 lesbians, 273 heterosexuals) were recruited through public notices, flyers, and announcements at meetings and social events in the Los Angeles area (e.g., Los Angeles Women's Chorus, local chapter of NOW).

For the purposes of this research, we categorized women as either coupled or single. We classified as coupled women who indicated that they were currently in a "primary couple relationship," which the questionnaire defined as a "love relationship, couple relationship, romantic relationship, sexual relationship, or partner relationship." We categorized women as single if they were not currently in a primary couple relationship. Thus the single category might include women who are dating casually, who have more than one romantic partner, or who have no intimate partner.

Although this is a relatively large sample, it is not representative of the entire population of lesbian or heterosexual women. Because we were interested in comparing the receipt of social support and its influence on well-being among lesbian and heterosexual women, we needed to minimize the variability of demographic and socioeconomic factors in our sample. From the available database, we sought to select a well-specified sample in which lesbian and heterosexual women were reasonably comparable in such background characteristics as ethnicity, age, employment status, and education and in such key features of their lifestyles as being a parent or having a primary partner. As a first step, we excluded women who indicated that they were bisexual and limited the sample to women who said they were lesbian or heterosexual. Given the constraints of the database, we then selected the largest group available: women who were White, currently employed, and not living with children. We restricted the sample to women between the ages of 20 and 50. To further increase comparability, we selected equal numbers of lesbian and heterosexual women, half of whom were in primary couple relationships and half of whom were single. Women were individually matched on age, education, and, for those in couple relationships, the length of their current relationships. The final sample consisted of 75 single lesbians, 75 coupled lesbians, 75 single heterosexuals, and 75 coupled heterosexuals.

*Background characteristics.* The mean age of the women in our sample was 31.0 (lesbian mean = 31.0,  $SD = 5.9$ ; heterosexual mean = 31.0,  $SD = 6.4$ ;  $t = .00$ ,  $ns$ ). On average, 32% of women had completed college (lesbians = 30%, heterosexuals = 34%),  $\chi^2(1) = .14$ ,  $ns$ . About 38% of the sample lived alone (lesbians = 41%, heterosexuals = 36%),  $\chi^2(1) = .51$ ,  $ns$ , 37% lived with a romantic partner (lesbians = 37%, heterosexuals = 36%),  $\chi^2(1) = .06$ ,  $ns$ , and 25% lived with other adults (lesbians = 22%, heterosexuals = 28%),  $\chi^2(1) = 1.02$ ,  $ns$ . All women were employed, but more lesbians reported working full-time than did heterosexual women (lesbians = 80%, heterosexuals = 64%),  $\chi^2(1) = 9.5$ ,  $p < .01$ . Responding to a question about "current social economic class," most women (52%) classified themselves as middle class (les-



bians = 46%, heterosexuals = 54%),  $\chi^2(5) = 5.6$ , *ns*, and there were no differences between the monthly incomes of lesbians (mean = \$1,605, *SD* = 998) and heterosexuals (mean = \$1,493, *SD* = 957; *t* = .99, *ns*). Because of the statistical similarity of lesbian and heterosexual women on these measures, these variables were not used as covariates in subsequent analyses.

Although the samples were very similar, differences emerged in marital and parenting experience. Lesbian women were more likely than heterosexual women to be "never married" (83% versus 56%, respectively),  $\chi^2(1) = 39.5$ ,  $p < .0001$ . Fewer lesbian women (2%) than heterosexual women (8%) had given birth or had legally adopted children,  $\chi^2(1) = 6.7$ ,  $p < .01$ . These variables were used as covariates in all analyses and were found to have no effect.

### Measures

Participants completed a 30-page questionnaire concerning their background characteristics, social relationships, and life experiences. The questionnaires for lesbian and heterosexual women were identical except for the wording of phrases referring to the gender of the woman's partner. Those parts of the questionnaire relevant to social support and well-being are described below.<sup>1</sup>

**Well-being.** The Index of General Affect was used to assess psychological well-being. This is the principal component of the Index of Well-Being developed by Campbell, Converse, and Rogers (1976). According to the authors, the index assesses both affective and cognitive evaluations of life satisfaction (p. 489). The index consists of eight semantic differential scales (7-point scales with labeled endpoints such as boring/interesting, enjoyable/miserable) for which respondents rate their "life at the present time." A well-being score was computed by averaging the eight items for a summary score ranging from 1 (*Low life satisfaction*) to 7 (*High life satisfaction*). In a very large population-based sample ( $N = 2,147$ ), Campbell and associates found that this measure had an internal reliability of .89 and accounted for 33% of the variance in overall life satisfaction. In the present sample, the Cronbach alpha for this index was .93.

**Social support.** Detailed questions developed by Aura (1985) assessed 18 specific types of social support, such as emotional intimacy, personal guidance, financial assistance, nurturance, and shared activities. In the questionnaire, each type of support was defined, and examples were given. The following is an illustration:

**EMOTIONAL INTIMACY:** This refers to sharing personal feelings with someone you trust and are close to. Examples include sharing feelings of sadness, joy, or anger; talking openly about feelings with another person; or expressing caring for each other.

Participants were asked a series of questions about each type of social support, including how important it was to them and how much of each type of support they received from specific people, such as their friends, relatives, and their total support network. The questionnaires completed by coupled women also asked how much of each type of support was received from their partners.

In our secondary analyses, we focused on the questions about the amount of support received from one's total support network. The woman's total network was defined in the questionnaire as "all the people with whom you have a relationship including your partner, friends, children, and relatives. This may include your in-laws, work associates, neighbors, or professional or skilled help if you have a personal relationship with these people." This question was asked for each of 18 types of social support. For example, one question was, "In sum, what is the overall *total amount* of emotional intimacy that you receive from your PERSONAL RELATIONSHIPS?" Responses were made on 7-point scales ranging from 1 (*None at all*) to 7 (*A very large amount*).

### Provisions of Social Support

Prior to our analyses of social support, we wanted to construct measures of support provisions closely resembling those defined by Weiss (1974). Using Weiss's definitions as a guide, we categorized the 18 support items into broader categories on an a priori basis. Because we did not have enough items to reliably construct an opportunity-for-nurturance provision, we classified the 18 items into five social provisions: attachment (including one item that assessed giving nurturance to someone else, either adult or child), social integration, reassurance of worth, guidance, and reliable alliance. To determine whether this categorization reliably reflected the five support provisions, we performed a confirmatory factor analysis (CFA) using EQS (Bentler, 1985, 1989). For this analysis, the items identified for each provision were each allowed to load on their respective provision (latent factor), factor variances were fixed at unity (for identification purposes), the latent support factors were allowed to correlate, and all hypothesized factor loadings were freely estimated.

The purpose of this analysis was to examine whether the items we had selected for each factor loaded significantly onto that factor and whether, taken together as a whole model, this categorization scheme was a good representation of the data. As a general rule, a model is said to fit the data if the *p* value associated with the chi-square statistic is greater than .05. Large sample sizes such as ours often preclude a nonsignificant chi-square (Newcomb, 1990). Consequently, the ratio of the chi-square statistic to the degrees of freedom ( $\chi^2:df$ ) and the

Comparative Fit Index (CFI; Bentler, 1990) are more appropriate indexes for evaluating the fit of a model with a large sample. The CFI ranges from 0 to 1; 0 reflects no fit, and 1 indicates a perfect fit. For the purpose of evaluating the present analyses, models with a  $\chi^2/df$  ratio that is less than 2:1 or with a CFI value of .95 or greater are considered good representations of the data.

The initial CFA model provided a moderate fit to the data,  $\chi^2(126) = 299.7$ ,  $p < .001$ , CFI = .92. However, inspection of LaGrange multiplier tests suggested that allowing specific residual error terms to correlate (seven pairs) would provide an even better fitting model,  $\chi^2(118) = 245.5$ ,  $p < .001$ , CFI = .95. Correlations between residual variables indicate shared error variance among the measured variables. These associations most likely reflect similar response effects between variables measured in similar formats. All hypothesized factor loadings of the items onto their respective factors were highly significant (all  $ps < .0001$ ). Thus, based on this analysis, the 18 support items were found to reliably represent the five latent factors of Weiss's (1974) social provisions (see Cutrona & Russell, 1987, for a similar analysis of Weiss's provisions conducted on 1,792 individuals). Based on these results, we constructed separate indexes for each provision by averaging the responses to items for each factor. These five indexes, along with reliability estimates (as determined by Cronbach alphas), are described below:<sup>2</sup>

Attachment refers to emotional closeness and sharing. It was assessed with three items concerning experiencing emotional intimacy, being supported, and being comforted by trusted others (lesbian sample = .78, heterosexual sample = .83).

Social integration describes a sense of belonging to a group that shares similar interests, values, and activities. It was assessed with four items concerning recreational activities, shared interests, celebration of special occasions, and a sense of community with others (lesbian sample = .77, heterosexual sample = .81).

Reassurance of worth occurs when an individual is recognized and valued for her competence and skills. It was assessed with three items about receiving respect and praise, having people know "the real you," and receiving support for behaviors that are nontraditional for women (lesbian sample = .76, heterosexual sample = .79).

Guidance refers to receiving advice or information from others. It was assessed by four items about receiving financial advice, guidance about work, advice about personal problems or concerns, and referrals or recommendations (e.g., about a mechanic or a lawyer; lesbian sample = .71, heterosexual sample = .80).

Reliable alliance involves knowing that others can be counted on for tangible assistance. It was assessed by four items about receiving financial assistance, other forms of help in completing tasks (e.g., help with moving furniture), and gifts or loans (e.g., the use of a truck; lesbian sample = .68, heterosexual sample = .71).

Total support was assessed by summing the five social provision indexes into a composite score (lesbian sample = .88, heterosexual sample = .92).

## RESULTS

Data analyses addressed four goals. First, we compared the amount of each of five types of social support received by lesbian and heterosexual women from their total network of social relations. Second, we investigated whether coupled women differed from single women in the amount of support they received. Third, we assessed the level of well-being among single and coupled lesbian and heterosexual women. Fourth, we examined the impact of receiving five types of social support on well-being among single and coupled lesbian and heterosexual women.

### *Types and Amount of Support Received*

To determine whether single and coupled heterosexual and lesbian women received equivalent amounts of social support, two analyses were performed. First, a two-way ANOVA with sexual orientation (heterosexual, lesbian) and relationship status (single, coupled) as the independent variables was performed on the measure of total support. Neither the two-way interaction,  $F(1, 298) = .71$ , nor the main effect for sexual orientation,  $F(1, 298) = .01$ , was significant. That is, lesbian and heterosexual women, regardless of their relationship status, did not differ on the total amount of social support received. We predicted that coupled women would receive more social support than single women. The main effect for relationship status was significant,  $F(1, 298) = 17.22$ ,  $p < .0001$ ; coupled women reported more support overall than did their single counterparts (see Table 1).

Next, to examine whether single and coupled lesbian and heterosexual women received differing amounts of the five support provisions, a two-way MANOVA with sexual orientation (heterosexual, lesbian) and relationship status (single, coupled) as the independent variables was performed for the five support provisions. The overall main effect for sexual orientation was significant, Wilks's criterion  $F(5, 292) = 3.78$ ,  $p < .003$ . Inspection of univariate  $F$  tests, however, revealed no significant differences for any of the support provisions (see Table 1). Although it is not usual for the univariate tests to be nonsignificant when the multivariate  $F$  is significant, in our case the multivariate effect reflects a significant difference found for the computer-generated composite dependent variable, which is designed to maximally optimize the chance that the two groups would differ (Tabachnik & Fidell, 1989). Together, these analyses indicated no differences in the types of social support received by heterosexual and lesbian women.

TABLE 1: Mean Ratings of Single and Coupled Lesbian and Heterosexual Women on Indexes of Social Support and Well-Being

Index	Lesbian Women			Heterosexual Women		
	Single	Coupled	Total Sample	Single	Coupled	Total Sample
Social support						
Attachment <sup>a</sup>	5.12	5.41	5.27	5.17	5.67	5.42
Social integration <sup>a</sup>	5.24	5.47	5.35	4.95	5.34	5.14
Reassurance of worth <sup>a</sup>	5.23	5.50	5.37	5.02	5.42	5.22
Guidance <sup>a</sup>	4.08	4.27	4.17	4.00	4.41	4.20
Reliable alliance <sup>a</sup>	3.08	3.80	3.44	3.28	4.06	3.67
Total support	22.75	24.45	23.60	22.41	24.90	23.66
Well-being <sup>b</sup>	4.88	5.48	5.18	4.88	5.44	5.16

NOTE: Standard deviations for all variables were nearly identical among both samples (*SDs* ranged from .93 to 1.3 for social provisions, 3.9 to 4.6 for total support, and 1.0 to 1.3 for well-being).

a. Mean ratings could range from 1 to 7; higher numbers indicate greater support.

b. Mean ratings could range from 1 to 7; higher numbers indicate greater life satisfaction.

We predicted that coupled women would receive more social support than single women. The overall main effect for relationship status was significant,  $F(5, 292) = 7.46, p < .0001$ . Inspection of univariate  $F$  tests indicated that coupled women reported receiving more of each of the five social provisions from their support networks than did single women—attachment:  $F(1, 298) = 9.17, p < .003$ ; social integration:  $F(1, 298) = 6.65, p < .01$ ; reassurance of worth:  $F(1, 298) = 8.04, p < .005$ ; guidance:  $F(1, 298) = 5.24, p < .02$ ; reliable alliance:  $F(1, 298) = 35.50, p < .0001$ . The overall interaction effect was non-significant,  $F(5, 292) = .21$ , indicating that the differences found between single and coupled women were similar among lesbians and heterosexuals (see Table 1).

#### *Psychological Well-Being*

A two-way ANOVA with sexual orientation (heterosexual, lesbian) and relationship status (single, coupled) was performed for well-being. As predicted, lesbian and heterosexual women did not differ in psychological adjustment; the main effect for sexual orientation was  $F(1, 298) = .03, ns$ . Women in both groups scored about 5 (on a 7-point scale), indicating relatively high ratings of life satisfaction (heterosexual mean = 5.18, lesbian mean = 5.16,  $t = .16, ns$ ). We also predicted that relationship status would affect well-being. The main effect for relationship status was significant,  $F(1, 298) = 17.78, p < .0001$ , revealing that coupled women reported greater well-being than did single women. A nonsignificant two-way interaction,  $F(1, 298) = .01$ , revealed that the effect for relationship status did not vary by sexual orientation (see Table 1).

#### *Psychological Well-Being and Social Support*

We predicted that the receipt of social support would be positively related to well-being and that this association would be similar among lesbian and heterosexual

women. We were also interested in whether any of the five specific support provisions were especially important to the well-being of lesbian and heterosexual women. Because a central question was whether the association between social support and well-being was affected by sexual orientation, we examined these associations separately among lesbian and heterosexual women and then statistically compared the results.

One approach to answering these questions would be to examine the correlations between each of the five social support provisions and well-being. However, because past research has found that the five types of support are generally highly correlated (as they were in our sample<sup>3</sup>), many researchers have expressed dissatisfaction with this approach (House & Kahn, 1985; Newcomb, 1990). When predictors (e.g., types of support provisions) are correlated or fluctuate greatly as the result of measurement error (e.g., self-report data), many problems may arise. For example, in standard multiple regression analyses, the predictor with the highest correlation with the outcome measure may be significant and may capture the common variance of the other predictors. Or the variance in the dependent variable may be split among the predictors with none of the effects reaching significance (see Newcomb, 1990, for discussion). One solution is to examine the association between the common variance among a set of predictors and the common variance among a set of outcome variables.

Given these considerations, we used structural equation modeling to examine the direct effect of social support on well-being. Structural equation modeling techniques are well suited to examine both the unique effects of specific types of social support and the effects of a general factor of global social support on well-being (Newcomb, 1990). As with the CFA performed with the 18 support items, key constructs called latent variables



are measured with multiple indicators. To create a stable latent variable, three measured variables are required to identify the factor. Multiple-item unidimensional scales are typically divided into three subscales to create a latent variable of the measure (Newcomb, 1990). Consequently, we divided the 8-item Index of General Affect into three indexes for a latent measure of well-being. A latent social support variable was created by extracting the commonality among the five provisions of social support.

The goal of structural equation modeling is to compare a covariance matrix generated from this sample with a covariance matrix generated by a hypothesized model. The goodness-of-fit indexes (described earlier in our discussion of the CFA) allow us to determine whether our hypothesized model provides a reasonable explanation of the data. Using the EQS program for structural equation modeling (Bentler, 1985, 1989), we were able to test whether the measured variables reliably reflected the two hypothesized latent factors of social support and well-being. We were also able to examine the error-free association between the latent constructs of social support and well-being.

The hypothesized model was constructed so that each observed variable was allowed to load on one latent construct and both factor variances were fixed at unity (for identification purposes). Factor loadings as well as the unidirectional association between the latent variable of social support and the latent variable of well-being were allowed to be freely estimated. Although the model restricted the associations between the unique portion of each support provision and well-being to zero, subsequent use of the LaGrange multiplier test would reveal whether any nonstandard effects (an association between the portion of a support provision not captured by latent support variable and the latent well-being variable) were significant. The skewness and kurtosis of the five support provisions and the measure of well-being were examined and determined to be normal (skewness ranged from  $-.56$  to  $.14$ , kurtosis ranged from  $-.48$  to  $.00$ ). Parameter estimation was performed using the maximum likelihood method, which assumes multivariate normal distribution of the data but has been shown to be quite robust over normality violations (Satorra & Bentler, 1986). Significance tests on parameter estimates were based on unstandardized statistics.

*Lesbian model.* Among lesbian women, the initial model fit the data moderately well,  $\chi^2(19) = 37.1$ ,  $p = .008$ , CFI = .97, but inspection of LaGrange multiplier tests indicated that a better fit could be obtained by estimating the correlation between two residual error terms as well as a nonstandard path from the residual error term of reassurance-of-worth support to the latent variable of

well-being. This model, shown in Figure 1, fit the data extremely well,  $\chi^2(17) = 25.7$ ,  $p = .08$ , CFI = .99. All hypothesized factor loadings were highly significant (all  $ps < .0001$ ), confirming the hypothesized factor structure of both latent variables.

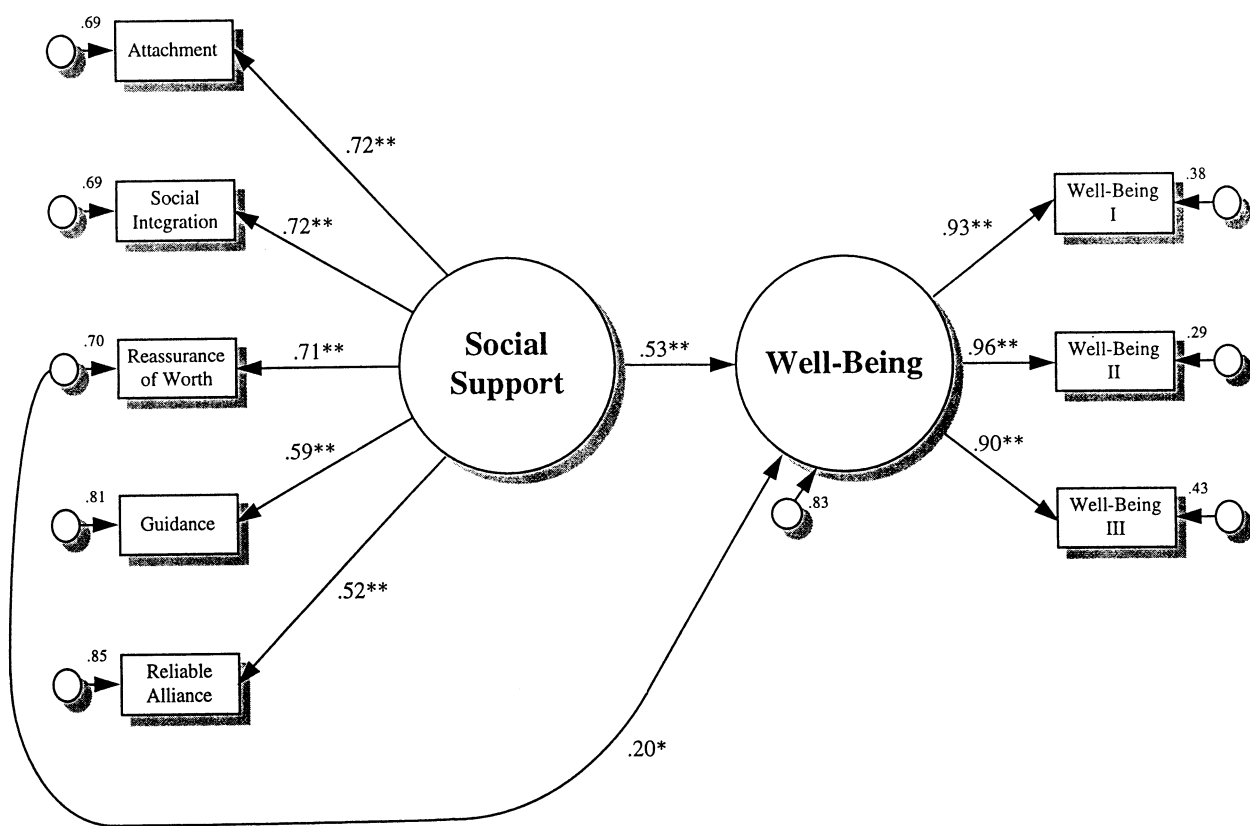
For lesbian women, a strong positive association existed between social support and well-being ( $\beta = .53$ ,  $p < .0001$ ). Well-being was also significantly predicted by the unique portion of reassurance-of-worth support not overlapping with the general construct of social support ( $\beta = .20$ ,  $p < .05$ ). Approximately 31% of the variance in well-being was accounted for by the model. Standardized factor loadings, residual variables (variances) of the observed variables, and path coefficients of the final structural model are depicted in Figure 1.

To examine whether the association between social support and well-being was different for lesbian women who were in couple relationships versus those who were not, the final lesbian model was examined separately among single and coupled lesbian women. Results indicated that this model represented both groups of lesbian women equally well,  $\chi^2(46) = 54.6$ ,  $p = .11$ , CFI = .98.

*Heterosexual model.* Identical analyses assessed the association between social support and well-being for heterosexual women. The initial model fit the data moderately well,  $\chi^2(19) = 53.7$ ,  $p = .001$ , CFI = .95, but inspection of LaGrange multiplier tests indicated that a better fit could be obtained by estimating the correlation between four pairs of residual error terms as well as a nonstandard path from the residual error term of guidance support to the latent variable of well-being. This model, shown in Figure 2, fit the data very well,  $\chi^2(14) = 28.8$ ,  $p = .01$ , CFI = .98. All hypothesized factor loadings were highly significant (all  $ps < .0001$ ), confirming the hypothesized factor structure of both latent variables.

For heterosexual women, a strong positive association existed between social support and well-being ( $\beta = .54$ ,  $p < .0001$ ). Well-being was also significantly predicted by the unique portion of guidance support not overlapping with the general construct of social support ( $\beta = .27$ ,  $p < .001$ ). Approximately 36% of the variance in well-being was accounted for by the model. Standardized factor loadings, residual variables (variances) of the observed variables, and path coefficients of the final structural model are depicted in Figure 2.

To examine whether the association between social support and well-being was different for heterosexual women who were in couple relationships versus those who were not, the final heterosexual model was examined separately among single and coupled heterosexual women. Results indicated that this model represented both groups of women equally well,  $\chi^2(46) = 54.9$ ,  $p = .11$ , CFI = .98.



**Figure 1** Structural model of the relationship between social support and well-being for lesbian women.

NOTE: Large circles represent latent constructs, and small circles with arrows pointing to individual items and latent constructs reflect residual variances.

\* $p < .05$ . \*\* $p < .0001$ .

### Statistical Comparison of Models

When the same variables are assessed in two different samples, EQS can determine whether one structural model fits both of them equally well. As can be seen in Figures 1 and 2, the regression coefficient between social support and well-being is very similar in the two models ( $\beta = .53$  for lesbians,  $\beta = .54$  for heterosexuals). We first tested a model that specified that the path between social support and well-being was equivalent in the two samples. In addition, the model allowed the factor loadings for the latent variables of social support and well-being to be different in each sample. This model provided a very good representation of the data,  $\chi^2(38) = 44.0$ ,  $p = .23$ , CFI = 1.00, and found that when the factor loadings were allowed to vary in the two samples, the path coefficients between social support and well-being were not statistically different in the two samples,  $\chi^2(1) = .80$ ,  $ns$ .

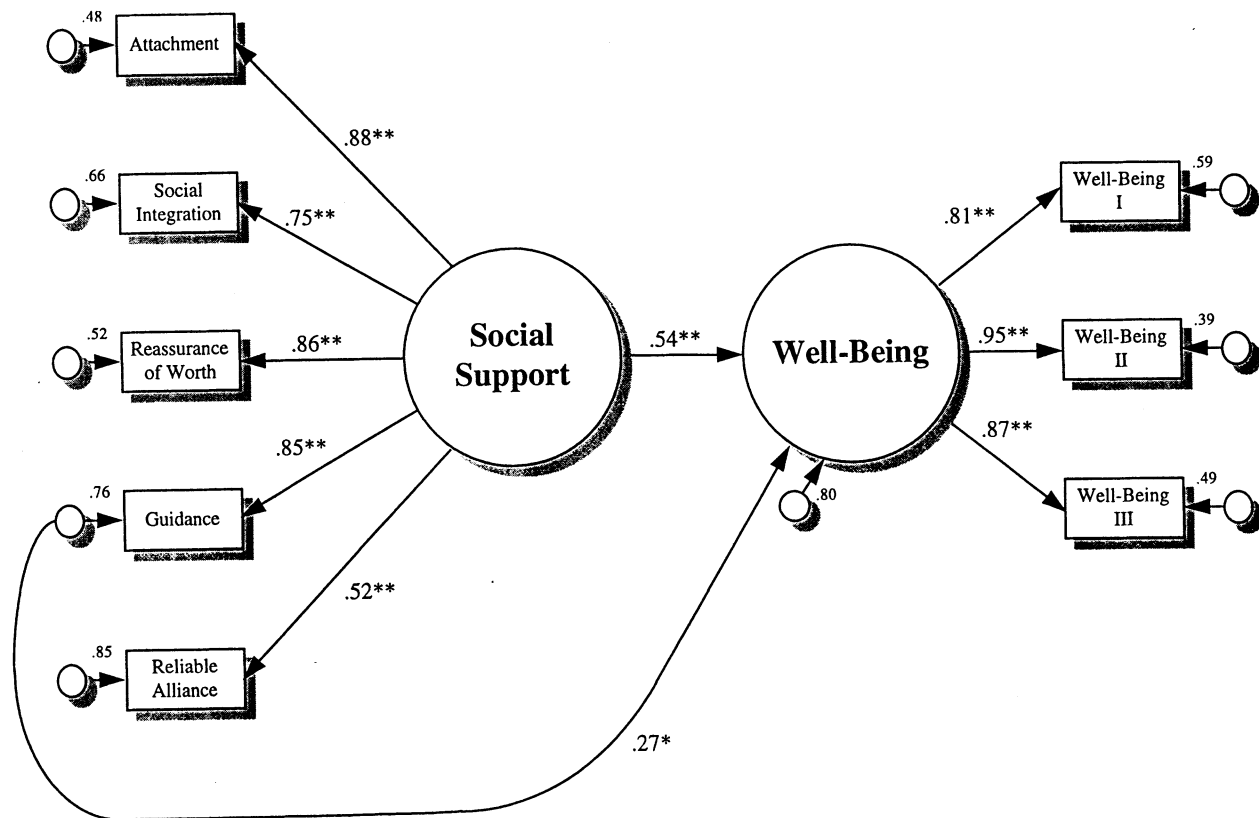
Next, we tested a more conservative model that hypothesized that (a) the factor loadings for the two latent variables were equivalent in both samples, (b) the path between support and well-being was equivalent in both

samples, and (c) the two nonstandard effects were equivalent in both samples. The model was found to provide only a marginal representation of the data,  $\chi^2(45) = 100.31$ ,  $p < .001$ , CFI = .94, and inspection of LaGrange multiplier tests indicated significant differences between the two samples in the path between the latent variables of social support and well-being,  $\chi^2(1) = 4.6$ ,  $p < .05$ , the path between guidance and well-being,  $\chi^2(1) = 5.9$ ,  $p < .01$ , and the path between reassurance of worth and well-being,  $\chi^2(1) = 4.3$ ,  $p < .05$ . Taken together, these results indicate that data generated from the lesbian and heterosexual samples are best represented by separate models rather than by a single model in which the two sets of data are assumed to be completely equivalent.

### DISCUSSION

This study adds to the understanding of the nature of social support and to knowledge about the impact of sexual orientation in women's lives. This research used a comprehensive approach to assess specific types of





**Figure 2** Structural model of the relationship between social support and well-being for heterosexual women.

NOTE: Large circles represent latent constructs, and small circles with arrows pointing to individual items and latent constructs reflect residual variances.

\* $p < .001$ . \*\* $p < .0001$ .

social support, and it used structural equation modeling to shed light on the link between the reported receipt of social support and well-being. Carefully matched samples of lesbian and heterosexual women, half of whom were in couple relationships and half of whom were single, enabled us to make systematic comparisons of women with differing life experiences. It is important to bear in mind that our findings may not be representative of all American women. Our findings are based on a group of fairly educated White women from Los Angeles, an urban area that offers lesbians many homosexual organizations and communities not available in other parts of the country. Furthermore, participants who volunteered for this study tended to be involved in community groups and organizations. Thus our findings may not generalize to women who are less socially engaged. Further work will be needed to determine the applicability of our findings to women with differing ethnic backgrounds and economic circumstances. In this section, we consider major findings about the receipt of social support, psychological well-being, and the links between social support and well-being.

### *Receipt of Support*

An important finding from this study is that lesbian and heterosexual women did not differ in their reports of the overall amount of social support or the five specific provisions of social support received from their total support network. A significant factor in the receipt of support was having an intimate relationship. Regardless of sexual orientation, coupled women reported receiving more overall support than did their single peers. This finding is consistent with other research documenting that heterosexual individuals in couple relationships have greater access to social support (Reis & Shaver, 1988; Sarason, Pierce, & Sarason, 1990).

### *Well-Being*

We found no evidence that sexual orientation affects psychological well-being. Both lesbian and heterosexual women reported similar levels of well-being. In contrast, relationship status was a significant factor in well-being. Both lesbian and heterosexual women with a partner reported greater well-being than did women who were

single. These results add to the growing literature documenting that sexual orientation is not related to happiness or psychological adjustment (Bell & Weinberg, 1978; Garnets & Kimmel, 1991; Gonsorick, 1982, 1991; Oberstone & Sukoneck, 1976; Ross et al., 1988).

### *Social Support and Well-Being*

We found that participants' perceptions about the amount of social support they have received from their support networks were significantly associated with greater well-being. This association was nearly identical for lesbian and heterosexual women and for single and coupled women. Nonetheless, two differences did emerge in the relative importance of specific support provisions. Reassurance of worth had greater impact on the well-being of lesbian women, and guidance made a greater contribution to the well-being of heterosexual women. Reassurance of worth refers to being recognized for one's competence and skills. The explanation for this pattern may be found in an analysis of the social roles of lesbian and heterosexual women. In this study, reassurance of worth assessed the feeling that one is respected and admired for one's abilities, is accepted as one really is, and is admired for acting in ways that are nontraditional for women. It may not be surprising that lesbians, whose lifestyle challenges women's traditional roles, benefit more than heterosexual women do from reassurance of this sort. In contrast, guidance support assessed seeking advice and information from other people and relying on others for help. This type of support is consistent with traditional roles emphasizing women's dependency on others, including male partners, and so may be of greater benefit to heterosexual women.

### CONCLUSION

In summary, our analyses have contributed to knowledge about social support in several ways. First, we have shown that Weiss's (1974) typology of social support is applicable to both lesbian and heterosexual women. Second, we have found that Weiss's specific provisions reflect a more general factor of social support (e.g., the higher order support factor in our structural equation model; see also Cutrona & Russell, 1990, for similar results). Third, we have found that the association of specific support provisions to psychological well-being differed among lesbian and heterosexual women. This finding suggests that the understanding of existing social support models may be expanded by examining social support in diverse samples.

At the same time, this work also contributes to an understanding about the lives of lesbian and heterosexual women. For both groups, a supportive social network enhanced psychological well-being. Our analyses also

indicated the benefits of a close dyadic relationship for women. Regardless of sexual orientation, women in couple relationships reported greater access to social support and higher levels of psychological well-being. The direction of causality underlying these findings is uncertain. Future research will be needed to determine whether close dyadic relationships enhance social support and well-being, whether women who have strong social ties and good psychological health are more likely to maintain dyadic relationships, or both. Furthermore, an analysis of how specific types of support may affect specific dimensions of well-being, such as physical well-being or mental well-being (rather than a global measure of well-being), is also desirable. Finally, in our study, single women were defined as those not in couple relationships. A more specific definition of what it is to be single is also necessary to understand the role of social support to well-being among single women. Much work remains to be done to investigate more fully the nature of social support and well-being among lesbians and heterosexuals with differing backgrounds and life circumstances.

### NOTES

1. Requests for copies of the items used in our analyses should be directed to Dr. L. Anne Peplau, Department of Psychology, University of California, Los Angeles, CA 90095-1563. For a complete version of the questionnaire used in this study, please refer to Aura (1985).

2. The reliability estimates for the five provision indexes in this sample were all generally high and comparable with those reported by Cutrona and Russell (1987). Note also that these data were collected prior to the development of the Cutrona and Russell Scale.

3. The correlation coefficients among the support provisions ranged from .31 to .56 in the lesbian sample and .33 to .78 in the heterosexual sample.

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