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Sexual Orientation Among Men Associated with Christian Groups:
A Discriminant Analysis

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Abstract

Ninety-two men affiliated with Christian religious organizations completed psychosocial measures of childhood rejection by fathers, trauma in the home, gender nonconformity; adult internalized shame, and sexual trauma, a measure of religious identification commitment, and a demographic questionnaire. Discriminant analysis distinguished heterosexuals from the gay and formerly gay groups on the basis of boyhood gender nonconformity, shame, and childhood trauma, accounting for 60.5% of the total variance; gays and former gays were distinguished on the basis of religious identification/commitment and childhood parental rejection, accounting for 39.5% of the variance. Discriminant functions correctly classified 77% of participants. Boyhood gender nonconformity and adult heterosexual orientation were strongly related ($r = .87$). Formerly gay and gay participants were distinguished by a stronger Christian commitment and identification among the formerly gay group. Implications for research, counseling, and Christian ministry are explored.

Sexual Orientation Among Men Associated with Christian Groups:
A Discriminant Analysis

Sexual orientation is a complex and controversial topic that has important spiritual and practical implications for individuals and social systems. Several factors have been proposed as causes of homosexuality. Among these are psychosocial and environmental factors, biological factors, and genetic factors. While Christians are diverse in their views, homosexuality is of concern to the Christian community because it is considered by many Christians to be contrary to Christian values (or sinful), and because homosexuality is perceived as a threat to families and communities.

Research on the etiology of homosexual behavior has emphasized psychosocial, biological, and genetic factors. Much of the early research up through the early 1980's emphasized psychosocial and environmental factors. Among the psychosocial factors which have been linked to the probability of homosexual behavior include childhood gender non-conformity (Hamer & Copeland, 1994; Whitehead, 1996), paternal absence or rejection (Etzioni, 1993; Will, 1993) and traumas such as emotional, physical, and sexual abuse (Beitchman & Zucker et al, 1992; Hart & Brassard, 1987; Sanders & Becker-Lausen, 1995) or neglect (Biller & Solomon, 1986). We will return to these later.

Biological factors became an increasingly important focus of research as the 1980's progressed. Biological factors proposed to account for homosexuality included exposure to abnormal levels of hormones during early development or adulthood (e.g., Ellis & Ames, 1987; Gladue, 1988; Gooren, 1988; Hendrix, Graber, & Rodriguez-Sierra, 1989; Meyer-Bahlburg et al, 1995) and differences in anatomical brain structures (e.g., Allen & Gorski, 1992; LeVay, 1991; Swaab & Hofman, 1990). Critical reviews of this research have concluded that the case for biological factors as an exclusive or primary cause of homosexuality has not been made, though biological factors may play a contributory role in homosexual behavior (Bailey, 1995; Burr,

1994; Byne & Parsons, 1993; Gladue, 1987; Jones & Yarhouse, in press; Muir, 1996; Schmidt, 1995 & Court, 1996).

Research on the presence and role of genetic factors emerged in the 1990's. Genetic influence is inferred from studies of twins (e.g., Bailey & Pillard, 1991; Bailey, Pillard, Neale, & Agyei, 1993; Green, 1988; King & McDonald, 1992; Mitchell, Baker, & Jacklin, 1989) or examined by direct genetic investigations (e.g., Hamer & Copeland, 1994; Hamer, Magnuson, Hu, & Pattatucci, 1993; Hu et al, 1995). A number of criticisms have been raised regarding these studies (Bailey, Dunne, & Martin, 1999; Byne & Parsons, 1993; Muir, 1996; Rice, Anderson, Risch, & Ebers, 1999; Schmidt, 1995; Whitam, Diamond, & Martin, 1993). In particular, Bailey et al. (1999) concluded on the basis of new data with better sampling techniques that earlier twin research had reached misleading conclusions due to sampling biases which inflated co-morbidity among twins. Perhaps the best conclusion which can be reached today is that the evidence for both biological and genetic factors as sole causal links for homosexuality is not convincing. It seems likely that both biological factors and genetics nonetheless play a role in homosexuality, however, and many factors remain to be investigated.

Most of the research investigating the role of psychosocial factors was done from the 1960's to the early 1980's. In the 1980's and 90's this line of research was largely laid aside in favor of research on biological factors discussed above (Jones & Yarhouse, in press). Several factors contributed to this shift. First, the deletion of homosexuality from the DSM carried the implication that homosexuality was not a disorder and shifted the focus of research (Burr, 1994). Second, the conclusion drawn from early path analytic studies was that psychosocial factors were of little importance in homosexual development (Bell, Weinberg, & Hammersmith, 1981; Van Wyck & Geist, 1985); thus biological factors came to be considered more promising. Third, voicing a theme important to Christians, Rosik (1996) suggested that an implicit moral shift in the way homosexuality is viewed also contributed to the dramatic change in research emphases in the 1980's. Finally, dramatic technological innovations during this period facilitated biological investigations, and made direct genetic investigations possible as well.

Oddly in tension with the shift toward an emphasis on biological and genetic etiology during this period was an increase in investigation of the behavioral practices of homosexuals spurred in part by desires to decrease high risk behaviors in order to reduce the spread of HIV-AIDS (for example, see the questionnaire used by Hamer and his colleagues in Hamer & Copeland, 1994; Appendix B). A second recent development is the growing consensus that the evidence for biological and genetic factors is not as strong as initially hoped. As a result, the importance of both biological and genetic factors has been questioned. Third, there also seems to be an emerging consensus that several factors may interact in the etiology of homosexual behavior, and that perhaps several pathways lead to it as well (Bailey, 1995; Jones & Yarhouse, in press; Schmidt, 1995; Whitehead, 1996b; Whitehead & Court, 1996). For example, Schmidt (1995) proposed an interactionist model in which differing combinations of genetic, biological, and psychosocial factors interplay in producing adult sexual orientation and behavior in any given individual. Jones and Yarhouse (in press) proposed a similar model. Finally, the path analytic studies have been re-appraised.

In a detailed analysis, Whitehead (1996b) critiqued the path analytic studies of Bell et al. (1981) and Van Wyck and Geist (1985). Three key points are pertinent here. First, Whitehead noted that “some of the factors identified (same-sex parent difficulties, childhood gender non-conformity, early intense sexual experiences) coincide with those posited by various theorists, and to a respectable degree” (Whitehead, 1996b; p. 334). Second, Whitehead detailed methodological shortcomings of path analysis which may account in part for the seeming weakness of the findings, and pointed out that the value of the findings seem to be understated in the reports since path models which account for 30% of the variance are “typical” and generally considered to be satisfactory. Third, Whitehead emphasized that unique and powerful individual (or “non-shared”) experiences may play a pivotal role in the development of this very private behavior.

Despite the weaknesses of path analytic models, Whitehead (1996b) concluded that “some of the factors identified (same-sex parent difficulties, childhood gender non-conformity,

early intense sexual experiences) coincide with those posited by various theorists, and to a respectable degree” (Whitehead, 1996b; p. 334). For somewhat different reasons Bem (1996, 1998) proposed that contributing factors to homosexuality include conditioning, social learning, and childhood abuse. Echoing this theme, Rosik (1996) called for an “attempt to identify possible etiological pathways for the homosexual orientation, such as the influence of childhood sexual trauma” (pp 379-380).

Despite their recent neglect, psychosocial factors remain an important area of investigation. Thus this study examines the effectiveness of several psychosocial factors in distinguishing among men who differ in their sexual orientation. Biological and genetic factors will not be considered, and factors in the development of lesbianism among females also will not be addressed here.

A number of psychosocial factors have been proposed to influence the development of male homosexuality. Among these are: (a) boyhood gender non-conformity (Bell et al., 1981; Van Wyck & Geist, 1985; Whitehead, 1996); (b) father absence or rejection during childhood (Etzioni, 1993); (c) childhood traumas such as emotional, physical, and sexual abuse (Beitchman & Zucker et al, 1992; Hart & Brassard, 1987; Olson, 1990; Sanders & Becker-Lausen, 1995), or neglect (Biller & Solomon, 1986); (d) adult sense of shame (Dalbey, 1992; Everstine & Everstine, 1989; Pittman, 1993;); and (e) adult spirituality (Dallas, 1996; Schneider, 1977/1992; Schmidt, 1995). We will consider each of these in turn.

Boyhood Gender Non-conformity

One of the strongest psychosocial predictors of homosexuality among adult males is boyhood gender nonconformity, sometimes referred to as the “sissy” factor. Hamer and Copeland (1994) noted that the link between effeminate behavior in boys and homosexual behavior as adults is “one of the strongest correlations between childhood and adult behavior known in developmental psychology” (p. 166). They found 68% of gays were considered “sissies” as children, while only 5% of heterosexuals were sissies; similar results were found for engagement in masculine sports (p. 167). Boys who are not athletic, who avoid typical boyhood

games, fights and competition, who avoid the risk of bodily injury, and who enjoy girlish activities such as dressing up like women, have been found to more commonly manifest adult homosexual behaviors (Bell et al, 1981; Bieber et al., 1962; Billingham & Hockenberry, 1987; Green, 1974; 1987; Harry, 1982; Saghir & Robbins, 1973). In contrast, among adult men the tendency to engage in less typically masculine behaviors seems more related to personality differences than to sexual orientation or preferences (Belsky, 1992; Brok, 1992).

Father Absence or Rejection

Early childhood relationships, especially with the father, are thought to play an important role in male interpersonal relationships and sexuality (Wilder, 1993). Divorce and father absence from the home are predictors of less adequate sense of identity, and lower well-being and adjustment (Biller, 1974; Biller & Solomon, 1986; Etzioni, 1993; Hoffman, 1992; Masterson, 1985; Rohner, 1975, 1986). The quality of father involvement in the child's development appears to affect the course of psychosexual development (Bell et al, 1981; Bieber et al., 1962; Biller & Solomon, 1986; Evans, 1969; Rohner, 1975; Sebold, 1976; van den Aardweg, 1985; Van Wyck & Geist, 1985; Whitehead, 1996). Father absence during childhood is also associated with increased rates of a variety of adult emotional and behavioral disturbances, including homosexuality (Etzioni, 1993).

Childhood Trauma

Traumatic experiences, including physical, sexual, and emotional abuse (Beitchman & Zucker et al, 1992; Hart & Brassard, 1987; Sanders & Becker-Lausen, 1995), and neglect (Biller & Solomon, 1986), are thought to play an important role in both social and spiritual development (Arterburn & Felton, 1991; Bradshaw, 1988, 1990). Sexual abuse has been linked with a variety of adult forms of maladjustment such as poor self-esteem and self concept, depression, and addictive behaviors, and with greater likelihood of adulthood homosexual activity (Beitchman & Zucker et al, 1992; Urquiza & Capra, 1990). Recent data indicate that sexual molestation by men is several times higher among male homosexuals (35%) than among male heterosexuals (4%; Doll et al, 1992). First homosexual experiences are likely to occur before 16 years of age (75%),

while first heterosexual experiences usually occur after that age (78%; McWhirter & Mattison, 1984).

Shame

Shame is a powerful emotion. It can produce both social- and self-alienation. It also has positive effects as it curbs antisocial impulses. At one extreme, lack of shame or shamelessness is thought of as a social and moral deficiency (Schneider, 1977/1992). At the other, shame can overwhelm or debilitate a person, resulting in a shame-based identity (Bradshaw, 1990; Harper & Hoopes, 1990; Potter-Efron & Potter-Efron, 1989).

Guilt has more to do with behavioral transgressions of social standards, while shame is more related to a sense that one's personal identity or being is unacceptable. Tangney and her colleagues have significantly contributed to our understanding of this distinction (e.g., Tangney, 1996; Tangney & Fischer, 1995; Tangney, Miller, Flicker, & Hill-Barlow, 1996).

Shame is believed to result from paternal rejection (Dalbey, 1992; Pittman, 1993). Especially when shame surrounds gender or erotic parts, involves degradation or shaming by powerful males that has sexual overtones, or occurs in the context of sexual molestation, it is thought to play an important role in the development of confused sexual identity (Everstine & Everstine, 1989; Hunter, 1990; Pittman, 1993; Stoller, 1987). Hunter (1990) concluded that shame is one of the most powerful and damaging effects of sexual abuse. Pittman (1993) concurred. However, shame has not yet been directly investigated as a causal factor in sexual orientation.

It has been proposed that shame has important spiritual implications (Bonhoeffer, 1955; Schneider, 1977/1992). Ideas about God--especially God the Father--are often portrayed in Scripture and Christian teaching by means of father images. Perhaps for this reason, paternal rejection and shaming seems to be transferred or projected onto God. Male shame is thus thought to have important spiritual implications.

Spirituality

Spirituality can be defined narrowly in terms of one's relationship to God (Benner, 1989) or broadly in terms of the quest for meaning and purpose in life (Ellison, 1983). Benner distinguishes natural, religious, and Christian spirituality. Christian spirituality has been proposed to play an important role in awakening (Peck, 1988) or transforming sexuality (Pattison & Pattison, 1980). Within Christian spirituality, God is commonly thought of as a father figure; hence father relationships in males may be important influences in God relationships as well (Smail, 1980). At present little is known about the relationship between spirituality and homosexuality. Because homosexuality has become a polarizing issue in the Christian community increased understanding of how spirituality fits into homosexual development seems important.

Purpose of Study

The present study gathered data from adult male heterosexuals, non-gay homosexuals, and gay homosexuals. It investigated whether retrospective reports of their father-son relationships, boyhood gender nonconformity, and childhood abuse; current sense of shame; and religious identity/commitment could distinguish them based on their sexual identities. The goal was to identify developmental patterns which may influence adult sexual identity among men. It was hypothesized that a discriminant analysis could successfully distinguish the participants' sexual orientation based on the five predictor variables. It was also hypothesized that heterosexual males would show less childhood masculine gender nonconformity, less internalized shame, less paternal rejection, less spiritual or religious alienation, and less childhood psychological maltreatment than the other two groups.

Classifying individuals in terms of sexual orientation is controversial and difficult. Classifications include heterosexual, bisexual, homosexual, pedophiles, and other groups. For purposes of the present study, three groups are examined in terms of their sexual behavior: heterosexual, gay homosexual, and non-gay homosexual. Conceptually, heterosexuals included those male participants who primarily or exclusively engage in sex with partners of the opposite sex.

Gay homosexuals included males who engaged primarily or exclusively in sexual interaction with other males. Gay homosexuals are “out of the closet” and often are associated with groups which advocate for gay rights and gay concerns.

Non-gay homosexuals included males who had formerly engaged in homosexual behavior, but who sought a change in sexual orientation to become heterosexual. Based on their understanding of the Bible, these men typically hold the view that homosexual behavior is sinful. Non-gay homosexuals are often affiliated with Christian groups such as Exodus International (Nicolosi, 1991).

Participants were chosen for the study based on their affiliation with groups largely characterized by one of these three orientations. Operationally, measurement of their scores on the Kinsey scale was used as a validity check (Kinsey, Pomeroy, & Martin, 1948).

Method

Design

A static group comparison (Campbell & Stanley, 1963) of three existing groups of men affiliated with Christian organizations, and identified as heterosexuals, gay homosexuals, and non-gay (or formerly gay) homosexuals was used to investigate the research hypotheses.

Participants

About 500 research questionnaires were distributed through several Christian organizations which agreed to participate in the study. Heterosexual men were recruited mostly from Evangelical Christian churches. Gay homosexual men were drawn mostly from a gay homosexual Christian denomination and a gay homosexual Christian alliance. Non-gay homosexuals were obtained mostly from parachurch Christian ministries that work with men seeking to leave the gay lifestyle.

Completed questionnaires were received by return mail from individual participants or from a volunteer who gathered them for the participant group. In all, 92 men completed and returned useable data. Because assistants were used to distribute questionnaires, the exact number of questionnaires distributed is not known; a high end estimate is 600. Response rate is

estimated to be 15-18%. Thus participants comprise a convenience sample of volunteers. All participants were adult male residents of the United States or Canada; the majority lived in California. The final sample included 32 heterosexual males, 32 gay homosexual males, and 28 non-gay homosexual males; mean ages were 44.7, 38.1, and 40.4 respectively. Ethnic composition was 80.4% Caucasian, 8.7% Hispanic, 4.4% African American, 2.2% Native American, 1.1% Pacific Islander, and 2.2% Other.

Predictor Variables

Five predictor variables were chosen because prior research indicated their potential to distinguish among participant groups, or because they were of particular interest to the investigators. These included: (a) a measure of boyhood gender nonconformity; (b) childhood abuse history; (c) childhood home environment; (d) shame; and (e) spiritual identity/commitment.

Boyhood Gender Conformity Scale. The total score on the Boyhood Gender Conformity Scale was used to assess adult men's retrospective perception of their boyhood behavioral patterns of gender-appropriate behavior. The Boyhood Gender Conformity Scale was developed to measure the degree to which the individual engaged in typical masculine behaviors as a boy (Billingham & Hockenberry, 1987; Hockenberry & Billingham, 1987). It consists of 20 items responded to on a 7-point Likert continuum from 0 = Never or Almost Never True to 6 = Always or Almost Always True. Hockenberry and Billingham showed that both a 13-item subset (loadings $\geq .30$) and a 5 item subset (loadings $\geq .40$) of the scale could distinguish heterosexuals from homosexuals in their cross-validation sample at 87.4% accuracy. Both versions also correlated significantly and above .57 with the Freund's Feminine Gender Identity Conformity Scale-A and Whitam's 67-item measure for distinguishing heterosexual and homosexual males. Test-retest reliabilities were .89 for the 13 item version and .92 for the 5 item version. The 5-item version, which measured the presence or absence of masculine traits, was used in this study.

The Boyhood Gender Conformity Scale has been shown to have good reliability. It discriminated well between heterosexual and homosexual males both at the item and scale level (Billingham & Hockenberry, 1987; Hockenberry & Billingham, 1987).

Home Environment Questionnaire. The Home Environment Questionnaire, also known as the Childhood Abuse and Trauma Scale, was developed to measure the effects of childhood psychological trauma, including physical, sexual, and emotional abuse, as perceived by adults (Sanders & Becker-Lausen, 1995). The total score, which was used in this study, provides a general index of the frequency, extent, and severity of psychological trauma experienced in childhood and adolescence. This questionnaire consisted of 38 items. Responses were on a 5-point Likert continuum from 0 = Never to 4 = Always.

Sanders & Becker-Lausen (1985) found three correlated factors: loneliness/neglect, sexual abuse, and punishment. Test-retest reliability at 6-8 weeks was .89 for the full scale and .91, .85, and .71 for the respective factor subscales. Internal consistency coefficient alpha was .90, .86, and .76 for the respective factor subscales. Scores on the overall scale and factor subscales correlated significantly with scores on Bernstein and Putnam's Dissociative Experiences Scale, with depression, and with stressful life events (Sanders & Becker-Lausen, 1995).

Parental Acceptance-Rejection Questionnaire. The Parental Acceptance-Rejection Questionnaire (Rohner, 1990) measures memories of childhood acceptance or rejection. In this study the total score on the Parental Acceptance-Rejection Questionnaire was used to provide a measure of memories of childhood acceptance or rejection by participants' fathers. The Parental Acceptance-Rejection Questionnaire has 60 items on four subscales. Internal consistency ranges from .72 to .90 (Rohner & Pettingill, 1985). Three of the four subscales have demonstrated good validity in predicting use of physical punishment (Rohner, 1990). Among North American youths control is associated with hostility and rejection, while it is associated with warmth among Korean youths; presumably these differences are due to the difference in cultural values

for autonomy and control respectively. Participants rated their fathers on this questionnaire using a 4-point Likert continuum from 1 = Almost Always True to 4 = Almost Never True.

Internalized Shame Scale. Shame was measured by means of the total score on the Internalized Shame Scale (SHAME), fifth version (Cook, 1993). It was developed to assess the extent to which participants had developed an internalized sense of failure, incompetence, and inadequacy (Kauffman, 1985, 1989; Nathanson, 1992). The measure includes 24 shame items; 6 self-esteem items were also included primarily as distractors to reduce the likelihood of response sets since all shame items are coded in the same direction. SHAME has high internal consistency and stability over time (Cook, 1993; Rybak, 1991); initial support for validity has also been shown by demonstrating that the SHAME scale can distinguish between clinical and non-clinical samples (Cook, 1991; 1993). Responses were on a 5-point Likert continuum from 0 = Never to 4 = Always.

Religious Identification and Commitment Scale. The Religious Identification and Commitment Scale was designed to measure the degree of religious commitment and activity of participants. It was developed for this study on the basis of a religious identification survey by Sachs (1974). It consisted of 9 items; all were responded to on a 5-point continuum. For 6 items the continuum ranged from 0 = Extremely Strong to 5 = Not at all Strong. The remaining items used a five-point continuum of frequency of activity or importance. Internal consistency coefficient alpha was .90 for this sample.

Additional Variables Used As Alternative Predictors. Three additional predictor measures were used in post-hoc analyses. The first was the participant's self-report of his understanding of the biblical view of sex. Options were: (a) Sinning (acting against God's principles); (b) Not sinning because God made him that way; (c) Not sinning because God approves of all loving relationships; (d) Both 2 and 3.

The Sexual Trauma Scale also was developed for this study on the basis of maltreatment scales developed by Briere and Runtz (1988, 1990) and a sexual abuse survey by Carnes (1991).

Fourteen items were rated on a 5-point continuum from 1 = Never Happened to 5 = Happened with Severe Negative Effects. Coefficient alpha in this sample was .88.

Criterion Variable

The criterion variable was male gender identity as heterosexual, gay homosexual, or non-gay homosexual. Affiliation was a primary factor in determining gender identity. In addition, scores on the Klein Sexual Orientation Grid (Klein, 1980), and the Kinsey Heterosexual-Homosexual Rating Scale (Kinsey, Pomeroy, & Martin, 1948) were used to verify classification of gender identity.

Procedure

Upon agreement to participate, each prospective participant was given a questionnaire packet of assessment materials by the researcher or his designated representative. Participants received a cover letter from the researcher describing the nature and goals of the study, assuring the participant of his anonymity and of the confidentiality of his responses, and seeking his informed consent to participate. Following the cover letter, materials included a demographic questionnaire, the Boyhood Gender Conformity Scale, the Home Environment Questionnaire, the Parental Acceptance-Rejection Questionnaire, the Internalized Shame Scale, the Religious Identity and Commitment Scale, the Father Forgiveness Perception Scale (reported in Born, 1998/1998), the Sexual Trauma Scale, the Klein Sexual Orientation Grid, and the Kinsey Heterosexual-Homosexual Rating Scale. The questionnaires took approximately 90 to 120 minutes to complete. Participants were offered the opportunity to receive the results of the study.

Statistical Analysis

A multiple discriminant function analysis (Kachigan, 1991) was used to test the research hypotheses. The variables were evaluated according to the default settings of TOLERANCE (0.001), FIN (0.05), and FOUT (1.0) (Norusis, 1992; 1994). Group differences were tested by analysis of variance; post hoc tests were conducted to examine differences between means on variables where significant F values were found. Because of the large number of statistical tests performed, a Bonferroni protection strategy was employed so that the family confidence interval

meets the .05 level (Howell, 1992; Marascuilo & Levin, 1983; Neter, Wasserman, & Kutner, 1983). To insure that the overall p did not exceed .05 the criterion for significance was set at $p \leq .002$.

Results

In terms of relationship status, among gays 51.6% were single, 3.2% married, 35.5% lived with a significant other, and 9.7% reported other status. Among non gays 53.6% were single, 32.1% married, none lived with a significant other, and 14.3% reported other relationship status. Among heterosexuals, 6.3% were single, 78.1% married, 3.1% lived with a significant other, and 12.5% reported other relationship status. These differences were significant ($X^2_{(6)} = 70.79, p < .001$).

Among gays 37.5% reported they were sexually active in long term unmarried sexual relationships, 34.4% in casual relationships, 15.6% in "other" relationships, and 12.5% reported they abstained. Among non-gays none were engaged in a long term unmarried sexual relationships, 7.1% were in short term unmarried sexual relationships, 3.6% were in "other" sexual relationships, and 53.6% were abstinent. Among heterosexuals 3.1% were engaged in long term unmarried sexual relationships, none were engaged in short-term unmarried or "other" sexual relationships, 81.3% engaged in marital sexual relationships, and 9.4% were abstinent. These differences also were significant ($X^2_{(8)} = 80.61, p < .001$).

Protestant religious affiliation was most common among all groups; total religious affiliation rates were 78.1% for gays, 100% for non-gays, and 96.8% for heterosexuals. Differences in affiliation rates were not significant ($X^2_{(2)} = 9.79, ns$). The three groups differed in their tendency to describe Jesus as savior and Lord ($X^2_{(2)} = 28.40; p < .001$). The three groups also differed in their tendency to view the entire Bible as the word of God ($X^2_{(2)} = 67.69; p < .001$).

Gays reported alcohol abuse among 21.9% of their fathers while growing up, non-gays 57.2%, and heterosexuals 34.4%; these differences were not significant ($X^2_{(2)} = 8.17, ns$).

Alcohol abuse was reported among 25% of mothers of gays, 17.8% for non-gays, and 12.8% for heterosexuals; these results also were not significant ($X^2_{(2)} = 1.06$, ns).

Personal alcohol use was reported as 84.4% among gays, 32.1% among non-gays, and 34.4% among heterosexuals; this difference was significant ($X^2_{(2)} = 23.18$, $p < .001$). Use of other drugs was reported as 25% among gay, 0% among non-gays (with 7.1% no response), and 18.8% among heterosexuals ($X^2_{(2)} = 7.18$, ns).

Personal use of counseling or psychotherapy was reported by 65.6% of gays (18.8% > 2 years, 94.4% of non-gay homosexuals (50% > 2 years), and 53.1% of heterosexuals (15.6% > 2 years) . These differences were not significant ($X^2_{(2)} = 10.0$, ns).

Father absence from the home for a year or more during childhood was reported as 28.1% among gays, 14.8% among non-gays, and 31.3% among heterosexuals ($X^2_{(2)} = 2.54$, ns).

Parental divorce or permanent separation was reported by 34.4% for gays 14.8% for non gays, and 25% for heterosexuals ($X^2_{(2)} = 3.21$, ns). Neither of these variables were significant.

On the Kinsey Rating Scale, 6 is exclusively homosexual, 3 is neutral, and 0 is exclusively heterosexual. The gay participants identified with the homosexual end of the continuum; 59.4% rated themselves as 6, 34.4% as 4 or 5, and 6.3% = 3. The non-gay group was split, with 3.8% at 6, 53.8% at 4 or 5, 26.9% 1 or 2, and 11.5% scoring 0. The heterosexual participants identified themselves as heterosexual with 3.2% 1-2, and 96.8% at 0. These results are significant ($X^2_{(8)} = 166.17$, $p < .001$).

Sexual abuse was reported by 63% of gays, 54% of non-gays, and 31% of heterosexuals in this sample. Differences among the groups in sexual abuse rates were significant ($X^2_{(2)} = 46.62$, $p < .001$). Reported rates of sexual abuse among males are varied; Hunter (1991) reports rates ranging from 2.5 to 17.3; using the highest figure, sexual abuse rates in this sample as a whole are higher than population estimates ($X^2_{(2)} = 73.89$, $p < .001$).

Analyses of variance were used to test for group differences on continuous variables (see Table 1). The three participant groups were not found to differ statistically in age, education, and income. Results indicated a significant difference among groups on the Boyhood Gender

Conformity Scale ($F_{(2, 90)} = 30.04$; $p < .0001$), with gay homosexuals = non-gay homosexuals < heterosexuals. Results for the Parental Acceptance/Rejection Questionnaire, the Home Environment Questionnaire, and SHAME were not statistically significant. On the Religious Identity and Commitment Scale differences were significant ($F_{(2, 90)} = 23.56$; $p < .0001$), with gay homosexuals > non-gay homosexuals = heterosexuals (low scores indicated greater religious commitment).

On the demographic question regarding whether the Bible portrays gay sex as sinful 100% of heterosexuals, 92.9% of non gays, and 16.1% of gays said they believe the Bible said it was sinful. These results were significant ($F_{(2, 90)} = 90.35$; $p < .0001$), with gay homosexuals < non-gay homosexuals = heterosexuals.

Results on the Sexual Trauma Scale were not significant. On the Klein Sexual Orientation Grid-Past results were significant ($F_{(2, 87)} = 114.81$; $p < .0001$), with gay homosexuals = non-gay homosexuals > heterosexuals. On the Klein Sexual Orientation Grid-Present results were also significant ($F_{(2, 87)} = 258.49$; $p < .0001$), with gay homosexuals > non-gay homosexuals > heterosexuals. On the Klein Sexual Orientation Grid-Ideal results were again significant ($F_{(2, 86)} = 147.95$; $p < .0001$), with gay homosexuals > non-gay homosexuals = heterosexuals (see Figure 1).

The overall hypothesis that participant groups could be discriminated on the basis of scores on the predictor variables was tested by discriminant analysis. The analysis was conducted using prior probabilities for classification based on sample proportions. Predictor variables were entered in a step-wise fashion, following the default option in SPSS (Norusis, 1992). The first function discriminated the heterosexual group from the other two groups on the basis of Boyhood Gender Conformity Scale, SHAME, and Home Environment Questionnaire scores (Wilks' Lambda = .39, Chi Square $_{(10)} = 67.43$; $p < .001$); it accounted for 60.5% of the total variance in group membership. The second function discriminated between gays and former gays on the basis of the Religious Identity and Commitment Scale and Parental Acceptance-Rejection Questionnaire scores (Wilks' Lambda = .68, Chi Square $_{(4)} = 28.01$; $p < .001$); it accounted for

39.5% of the variance in group membership. Together these functions correctly classified 77% of the participants; about 35% accuracy is expected by chance.

In a subsidiary analysis, responses to the demographic questionnaire item on participants' views of the biblical perspective on homosexual behavior were included along with the above measures. Again, sample proportions were taken into account and a step-wise procedure was employed. Two discriminant functions were generated. The first function discriminated the heterosexual group from the other two groups on the basis of their biblical view of homosexual behavior and Religious Identity and Commitment Scale scores (Wilks' Lambda = .21, Chi Square $(6) = 111.79$; $p < .001$); it accounted for 80% of the total variance in group membership. The second function discriminated between gays and former gays on the basis of the Boyhood Gender Conformity Scale, Home Environment Questionnaire, SHAME and the Parental Acceptance-Rejection Questionnaire (Wilks' Lambda = .68, Chi Square $(2) = 30.54$; $p < .001$); it accounted for 20% of the variance in group membership. Together these functions correctly classified 83% of the participants.

Discussion

In interpreting results sample limitations must be kept in mind. First, the sample is based on naturally existing groups of men that differ sharply in their sexual orientations. This factor likely makes it easier to statistically identify factors which distinguish these men in terms of sexual orientation, but precludes generalizing to individuals who are less distinctive in this manner. However, Whitehead (1996) suggested that using extreme groups is a useful strategy for research in initially identifying important variables. Second, only about one in six or seven men who were initially contacted agreed to participate. Thus the sample does not represent the three groups from which participants were solicited. Third, reported sexual abuse rates in this sample are unusually high and differ from estimates for the population as a whole (Hunter, 1991). Fourth, the participants reported a high degree of therapy experience. Fifth, childhood experiences are represented by adults' memories of childhood; these memories are presumably

distorted in various ways. Generalization of the present results to other men is quite problematic. Finally, causal inferences cannot be made.

Several distinctions among the participant groups are important. Scores on the Kinsey Rating Scale confirmed that sexual orientations corresponded well to group membership. These results supported carrying out the proposed discriminant analyses.

Results for the Klein Sexual Orientation Grid scores were significant. They supported the view that non-gays in the present sample are in transition from a former homosexual identification toward a heterosexual identification. Non-gays described their past sexual orientations as similar to the gay homosexuals', their present orientations as intermediate, and they aspired to a sexual orientation like the heterosexuals. Non-gay homosexual participants report making an important transition in their sexual identities. This finding is consistent with claims that some homosexuals not only desire to change their sexual orientations (e.g., Nicolosi, 1991; 1993), but that changes in sexual behavior are possible for at least some homosexual men (e.g., Macintosh, 1994; Schwartz & Masters, 1984, van den Ardweg, 1986). Jones & Yarhouse (in press) provided a more complete discussion of the literature on changes in sexual orientation and behavior; they concluded that about 30% of participants change and noted that this outcome is similar to treatments for problems such as substance abuse.

For the present sample, gay and non-gay homosexuals described themselves as poorly identified with masculine activities as children, while heterosexuals engaged in typical male activities. These findings are consistent with prior research (Bell et al, 1981; Van Wyck and Geist, 1985; Whitehead, 1996).

Somewhat surprisingly, parental acceptance/rejection, experiences of trauma in the home environment, and the experience of shame did not distinguish the present groups, although they entered into the regression equations. In part this may be due to the differences in the statistical questions posed. Perhaps painful childhoods and shame were common among all participant groups. Reported abuse was fairly high in all three groups, and all groups scored at least a standard deviation above the normative sample for the Parental Acceptance-Rejection

Questionnaire (Rohner, 1990). These factors may have reduced the significance of parental rejection as a predictor variable in the present sample. All groups also reported relatively high levels of prior mental health counseling, suggesting the sample as a whole had high levels of distress at some time in their lives.

As a whole the sample was quite high in religious affiliation, with no differences among groups. However, the non-gay homosexuals and heterosexuals in this sample were similar to each other in their religious identity and commitment, in their beliefs about the Bible, and in their tendency to describe Jesus as Savior and Lord. Gays in the sample held different views on these issues. Gays were less conservative in their views of the Bible, of Jesus Christ, and in the importance they gave to religious identity and commitment.

Many Christians would probably not be surprised by the finding in the second set of discriminant functions that interpretation of the biblical view regarding homosexual behavior is a major factor distinguishing the non-gay and gay groups in this study. However, we must be cautious about concluding that this is generally true of gay and non-gay groups given the unique features of the present sample.

One surprising finding is that for the sample as a whole, self-reported sexual abuse was higher than population estimates. Because of the convenient nature of the sample it is not possible to draw clear conclusions. However, it is possible that participants have unusually high rates of abuse, or that use of the 12-item Sexual Trauma Scale broadened the scope of sexual abuse beyond that normally used and thus increased reported rates of sexual abuse.

Together the findings indicate that there are clear differences among the participant groups in their religious beliefs, relationships, and sexual behavior. In many respects the non-gay homosexuals report histories similar to the gay homosexuals, yet religiously they are more similar to the heterosexuals in this sample. Taken as a whole, the findings support some preconceptions while challenging others.

One aspect of causality deserves further comment. While the factors investigated in the present study were psychosocial, the present findings do not bear directly on the nature-nurture

question. The present results do not shed light on the role of biological factors such as genetic make-up and exposure to or absence of hormones or other substances during crucial developmental periods. As many recently have suggested, these too may play an important role in psychosexual development (Bailey, 1995; Jones & Yarhouse, in press; Schmidt, 1995; Whitehead, 1996). Since much of the variance remains unexplained, there is certainly room for genetic and biological influences to also play a role in differences among participants.

Practical Implications

Research. The present findings provide strong support for the conclusion that sexual identification, sexual behavior, and religious beliefs are associated in this sample. However, causal conclusions may not be drawn. Thoughtful efforts to tease out the paths of causal influence are needed. Many have proposed that several factors, including genetic predispositions, biological events, childhood experiences such as trauma and rejection, and early sexual experiences and fantasies, interact to influence sexual attitudes and behavior in adulthood (Bailey, 1995; Jones & Yarhouse, in press; Muir, 1996, Rosik, 1996; Whitehead, 1996). In this regard, it may be significant that many Christians believe that sexuality and spirituality are closely intertwined and that the marital sexual union serves as a symbol for the relationship between persons and God.

As a consequence, future research may need to use larger samples which are amenable to cluster analysis or other strategies for grouping participants into more homogeneous groups to better identify a set of causes or pathways which lead to homosexuality.

Bailey (1995) lamented the lack of research on sexual feelings, identification, and behavior. Such data could prove immensely important in testing notions such as those of Whitehead that a kind of sexual imprinting may occur with early sexual experiences (Whitehead, 1996).

Counseling. Providing therapy directed toward change in homosexual behavior or orientation is controversial, with some proposing this treatment is unethical while others promote it (Rosik, 1996). Rosik proposed that different moral views underlie the disagreement. From the

present findings it seems likely that some men seeking counseling for distress around sexual orientation will believe that homosexual behavior is sinful. Men who do not view homosexual behavior as sinful are unlikely to enter counseling because of sexual orientation concerns per se. They may, however, enter counseling for a variety of other reasons. Ethically, informed consent principles suggest that the counselor needs to respect this distinction and be careful not to “impose” his or her agenda on either group (e.g., see APA Ethical Principles D, E, & F, and Ethical Standards 1.08, 1.09, 1.15, 4.02; APA, 1992); informed consent is a cardinal principle here. Whitehead and Court (1996) affirmed this notion, but cautioned that change is not easy, and for some may not be possible. They further noted that seeking changes in high risk homosexual behaviors has become more acceptable in the age of HIV and AIDS.

Dallas (1994) proposed that Christians think in terms of a continuum of change with sexual reorientation as the most complete transformation perhaps being an exception rather than normal outcome. Change may range from reduced transgression, to diminished desire in other instances. In this way, perhaps, homosexual behavior may be treated in a manner similar to other besetting sins such as substance abuse, heterosexual lust and infidelity, problems with anger, and so on.

Pastoral Ministry. Men with beliefs that homosexual behavior is sinful likely need to experience the theology of grace. They need on one hand to explore the possibility that God can forgive and love them despite their besetting sexual behavior and on the other to seek God’s grace and strength to live in light of their beliefs. In contrast, those who view homosexual behavior as acceptable to God will likely need to be approached in a very different manner which emphasizes their coming to know and enter into relationship with God as a first priority. Any transformation of their beliefs and attitudes about sexuality will likely come through this indirect route. They also need to experience affirmation of their worth as persons even by those Christians who believe that their chosen way of life is sinful; as bearers of the image of God (and thus set apart as belonging to Him) they, too are to be treated as we would treat God himself.

Debate revolves around whether homosexual orientation and behavior are sick, sinful, or simply an alternative pattern of sexuality (Byne & Parsons, 1993; Cameron, 1993a, 1993b; Nicolosi, 1991; Paul, 1985; Schmidt, 1995, 1996). Christians are not in complete agreement on these issues or even on which views are Christian. In one example of a different viewpoint, White wrote, “accepting my sexual orientation and entering into a loving, committed gay relationship had proven to me once and for all times that my homosexuality was another of God’s gifts” (White, 1994; p. 260). He views himself as a victim of the religious right and its views.

God’s call to Christians is to practice holy living in the power of the Holy Spirit. Many Christians, especially conservatives, believe that in the sexual arena that means abstinence apart from marriage, and fidelity in marriage (Anderson, 1996; Jones & Yarhouse, in press; Jones & Workman, 1994; Whitehead, 1996). The present authors concur with this view. Perhaps such abstinence is an example of delayed gratification. Christians are called to sacrifice other things for the Kingdom of God, to lay up for themselves treasures in heaven (Mt 5:19-21), and to be prepared to endure suffering on earth toward this end (e.g. 2 Tim 2:3-7). However, sacrificing personal desires for Godliness does not make sense to persons who do not honor God, do not believe in Him, or distrust Him. Scripture suggests it should not be surprising that others do not share these Christian beliefs and values (e.g., see 1 Pet 4:1-5). The call to Christian living is for Christians!

However, God’s call to unbelievers is to repentance and salvation. Thus as Christians we must be careful to focus our message to our audience. Christians need to remind each other that we are called to holiness. We are called to remove the beam in our own eyes before seeking to remove the splinter from our others’ eyes--whether the beam in our own eyes is self-righteousness, marital infidelity, love grown cold, or whatever. According to Hays (1994), Christians should repent of malice toward homosexuals. Similarly, Rosik (1996) called Christians to respect homosexual persons as bearers of God’s image. To unbelievers Christians are called to reach out--to reach out with God’s love--while at the same time not condoning what we believe to be sinful.

Homosexuals should be welcomed in the church like any other sinners.

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Table 1
Means and Standard Deviations for Selected Variables by Participant Group

<u>Variables</u>	<u>Participant Group</u>								
	<u>Gay</u>		<u>Heterosexual</u>		<u>Formerly-gay</u>		<u>F</u>	<u>df</u>	<u>p</u>
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>			
Alienation	13.34	8.68	9.68	7.47	15.61	8.05	3.55	2, 84	.03
BGCS	63.29 ^a	19.04	90.31 ^b	10.68	57.50 ^a	22.14	30.04	2, 89	.0001
Biblical View	3.25 ^a	1.21	1.00 ^b	.00	1.10 ^b	.42	90.35	2, 89	.0001
Income	3.39	2.01	4.56	1.98	3.64	1.80	3.18	2, 89	.05
KSOG Past	37.06 ^a	9.72	10.79 ^b	.06	33.68 ^a	7.05	114.81	2, 87	.0001
KSOG Present	41.55 ^a	4.72	9.97 ^b	2.76	23.32 ^c	7.70	258.49	2, 87	.0001
KSOG Ideal	35.93 ^a	10.86	9.55 ^b	.52	11.00 ^b	1.78	147.95	2, 86	.0001
PARQ/Warmth	51.47	5.50	48.63	16.45	58.56	2.96	3.04	2, 84	.05
RICS	26.65 ^a	9.53	15.97 ^b	5.82	16.25 ^b	4.30	23.56	2, 89	.0001
SHAME	40.41 ^{a b}	20.18	35.00 ^b	19.06	48.48 ^a	17.73	3.39	2, 84	.05

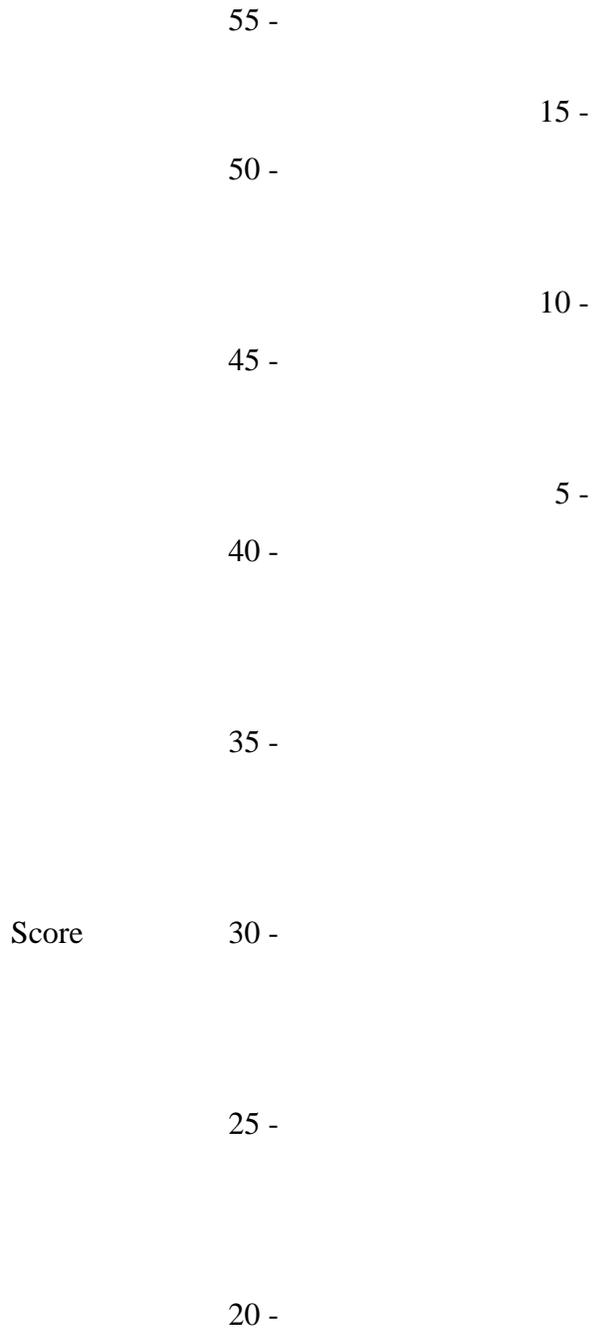
Note: $n = 32, 32, 28$ for Gay, Heterosexual, and formerly gay respectively; means with different subscripts differ significantly.

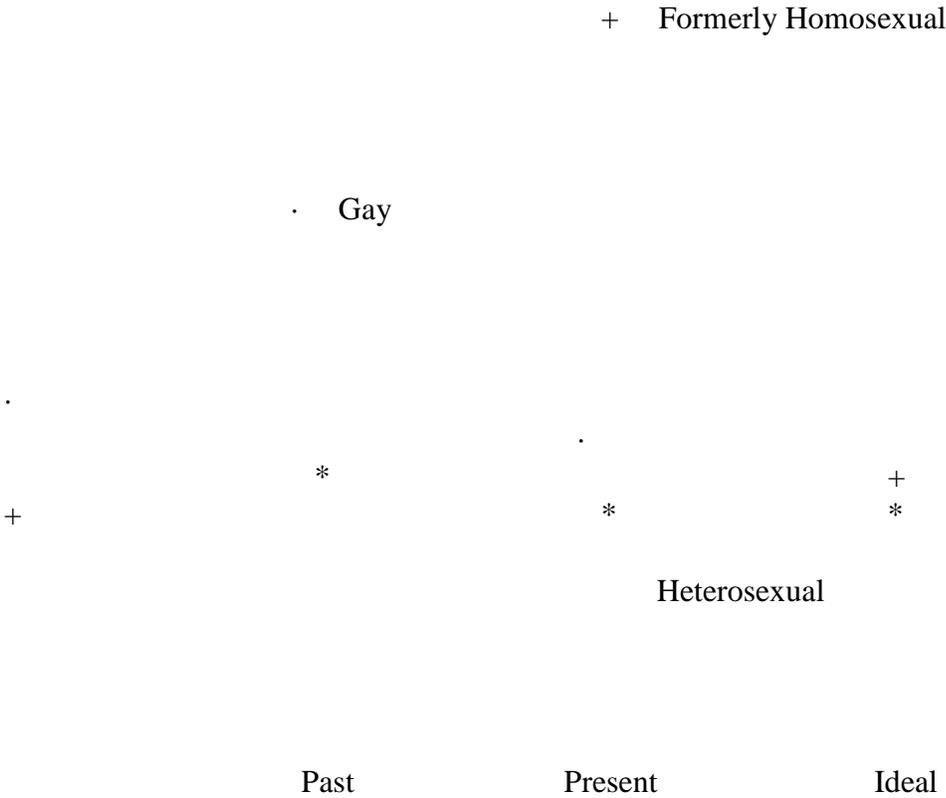
Variables include BGCS = Boyhood Gender Conformity Scale; Biblical View = view of Bible regarding homosexuality; Income = gross annual household income; KSOG = Klein Sexual Orientation Grid for past, present, and ideal; PARQ = Parental Acceptance/Rejection Questionnaire, Warmth subscale; RICS = Religious Identification and Commitment Scale; SHAME = Internalized Shame Scale.

Age, Home Environment Questionnaire Total, Parental Acceptance/Rejection Total, and Sexual Trauma Scale scores did not significantly differ among groups.

Figure 1

Klein Sexual Orientation Grid Scores for Past, Present and Ideal Sexual Orientation by Heterosexual, Gay, and Formerly Homosexual Groups.





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For the sample as a whole, self-reported sexual abuse was quite high. Reported abuse rates were 31%, 63%, and 54% for heterosexuals, gays, and former gays respectively. For the population as a whole estimates range from 2.5-17.3% (Hunter, 1991).

Table 1

Means, Standard Deviations, and Significance Tests for Predictor Variables by Participant Group

	<u>Participant Group</u>								
	<u>Gay</u>		<u>Heterosexual</u>		<u>Non-gay</u>		F	df	p
	n = 32		n = 32		n = 28				
M	SD	M	SD	M	SD				
<u>Scales</u>									
Gender Conformity	63.29 ^a	19.04	90.31 ^b	10.68	57.50 ^a	22.14	30.04	2, 90	.0001
Home Environment	51.91	29.39	45.16	23.72	52.79	22.06			ns
Klein Grid Past	37.06 ^a	9.72	10.79 ^b	.06	33.68 ^a	7.05	114.81	2, 87	.0001
Klein Grid Present	41.55 ^a	4.72	9.97 ^b	2.76	23.32 ^c	7.70	258.49	2, 87	.0001
Klein Grid Ideal	35.93 ^a	10.86	9.55 ^b	.52	11.00 ^b	1.78	147.95	2, 86	.0001
Parental Acceptance	140.90	43.32	132.77	40.26	150.16	35.01			ns
Religious Identity	26.65 ^a	9.53	15.97 ^b	5.82	16.25 ^b	4.30	23.56	2, 90	.0001
Sexual Trauma	21.84	9.21	19.25	8.51	23.82	10.22			n
s SHAME		40.41	20.18	35.00	19.06	48.48	17.73	3,392, 84	
		ns							
<u>Demographic Questions</u>									
Age	38.06	11.99	44.72	11.73	40.39	10.21			ns
Alienation	13.34	8.68	9.68	7.47	15.61	8.05	3.55	2, 84	ns
Biblical View	3.25 ^a	1.21	1.00 ^b	.00	1.10 ^b	.42	90.35	2, 89	.0001
Education									
Income	3.39	2.01	4.56	1.98	3.64	1.80	3.18	2, 89	ns
Inferior	27.06	12.21	25.32	12.62	32.89	10.43	3.09	2, 84	ns

Note: Means With Different superscripts Differ Significantly.

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