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# DEVELOPMENT OF THE GAY AND LESBIAN RELATIONSHIP SATISFACTION SCALE

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This article describes the development and evaluation of the Gay and Lesbian Relationship Satisfaction Scale (GLRSS) as a measure of individuals' gay and lesbian same-gender relationship satisfaction and social support. Clinicians and researchers administer relationship satisfaction scales to persons in gay and lesbian relationships with a heteronormative assumption that scales developed and validated with opposite-gender couples measure identical relationship issues. Gay and Lesbian couples have unique concerns that influence relationship satisfaction, most notably social support. Using online recruitment and data collection, the GLRSS was evaluated with data from 275 gay and lesbian individuals in a same-gender relationship.

Approximately 3.5% of the U.S. adult population self-identifies as lesbian, gay, or bisexual (LGB, Gates, 2011). Recent estimates indicate that up to 46% of gay men and 62% of lesbian women (ages 18–59) are in cohabiting, same-gender¹ relationships (Carpenter & Gates, 2008). In comparison, 62% of heterosexual adults in this age range are also in cohabiting relationships (Carpenter & Gates). Although statistics show that similar percentages of heterosexual and lesbian and gay (LG) adults are in cohabiting relationships, there is limited research related to the development of instruments and measures to examine characteristics of LG relationships—particularly when compared with the plethora created to examine opposite-gender couples. It has been common to make the heteronormative (McGeorge & Carlson, 2011) assumption that a relationship measure developed for a heterosexual population is equally appropriate for the LG population (e.g., Kurdek, 1992b). The assumption has not been validated; in fact, the limited research on same-gender relationships that has been conducted indicates that there are differences that must be taken into account (Kurdek, 2005).

# SOCIAL AND FAMILIAL SUPPORT

Research has shown that stigma and lack of social support play a major role in lower relationship satisfaction in same-gender couples (Frost, 2011; Otis, Rostosky, Riggle, & Hamrin, 2006). With a decrease in acceptance and support of family and friends, the relationship cohesion and satisfaction begin to decline (Julien, Chartrand, Simard, Bouthillier, & Begin, 2003; Rostosky et al., 2004; Smith & Brown, 1997). Also, lack of positive support from family and friends is associated

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with increases in mental health issues and more risky sexual behavior (Meyer, 1995, 2003). However, there is evidence that, with increased stigma and oppression in environmental contexts, some couples may be pulled closer together, with an increased commitment to the relationship (Frost). Social support also has a role in the decision of a same-gender couple to adopt or have children (Goldberg & Smith, 2008). Social support not only influences satisfaction and decision making in relationships but can also play a substantial part in mental health and perceived stability.

# Psychological Issues

Individuals who identify with a nonheterosexual orientation experience higher rates of stress, stigma, and social isolation when compared with heterosexual-identified individuals (Kuyper & Fokkema, 2011; Malcolm, 2002; Meyer, 2003). Not surprisingly, LG individuals also account for a disproportionately larger percentage of clients presenting for outpatient therapy, compared with their percentage in the total population. This is primarily due to the extensive stress associated with being a member of a subjugated social group. Meyer (2003) developed the theory of Minority Stress to account for the overarching constant stress associated with being lesbian or gay (and other identities), which can account for higher rates of mental disorder diagnosis (whether correct or incorrect)—especially depression and anxiety, as well as an increased risk of suicide due to potential isolation.

In addition, Meyer and other colleagues have discussed the importance and recognition of internalized homophobia and homonegativity (Malyon, 1982) on a person's development and functioning, specifically on the psychological well-being of an individual (Meyer & Dean, 1998). This internalized conflict results from conflicting values and beliefs related to a person's sexual expressions, intimacy, and desires, and their overall place in society, particularly as the person begins to integrate and thereby expects rejection and discrimination due to their sexual identity. This negative sense of self has a continued effect on relational issues, not only in their intimate relationships but also in the context of their life through familial and social interactions and connections (Frost & Meyer, 2009).

# Relational Issues

Individual psychological issues can have an effect on couple relationships, and, conversely, the lack of social acceptance of the relationship or conflict and stress in the relationship can have a negative effect on the individual—thereby leading to increased internalized homophobia/homonegativity. Higher levels of social support correlate with higher levels of relationship and personal satisfaction (Gallor & Fassinger, 2010). A lack of acceptance by peers and family members increases the likelihood of mental health difficulties and limits identity development (Ariel & McPherson, 2000; Green, 2000). Research has shown that low support from those who are close to a person or from the public leads to higher rates of perceived stigma and social isolation (Ariel & McPherson, 2000; Dooley, 2009; LaSala, 2000; Patterson, 2000; Rostosky et al., 2004; Ryan, Huebner, Diaz, & Sanchez, 2009). A positive relationship with a supportive partner can decrease the effect of lack of support from others (Clausell & Roisman, 2009; Frost, 2011; Knoble & Linville, 2012; Kurdek, 2008). In general, individuals in committed relationships have higher levels of acceptance and support from family and the public (Meyer, 2003; Ryan et al. 2009). Most of the research into support issues has focused on individual outcomes, e.g., improved mental health, and not on improved couple relationships.

#### RESEARCH ON SAME-GENDER COUPLE CHARACTERISTICS

Much of the research that has been conducted with same-gender couples has focused on a comparison with opposite-gender couples (e.g., Kurdek, 1992a,b, 2004), instead of identifying unique features of each. Furthermore, most research has focused on negative or stereotypical aspects of the same-gender relationship: HIV status (e.g., Darbes, Chakravarty, Beougher, Neilands, & Hoff, 2012) and lack of monogamous commitment (e.g., LaSala, 2000; Rostosky et al., 2004). With the focus on demography, lack of monogamy, disease, sexual behavior, and HIV/AIDS treatment, there has been little focus on the characteristics of the actual relationship from an affirmative standpoint (Kurdek, 2008).

Most of the recent research on same-gender relationships has come from an examination of the effects of the legalization of same-gender marriage. This research has focused on demographics related to rates of marriage and divorce, and compared those rates with heterosexual couples in Canada or the United States (e.g., Canada: MacIntosh, Reissing, & Andruff, 2010; US: Balsam, Beauchaine, Rothblum, & Solomon, 2008; Porche & Purvin, 2008; Solomon, Rothblum, & Balsam, 2004). In general, same-gender couples who have married have more stable relationships and get a divorce less frequently than heterosexual couples. The research also shows increased levels of satisfaction and intimacy and lower levels of conflict when compared with married heterosexual couples. However, these studies are based on small samples of same-gender and opposite-gender couples who have been in relatively short legal marriages. More positive communication styles in gay and lesbian couples are correlated highly with positive behavioral interactions, which, in turn, are associated with higher levels of relationship quality (Julien et al., 2003).

# RELATIONSHIP ASSESSMENT

Assessment is key to gathering research data on relationships, as well as an integral part of guiding and evaluating individual or couple therapy. However, much of the research on LG relationships relies on instruments developed and normed with non-LG couples. For example, the Dyadic Adjustment Scale (DAS; Spanier, 1976) and Revised Dyadic Adjustment Scale (RDAS; Busby, Christensen, Crane, & Larson, 1995) have been extensively used in couple research and therapy. Both were normed with heterosexual samples. These assessments do not take into account common issues for lesbian and gay couples: e.g., stigma, secrecy, and lack of family support and social acceptance (Kuyper & Fokkema, 2011; Meyer, 2003). Relational assessment of LG individuals has been based on the assumption that the dynamics and issues of individuals in heterosexual opposite-gender relationships are not substantially different (Hardy, 1990; Kurdek, 1992a), i.e., that LG persons in a couple relationship are basically the same as non-LG individuals in the ways they feel, think, and act. Even the few assessments that have been given within LG samples fail to address the unique issues with LG relationships, and almost all relational measures used in LG relationship research were developed with exclusively heterosexual samples (Burgoyne, 2001; Chung & Katayama, 1996; Kurdek, 1992a,b, 2004; Malcolm, 2002). The assumption that instruments designed and validated with heterosexual samples are appropriate for use with lesbian and gay samples is, potentially, discriminatory. LG couples experience challenges that differ in content and/or intensity with the common difficulties experienced by opposite-gender parings. The experiences and environments of lesbians and gays must be examined, whether addressing individual, couple, or family issues. The support of friends and family can play a substantial role in a couple's overall relationship satisfaction.

The quality of a committed dyadic relationship has value for both physical and mental health for both LG and non-LG couples (Kurdek, 2005). Therefore, it is important to create and evaluate therapeutic interventions that strengthen same-gender relationships. However, it is also important to provide evidence that such relational interventions are effective for same-gender relationships, using a valid assessment of their effect. Only one instrument has been developed specifically for use with same-gender couples, and that measure (Relationship Assessment Measure for Same-Sex Couples (RAMSSC); Burgoyne, 2001) has psychometric and design flaws.

The RAMSSC was initially developed utilizing a sample size of 35 gay male couples who were in therapy for relationship issues, to be compared with 32 gay male couples who were not in therapy as a comparison group. This equates to a grand total of 134 participants, omitting lesbian relationships. By most accounts of quantitative test development, this is a smaller than ideal sample size (Cook & Hatala, 2015). In addition, the test itself was developed by adapting (e.g., changing the word "spouse" to "partner") the Waring Intimacy Questionnaire (Waring & Reddon, 1983), and keeping the entirety of the structure virtually the same, including subscales. Finally, the measure was evaluated using only a single unpaired samples *t* test, which is not a stringent enough method of analysis to determine validity, reliability, or consistency of an instrument. While Burgoyne did call for further validation and testing of the new measure, none has been completed

in the years since it was created. With the faults apparent in this measure of same-gender relationship satisfaction, it was prudent to retest and develop a newer more stringent measure that could hold up to intense scrutiny—and was influenced by current empirical knowledge of the same-gender relationship.

There is no empirically validated assessment developed specifically to measure the relationships of same-gender couples. Therefore, the purpose of the present study was to develop and evaluate the reliability and validity of an instrument assessing lesbian and gay individuals' relationships, including the role of social support—a major influence on satisfaction and perception of self (a unique contribution of this newly proposed measure).

## **PROCEDURE**

A goal of the study was to develop a measure of relationship satisfaction with a large and diverse population of lesbian and gay (LG) respondents. Accordingly, an online study was designed to allow for greater geographic and contextual diversity of respondents. This initial study is designed to be analyzed using classical test theory (CTT, Hambleton & Jones, 1993) to provide basic psychometric information and initial validation of the Gay and Lesbian Relationship Satisfaction Scale, and to lay the foundation for future outcome and validation studies.

Classical test theory is a framework for understanding and providing reference for tests and their results (Hambleton & Jones, 1993). The theory is directly related to True Score Theory, in that it is focused on the overall test, and not the items that make up the test itself; as such the primary evidence of the effectiveness of the test is given through the provision of evidence of validity and reliability (Allen & Yen, 2002). Many psychometricians believe that CTT is the preferred method for the initial development of an instrument, as it provides a basic amount of evidence for the usefulness of the test itself—before going into item-level characteristics (Hambleton & Jones, 1993). CTT allows the developer to examine the traits being studied, at the level of the entire test, prior to considering each item (Novick, 1966). CTT was chosen to be used in this study so that an overall examination of the entire test could be had before item-level characteristics were examined. It seemed prudent to gather information related to reliability, internal consistency, stability, and validity to allow the instrument to become more generalizable before it is focused on item-level characteristics.

# Recruitment

Participants were recruited via the Internet (e.g., Facebook, Google Adwords, discussion boards, listservs) from diverse geographic locations within the United States. Participants self-enrolled in the study. Participants gave consent to participate in the study on the first page of the survey instrument. A total of 516 actually reached the informed consent page, and 295 completed the package of assessments. Criteria for inclusion required potential participants to identify as either lesbian, gay, or bisexual, be over the age of 18 years, and have been in a same-gender relationship for at least 6 months (either currently or in the previous 5 years).

## Online Data Collection Procedures

A basic demographic questionnaire was completed on the next page of the survey, following receipt of the participant's consent. Information collected included age, gender identity, sexual identity, relationship status, general geographic location, months "out," and ethnicity. Quantitative data were collected via SurveyMonkey™ internet software, with three different instruments presented in the following order: the Gay and Lesbian Relationship Satisfaction Scale (GLRSS; developed for this research), Revised Dyadic Adjustment Scale (RDAS; Busby et al., 1995), and the Outcome Questionnaire 45.2 (OQ; Lambert et al., 1996). As the GLRSS was seen as the most important measure for participants to complete, it was presented after the section on demographic data. The RDAS was second as a comparative measure of couple satisfaction, followed by the OQ as an assessment for psychological, relational, and social role distress. Half the participants completed an open-ended questionnaire (not reported here) before completing the instruments; half after completing the instruments. There was no significant difference in scores on any of the three instruments between the two presentation sequences.

#### **Participants**

A total of 295 lesbian, gay, and bisexual participants completed at least 80% of the items presented in the three instruments (75% of those completed at least part of the survey). The majority of respondents were non-Hispanic/Latino Whites (78%). Lesbians made up 50.5% of the sample; gay men, 43.3%; and bisexual respondents, 6.2%. Only data from lesbian and gay males (n = 275) were used in the assessment of GLRSS reliability and validity. Almost 45% of respondents were from the Midwest; however, other regions of the United States were represented as well, ranging from 16.7% from the Northeast to 8.2% from the South and Northwest. Respondents were most likely to report living in urban areas (71.5%). Respondents also reported the length of time they had been "out" (M = 11.5 years, SD = 11 years, MDN = 7 years, range = 0–60 years) and whether they were responding regarding current (n = 252) or past relationships (n = 40) lasting at least 6 months. Because of the small number of bisexual participants (n = 20), their data were removed from further analyses, leaving a total sample of 275 self-identified lesbian and gay respondents.

# Instruments

Revised Dyadic Adjustment Scale. The Revised Dyadic Adjustment Scale (Busby et al., 1995) was derived from the original Dyadic Adjustment Scale (DAS; Spanier, 1976). Both versions of the Dyadic Adjustment Scale were normed with heterosexual respondents; both have been used extensively in research on couple satisfaction and adjustment; and each is among the most widely used scales in couple therapy. Since the publication of the RDAS, it has become the dominant scale for use in identifying distressed versus nondistressed couples in clinical settings because it is more accurate in classifying previously identified nondistressed respondents. The RDAS is well established, and has acceptable ratings of validity (content, construct, and criterion validity as measured through significant correlations and factor analytic methods, see original article: Busby et al., 1995) and reliability ( $\alpha = .90$ ,  $r_{\rm SH} = .95$ ,  $r_{\rm SHG} = .94$ ). In addition, the RDAS has been validated and used across cultures (e.g., Hollist et al., 2012; Isanezhad et al., 2012), in medical settings as a measure of relationship adjustment and strength in the face of life-threatening illness (e.g., Kazemi-Saleh, Pishgou, Assari, & Tavallaii, 2007; McLean et al., 2008), and in meta-analytic and comparative studies of efficacy (e.g., Crane, Middleton, & Bean, 2000; Wood, Crane, Schaalje, & Law, 2005).

The RDAS includes three subscales: Consensus, Cohesion, and Satisfaction. The RDAS has 14 items overall: six items in the Consensus subscale (e.g., "Making major decisions"), four items in the Satisfaction subscale (e.g., "How often do you and your partner quarrel?"), and four items in the Cohesion subscale (e.g., "How often do you calmly discuss something?"). Each item is rated on a 0- to 5-item Likert scale (Busby et al., 1995).

This scale was included to (a) provide evidence of content and criterion validity of the GLRSS in comparison to the RDAS, and (b) to create a more broadly based sample for the RDAS with same-gender respondents. For the present sample, Cronbach's alpha was .83 for the full scale (M = 51, SD = 7.34, MDN = 52), .71 for the Consensus subscale (M = 23, SD = 3.38, MDN = 23), .78 for the Satisfaction subscale (M = 15, SD = 2.67, MDN = 16), and .72 for the Cohesion subscale (M = 13, SD = 3.09, MDN = 12).

Outcome Questionnaire 45.2. The Outcome Questionnaire 45.2 (Lambert et al., 1996) is a Likert-scale measure with 45 items on which respondents mark their level of distress with a specific symptom in reference to the past week. The OQ initially was developed to measure therapy outcome in terms of intrapersonal psychological distress, but it also has been used to measure interpersonal distress and social role issues. Reliability of the OQ has been evaluated with test–retest statistics and measures of internal consistency (Lambert et al., 1996). Validity was assessed also through evaluating concurrent validity with several other scales measuring anxiety, depression, and social role distress (Lambert et al., 1996). The OQ Social Role (SR) and Interpersonal Relationships (IR) scales were included as further comparison measures of relationship satisfaction assessed on the GLRSS and RDAS. The third OQ subscale, Symptom Distress (SD), was used to examine the level of psychological distress in relation to scores on the RDAS and GLRSS. For the present sample, Cronbach's alpha was .94 for the full OQ scale (M = 49, SD = 22.33, MDN = 46), .93 for the OQ Symptom Distress (M = 29, SD = 14.48, MDN = 26), .75 for the OQ Interpersonal

Relations (M = 11, SD = 5.66, MDN = 11), and .71 for the OQ Social Role subscales (M = 9, SD = 4.44, MDN = 8).

Gay and Lesbian Relationship Satisfaction Scale. For the present study, 90 items from the Relationship Assessment Measure for Same-Sex Couples (RAM-SSC; Burgoyne, 2001) were selected initially. Selection of a final pool of 19 items was based on a sorting of the 90-item RAM-SSC components into 10 categories (Burgoyne, 2001) by 200 undergraduate students. Items were presented on a screen, and respondents were asked to place each item into one of Burgoyne's nine original "subscale" categories (Conflict Resolution, Affection, Cohesion, Sexuality, Identity, Compatibility, Autonomy, Expressiveness, and Social Desirability ["response bias"], or an additional "doesn't fit" category). An oblimin principal component factor analysis (PCA) of the 90 items yielded 34 factors with eigenvalues above 1.0. Most item eigenvalues were less than 2.0, and many items loaded across more than one factor, failing to match the nine Burgoyne subscales. Items scattered across several of the categories were eliminated as were any classified as "doesn't fit." Only those items where at least 50% of the respondents agreed as to Burgoyne's category were considered for inclusion. Then, all duplicate items were eliminated.

Examining the surviving 19 items, it was clear that they did not address some of the issues faced by same-gender couples that have been described in the literature. An additional 11 items were created and added to the pool of 19 items to cover issues of social and familial support, as well as identity negotiation. All 30 GLRSS items were edited to have a 7-point Likert scale, allowing for greater response variance than the original true/false format used by Burgoyne (2001). These 30 items were used in the online study with lesbian and gay respondents.

Factor analysis. Data from the 30-item GLRSS were used in an Exploratory Factor Analysis (EFA, N=275; item:respondent ratio = 1:9.2). EFA was chosen to take a nonassumption approach to the number of factors that would be identified during analysis. A varimax rotation was used. Factor eigenvalues over 1.0 were used as the "cut-off," up to the point when at least 60% of the variance of the GLRSS responses could be explained by the factors (Kline, 1994). The initial EFA resulted in nine factors with an eigenvalue above 1.0. After this initial factor solution was interpreted, further confirmatory factor analyses (CFA) were conducted to determine a final factor structure. Six items from the GLRSS (30-version) that had factor loadings of similar magnitude across several factors or did not load on any factor were identified. A series of reliability analyses (see below) indicated that these items did not improve GLRSS internal reliability. In fact, each of these items reduced the overall reliability of the measure when included. Accordingly, the "worst" item was selected (the item that had multiple factor loadings and the largest negative impact on reliability) and removed from analysis and from the GLRSS. This was done six times before reliability (Cronbach's alpha) did not improve, and the factor structure remained stable. See Table S1, for reduction technique and values.

The scree plot from the EFA with 24 items was examined to determine the appropriate number of factors. A clear "elbow" or distinction between factors was indicated between the third and fourth factors. This distinction was confirmed by examining the differences among the eigenvalues. A CFA was conducted limited to the three factors identified, resulting in fewer cross-loadings. However, all the items in the third factor cross-loaded on either the first or second factor. Therefore, a final CFA was run, limited to two factors (step 7, Table S1). Examining the items indicated that the two-factor model was theoretically sound. Most items loading on Factor 1 are about relationship satisfaction (several from the RAM-SSC). The second factor is comprised of items specifically asking about social and familial support (Table S2).

Final version of the GLRSS. The final version of the GLRSS was comprised of 24 items. There are two subscales emerging from the factor analyses: GLRSS Relationship Satisfaction (eigenvalue = 5.296, % variance = 22.1%) and GLRSS Social Support (eignenvalue = 2.732, % variance = 11.38%). Table S2 lists items by subscale. To evaluate the reliability of the revised GLRSS, Cronbach's alphas were computed for the full scale and each subscale and the results of the final factor analysis were examined. Validity of the GLRSS was evaluated by examining the correlations between the GLRSS and its subscales and the RDAS and its subscales as well as the OQ subscales. Reliability and validity data for the GLRSS are presented in the Results section.

# **RESULTS**

#### Basic Psychometrics

GLRSS descriptive statistics. Means, standard deviations, and medians were computed for the GLRSS total and subscale scores (N=275): Total GLRSS, M=107, SD=16, MDN=108; GLRSS Relationship Satisfaction, M=68, SD=13, MDN=69; GLRSS Social Support, M=38, SD=7, MDN=39. Higher scores indicated higher satisfaction/social support, while lower scores indicated lower satisfaction/social support in the reported relationship. There was no significant gender difference among the three instruments. In addition, an ANOVA conducted showed no significant difference between participants discussing a previous relationship versus the remaining responses reporting on current relationships; as such there was no need to remove or distinguish these data [Relationship Satisfaction: F(1, 277) = .270, p=.27; Social Support: F(1, 277) = 2.84, p=.09; Total: F(1, 265) = 1.72, p=.19].

#### Reliability

The reliability of the GLRSS was assessed using Cronbach's alpha with the 24-item GLRSS scale. The two factors identified through factor analysis were also tested for reliability. For the entire scale, Cronbach's alpha was .82. Factor 1 ("GLRSS Relationship Satisfaction") had an alpha of .83, and Factor 2 ("Social and Familial Support", shortened to "GLRSS Social Support") had an alpha of .72.

# Validity

Evidence for both convergent and divergent validity was found in the correlations between the GLRSS total score and its subscales and the RDAS total and subscale scores (Table 1). There was a significant positive correlation between the GLRSS total score and the RDAS

	GLRSS Total Score	GLRSS Relationship Satisfaction	GLRSS Social Support	RDAS Total Score	RDAS Satisfaction Subscale	RDAS Cohesion Subscale	RDAS Consensu Scale
GLRSS Total Score	_						
GLRSS Relationship Satisfaction	.903*	_					
GLRSS Social Support	.636*	.243*	_				
RDAS Total Score	.718*	.763*	.249*	_			
RDAS Satisfaction Subscale	.622*	.676*	.191	.787*	_		
RDAS Cohesion Subscale	.471*	.510*	.147	.769*	.431*	_	
RDAS Consensus Subscale	.616*	.636*	.248*	.816*	.505*	.385*	_

total score (p < .001). Correlations between the GLRSS Relationship Satisfaction subscale and RDAS total and subscales were also significant (p < .001), as were correlations between the GLRSS Social Support subscale and the RDAS total and consensus subscale (p < .001) (Table 1). However, there were significant differences in the absolute size of the correlations between the GLRSS Social Support subscale and the RDAS scales and the correlations between the GLRSS Relationship Satisfaction subscale and the RDAS scales (Table 2, Fisher's z tests). These results, in parallel with the very different  $r^2$ -values (GLRSS Relationship Satisfaction, .26-.58; GLRSS Social Support, .02-.06), support the argument that the GLRSS Social Support subscale is assessing different issues than the GLRSS Relationship Satisfaction subscale or, in fact, the RDAS.

Correlations also were computed to examine the relationships between the GLRSS and the OQ-45 scales. It was expected that as the GLRSS scores increased, a participant's scores on the OQ would decrease. This was confirmed by the significant and negative correlations obtained (Table 3). Table 2 presents the differences between the correlations for the GLRSS total and each of the subscale scores and the OQ total and each of the subscale scores. There were significant negative correlations between the GLRSS total and subscale scores and the total and all subscales of the OQ (rs = -.267 to -.626, p < .001). The strongest relationship (r = -.626, p < .001) was found between GLRSS Relationship Satisfaction and OQ Interpersonal Relations scales (Table 3).

Evidence for the discriminant validity of GLRSS Relationship Satisfaction versus the GLRSS Social Support score was found in the significantly larger correlation between GLRSS Relationship Satisfaction and OQ Interpersonal Relations scores than between GLRSS Social Support and the OQ Interpersonal Relations scores (Table 2,  $r^2$ -values: GLRSS Relationship Satisfaction .39; GLRSS Social Support, .07). Suggestive evidence of discriminant validity is found in the significant, but lower, correlations between both GLRSS subscales (and the total score) and the remaining OQ total and subscale scores ( $r^2$ -values range from .21 to .07) and the lack of significant Fisher's z-test results.

Table 2	
Fisher's z Test of Differences between Correlations ( $N = 245$ )	

	Correlation W	ith			GLRSS
Compare	GLRSS Relationship Satisfaction	GLRSS Social Support	Fisher's $Z$	GLRSS Relationship $(r^2)$	Social Support $(r^2)$
RDAS Total Score	.763	.249	8.864*	.58	.06
RDAS Satisfaction Subscale	.676	.191	7.435*	.46	.04
RDAS Cohesion Subscale	.510	.147	4.904*	.26	.02
RDAS Consensus Subscale	.636	.248	5.892*	.40	.06
OQ Total Score	457	310	-2.047	.21	.10
OQ Symptom Distress Subscale	361	290	943	.13	.08
OQ Interpersonal Relations Subscale	626	267	-5.457*	.39	.07
OQ Social Role Subscale	361	268	-1.223	.13	.07

<sup>\*</sup>p < .001, if Fisher's Z > 3.1.

Table 3 Correlation Matrix of GLRSS by OO 45.2 (N = 250) GLRSS 0000 00GLRSS Relationship 00 Social. GLRSS Symptom Interpersonal Total Satisfaction Total Distress Relations Role Support GLRSS Total GLRSS 901\* Relationship Satisfaction GLRSS .626\* 226\* Social. Support **OQ** Total -.310\* -.504\*-.457\*OO -.419\* -.290\* .969\* -.361\*Symptom Distress 00 -.620\*-.626\*-.267\*.819\* .693\* Interpersonal Relations .821\* 576\* OO Social Role -.372\*-.361\*-.268\*.733\* \*p < .001.

# DISCUSSION

Classical Test Theory (CTT) was used as an approach to data reduction and to test the evidence for validity and reliability of the GLRSS. The CTT analyses support the value of the GLRSS as a valid and reliable instrument for the self-report of an individual in a same-gender relationship. Through the examination of the factors derived from factor and reliability analyses, it is apparent that the GLRSS is a stable two-dimensional instrument with adequate specificity to asses both satisfaction in a same-gender couple relationship and familial and social support for that relationship.

# Excluded Items

The original version of the GLRSS included 30 items. Six items were removed from the original measure as part of the validation and development process (Table S2). It is worth noting that the items themselves seemed to be theoretically sound for inclusion on the assessment; however, statistically they were not appropriate.

Sometimes, one of us gets mad and gives the other the silent treatment, was an item included from the RAM-SSC that had a high level of agreement among the undergraduate sorters. However, it lowered the reliability of the Relationship Satisfaction subscale. Our sexual relationship influences our level of closeness and Our sexual relationship decreases my frustration with other parts of our relationship were included from the RAM-SSC because the raters agreed they belonged in the category of Sexuality, Affection, Expressiveness, and Compatibility. While research shows that sexuality in a relationship is an important predictor of overall satisfaction (Byers, 2005), these two items decreased the overall reliability, as well as loading across both the Relationship Satisfaction and Social Support factors. Therefore, they were removed to provide greater reliability and stability to the subscales.

Three other items, two of which were developed from the literature, *Sometimes, I am afraid that people will see a part of me of which I am not aware, Being active in the gay community is important to me,* and *When I meet people, I hesitate to tell them about my sexual orientation/attraction,* also seemed to be important, if not a subscale/factor unto themselves. However, none of these

items proved to be helpful for the overall scale, and none loaded successfully onto a single factor or contributed to the overall reliability/validity of the instrument. They were deleted as well.

With the deletion of these items, the 24-item scale proved to have acceptable reliability, with evidence supporting its validity, and had a stable factor structure. In this process, two subscales were identified, labeled "GLRSS Relationship Satisfaction" and "GLRSS Social Support." The complete scale is presented in the Appendix A.

# Potential for Research Use

The GLRSS is the first empirically created and validated measure for assessing both individuals and partners in same-gender couples. It can be used to examine an individual's report of relationship satisfaction and perceived social support of the relationship, as well as providing a means of comparing partners' similarities and differences in terms of satisfaction and support. Such data can be used to follow changes in the relationship and social support over time or as a predictor of changes in the relationship (e.g., dissolution, decision to marry). Furthermore, The GLRSS can be valuable to intervention researchers to gather baseline and assess change related to therapy and changes in skill use. The availability of a measure that looks at social and familial support in addition to relationship satisfaction would add to research underway utilizing the minority stress model. Much of the current research conducted on minority stress uses individually oriented stress-related and perception instruments, but fails to examine the role of relationship satisfaction and relationship support as sources of increased stress.

#### Potential for Clinical Use

Clinicians can use the GLRSS to gain a better understanding of the relationships (both romantic and family support) for a client in a relationship with someone of the same gender. Such information serves a baseline for measurement of outcome, and provides an initial assessment of the effect of minority stress on the mental health of the client. In doing so, particularly through the combination of providing Gay Affirmative Therapy informed by interventions based on information from the GLRSS, LG clients can gain a sense of positive resilience. Additionally, use of the GLRSS can provide the therapist with an opportunity for discussion around clients' history of support, satisfaction, and perceived discrimination in their intimate relationships. Of course, the scale could be helpful in other situations involving couples or individuals in same-gender relationships, including groups and psychoeducational or community-based programs. Cultural differences and expectations between the families of couples can lead to conflict and lowered relationship satisfaction and can be addressed beneficially in therapy (Reyes, 2007). Although not part of the present study, the GLRSS has potential applications for any LG or heterosexual couple dealing with issues of family or social support for their relationship as well as relationship satisfaction. However, the GLRSS is not normed for heterosexual clients and must be used cautiously.

#### Limitations

This study was completed within CTT framework to develop basic psychometrics and a working understanding of the structure of a new instrument for use with same-gender couples. More sophisticated statistical techniques should be used to further validate the measure. Classical Test Theory provides an excellent base for assessing the reliability and validity of an instrument; however, Item Response Modeling, derived from Item Response Theory, provides more detail at itemlevel specifics and has potential value (Hambleton & Jones, 1993).

This particular study was completed with a nonclinical sample. However, as constructed, the GLRSS can be used to help identify those individuals and couples who score unusually high on either or both of the scales. As noted, the study recruited only individuals in same-gender relationships; thus, a statement regarding couple reports of satisfaction and support cannot be made from a conjoint perspective. In addition, a more diverse sample set would be desirable for future studies, to increase generalizability across cultures.

The data in the present study were collected in an Internet survey. Although the method allows participants to remain anonymous and permits data collection from wider geographic areas, it also means that the researcher cannot be sure that, in fact, the 275 participants were lesbian or gay. Half the data were collected with the instruments (i.e., GLRSS, RDAS, OQ-45) presented

first, followed by a series of open-ended questions; for the other half, the open-ended questions were presented first. The length of the assessment and the requirement to respond to open-ended questions would be expected to limit the number of casual respondents who were neither lesbian nor gay. In addition, only lesbian or gay identified individuals were recruited for this study, which obviously omits bisexual, MSM/WSW, pan, and trans\* people and their varying identities in relationships. An interesting future study would be to purposefully recruit these populations to determine efficacy of the measure within their same-gender relationships.

# Why Not Just Use the RDAS?

Many researchers and clinicians would agree: why develop a new measure, when one that is commonly known and accepted exists? The answer to this lies in the argument against heterosexism (in an assumption of identical processes) between heterosexual versus same-gender couples. The RDAS was developed with heterosexual couples, and was based on a measure that was developed with (and for) heterosexual couples. The interpretation of data gathered with an instrument not designed for the population being assessed becomes an ethical concern. Kurdek (2005) used the RDAS and assessed both opposite and same-gender couples and found that there were significant differences in the way in which they answered the questions and the way in which the results should be interpreted. Within this study, the RDAS had different standard psychometrics than it did when validated with the original heterosexual sample, thus calling into question the interpretability of the results when used with same-gender couples.

## CONCLUSION AND DIRECTIONS FOR FUTURE RESEARCH

This report presents a new assessment instrument for use with same-gender couples. As an initial investigation, it explored the structure and basic psychometrics of the measure. The development of the GLRSS is one of a few studies that have empirically developed and validated a measure specifically for same-gender couples. As mentioned, some measures have been used with same-gender couples under a myth of sameness—guided by heteronormativity; however, they were all created initially with opposite-gender couples. The GLRSS has shown evidence of being reliable and valid with the recruited population, specifically gay- and lesbian-identified individuals in couple relationships. In future studies, we plan to incorporate item response modeling analysis procedures and follow-up retesting methods to further advance the psychometric strength of the measure.

#### NOTE

<sup>1</sup>For this manuscript, the term "same-gender" is used in place of the phrase "same-sex" as the word *gender* denotes the psychological identification of either male/female/other characteristics, while *sex* is the physical embodiment of biological characteristics—e.g., a penis or a vagina. In an effort to be inclusive and most accurate, "same-gender" will be used to identify people in a relationship who classify themselves psychologically as having the same gender identity.

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# APPENDIX GAY AND LESBIAN RELATIONSHIP SATISFACTION SCALE

*Directions:* Couples often have good and not-so-good moments in their relationship. This measure has been developed to get an objective point of view of your relationship. Thinking about your relationship with your partner, please mark your agreement with each statement on the scale below.

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
*1. There are some things about my partner that I	0	1	2	3	4	5	6
do not like.  *2. I wish my partner enjoyed more of the	0	1	2	3	4	5	6
activities that I do. 3. My mate has the qualities I want in a partner.	0	1	2	3	4	5	6
4. My partner and I share the same values and goals in life.	0	1	2	3	4	5	6
5. My partner and I have an active social life.	0	1	2	3	4	5	6
6. My partner's sociability adds a positive aspect to our relationship.	0	1	2	3	4	5	6
7. If there is one thing that my partner and I are good at, it's talking about our feelings with each other.	0	1	2	3	4	5	6
8. Our differences of opinion lead to shouting matches.	0	1	2	3	4	5	6
*9. I would lie to my partner if I thought it would "keep the peace."	0	1	2	3	4	5	6
10. During our arguments, I never put down my partner's point of view.	0	1	2	3	4	5	6
11. When there is a difference of opinion, we try to talk it out rather than fight.	0	1	2	3	4	5	6
12. We always do something to mark a special day in our relationship, like an anniversary.	0	1	2	3	4	5	6
13. I often tell my partner that I love him/her.	0	1	2	3	4	5	6
*14. Sometimes sex with my partner seems more like work than play to me.	0	1	2	3	4	5	6

# Appendix Continued

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
15. I always seem to be in the mood for sex when my partner is.	0	1	2	3	4	5	6
*16. My partner sometimes turns away from my sexual advances.	0	1	2	3	4	5	6
*17. My family accepts my relationships with my partner.	0	1	2	3	4	5	6
18. My partner's family accepts our relationship.	0	1	2	3	4	5	6
19. My family would support our decision to adopt or have children.	0	1	2	3	4	5	6
20. My partner's family would support our decision to adopt or have children.	0	1	2	3	4	5	6
21. I feel as though my relationship is generally accepted by my friends.	0	1	2	3	4	5	6
22. I have a strong support system that accepts me as I am.	0	1	2	3	4	5	6
23. I have told my coworkers about my sexual orientation/attraction.	0	1	2	3	4	5	6
24. Most of my family members know about my sexual orientation/attraction.	0	1	2	3	4	5	6

# SCORING INFORMATION

All items are summed at face value, except reverse score items (denoted with asterisk\*—#1, 2, 9, 14, 16, 17). Relationship Satisfaction subscale includes items 1–16; Social Support subscale items 17–24.

# BRIEF INTERPRETATION INFORMATION

Scores above the mean indicate higher rates of satisfaction/support, while lower scores indicate possible deficits. Total scale: M = 107, SD = 16; Relationship Satisfaction subscale: M = 68, SD = 13; Social Support: M = 38, SD = 7.

# SUPPORTING INFORMATION

Additional Supporting Information may be found in the online version of this article:

Table S1. Item Reduction Logic—Number of Items Reduced from 30 to 24.

Table S2. Final GLRSS Scale with Item Factor Loadings.