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Gay and lesbian psychological well-being: A thesis comprising; Psychological health in adults from sexual minorities (literature review); and, A comparative exploratory study of the psychological well-being of gay male, lesbian, and heterosexual Australian metropolitan adults (research project)

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Gay and Lesbian Psychological Well-Being

A thesis comprising

Psychological Health in Adults from Sexual Minorities (Literature Review)

and

A Comparative Exploratory Study of the Psychological Well-Being of Gay Male, Lesbian, and Heterosexual Australian Metropolitan Adults (Research Project)

Stephen D. Brown

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Candidate's Signature:

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Psychological Health of Adults from Sexual Minorities

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Abstract

Research into the psychological health of members of sexual minorities has been biased towards a medical model of illness and several methodological difficulties need to be considered to critically interpret findings in this area. This review presents relevant literature on sexual minority stressors, positive coping by sexual minority members, and the mixed findings of between-groups comparative research. The medical model bias is evident in an analysis of the measures of psychological health used in research involving sexual minorities. The thesis of considering psychological health of sexual minorities from the broader perspective that includes both well-being and pathology, and of using a positive psychology focus on well-being and competence, is discussed. The increased use of substantial measures of wellbeing, including psychological well-being, is encouraged.

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Psychological Health of Adults from Sexual Minorities

Gay men, lesbian women and bisexuals, as members of sexual minorities, face many pressures in largely heterosexual and often homophobic societies, yet display positive psychological functioning. Current research on the psychological health of sexual minorities often fails to acknowledge this and is biased toward a medical model of investigation describing illness and using measures of psychological pathology. The current interest in positive psychology encourages mental health practitioners to use positive perspectives and measures of competence and well-being, and this would equally apply when working with sexual minority clients. Medical model perspectives and measures have their place in decreasing illness or dysfunction, but positive measures of well-being provide a balance, creating opportunities to build on client strengths and competencies. To continue with the current medical model bias in sexual minority psychological health research is not in keeping with the acceptance of sexual minority members as equal, valid, skilled and competent members of society. Until methodological problems with sexual minority psychological health research, especially comparative research, are addressed more rigorously, mental health practitioners may be at risk of being influenced by unfair conclusions about sexual minority populations, even of perpetuating a medical model approach that often ignores strengths and competencies within sexual minority populations.

This review uses the broadest definition of adult psychological health which includes the two distinct, though related dimensions of psychological distress and psychological well-being (Masse et al., 1998; Wilkinson & Walford, 1998). Psychological health is considered as a subset of mental health which is defined as "a state of emotional and psychological well-being in which the individual is able to use

his or her cognitive and emotional capabilities, function in society, and meet the ordinary demands of everyday life" (American Heritage Dictionaries, 2004).

In this review, sexual minorities are defined as groups that are non-heterosexual, typically including people who self-identify, or are categorised as homosexual, gay, gay male, lesbian, or bisexual. A homosexual, gay, gay male, or lesbian person will have "a consistent pattern of sexual arousal toward persons of the same gender, encompassing elements of fantasy, conscious attraction, emotional and romantic feelings, sexual behaviours, and possibly other components", while a bisexual person will have "a consistent pattern of sexual arousal toward persons of either ender, encompassing elements of fantasy, conscious attraction, emotional and romantic feelings, sexual behaviours, and possibly other components" (Lesbian Gay and Bisexual (LGB) Youth Sexual Orientation Measurement Work Group, 2003 p. 18.).

Research findings on the psychological health of youth from sexual minorities are beyond the scope of this review, yet remain important, especially considering the considerable issues of identity exploration, suicide and risky behaviour for many sexual minority youth which could potentially have developmental implications for later adult psychological health (D'Augelli & Hershberger, 1993; Fergusson, Horwood, & Beautrais, 1999; Garofalo, Wolf, Wissow, Woods, & Goodman, 1999; Lock & Steiner, 1999; Pilkington & D'Augelli, 1995; Rotheram-Borus, Rosario, Van-Rossem, Reid, & Gillis, 1995; Seal et al., 2000).

Well-being research has a long tradition of exploring psychological health from a positive perspective. Happiness and pleasure are the focus of hedonic well-being, while meaning and optimal functioning are the focus of eudaimonic well-being, and there has been an increase in the level of well-being research, with an accompanying shift away from studying pathology towards prevention (Ryan & Deci, 2001). More

recently, positive psychology has sharpened the focus on understanding and nurturing strengths, competencies and resilience, and this positive perspective has encouraged exploration of how positive subjective experiences, positive individual traits, and positive institutions contribute to well-being and functionality (Seligman & Csikszentmihalyi, 2000). The fields of contemporary counselling and clinical psychology have developed a shared interest in promoting human adaptation, adjustment, personal development, well-being, and more highly functioning lives (Lent, 2004). Scholars have encouraged the exploration of aspects of healthy, optimal functioning (Gelso & Fassinger, 1992; Ryff & Singer, 1998). It is therefore timely to use this lens of positive psychology and well-being to critically review the literature and research on adult psychological health involving members of sexual minorities.

The thesis in this review is that the bias in psychological research involving sexual minorities should be complemented by positive measures and perspectives of psychological functioning and well-being, and that more consideration should be taken of methodological problems when fairly designing and interpreting research involving sexual minority participants, especially research comparing the psychological health of heterosexual and sexual minority participants.

Methodological Issues

Sexual minority psychological health research is difficult, but there is a need for greater acknowledgement of these methodological problems so that increased rigour can be used in research design, and fair conclusions can be drawn about the findings of psychological health of sexual minorities.

Many of the methodological problems stemmed from the hidden nature of sexual minority populations (Cochran, Keenan, Schober, & Mays, 2000), and the fact that people from sexual minorities comprised only a few percent (2-3%) of the

population (Hillier, de Visser, Kavanagh, & McNair, 2004; Michael, Gagnon, Laumann, & Kolata, 1995; Smith, Rissel, Richters, Grulich, & de Visser, 2003). One methodological problem raised by several researchers was the use of small non-representative convenience samples rather than larger random samples (Barber, 2002; Hillier et al., 2004; Horowitz, Laflin, & Weis, 2001; Meyer, 2003; Warner et al., 2004). Another problem was selection bias based on the premise that only the most open members of sexual minorities may have participated in research, that motives for participation may have biased findings, and that targeting sexual minority venues may have biased findings towards those most open and/or involved in strong social networks (Barber, 2002; Catania, Gibson, Chitwood, & Coates, 1990; Cochran et al., 2000; Gonsiorek, 1991; Horowitz et al., 2001). Response bias may also have been present, where participants who were expected to disclose their sexual minority status may have responded differently, or that those from sexual minorities may have experienced more personal growth and consequently disclosed information more freely (Mays & Cochran, 2001; Meyer, 2003).

Including a heterosexual group in sexual minority research was considered important (Matthews, Hughes, Johnson, Razzano, & Cassidy, 2002), but is was also considered important to include sufficient numbers of sexual minority members to obtain sufficient power in any comparative analysis with heterosexuals (Meyer, 2003). Methodological problems were proposed about studies that compared sexual minority performance with general population data that contained data from both sexual minority and heterosexual people (Hellman, Sudderth, & Avery, 2002). While large national studies were useful, especially those with a priori inclusion of sexual minority status (Meyer, 2003), the very low percentage of sexual minority members in

these studies often reduced the power of many findings from such studies (Mays & Cochran, 2001).

Several scholars considered it was beneficial to control covariates, mediating factors, and confounds in sexual minority research, and researchers have identified substance misuse, depression, stress, social support, relationship status, age, professional background, educational experience, socio-economic status, place of residence, adverse childhood, and adverse current life events as variables that, depending on the nature of the research, could be controlled through covariate analysis or participant matching (Goldfried & Goldfried, 2001; Gonsiorek, 1991; Herrell et al., 1999; Jorm, Korten, Rodgers, Jacomb, & Christensen, 2002; Mohr & Fassinger, 2003; Rothblum, 2002). Some studies determined sexual minority status using self-identification, while others used behavioural definitions, and still others used proxy allocations. Different influences could operate when different methods are used to determine sexual minority status, making comparison of studies difficult (Barber, 2002; Cochran et al., 2000; Gonsiorek, 1991).

There was often a lack of consideration or definition of performance within the normal range for the psychological health measures used in studies, which made interpretations of sexual minority research difficult (Gonsiorek, 1991). A review that considered this aspect found that, while some sexual minority members performed less strongly than their heterosexual counterparts on some measures, the performance was still within the normal range on the standardised tests used (Ross, Paulsen, & Stalstrom, 1988). Another review noted that, although some studies had recorded increased prevalence of mental health disorders such as major depression, generalized anxiety disorder, and substance misuse or dependence for sexual minority participants

compared to heterosexual participants, most sexual minority participants did not record clinical levels of the disorders (Cochran, 2001).

The reviewer concluded that it is possible that in some comparative research, observed differences between sexual minority members and heterosexuals were potentially due to confounds or poor design and sampling, resulting in an exaggerated impression of the level of psychological pathology in sexual minority populations. Acknowledgement of these methodological considerations and issues is therefore essential when designing or critically interpreting research on adult psychological health in studies involving sexual minorities, especially between-groups comparative studies investigating possible differences between sexual minority members and heterosexuals. This present review considers it difficult to extract consistent patterns from the comparative research that will be presented in subsequent sections of this review because of the variety of combinations of methodological strengths and weaknesses in and between studies.

Stress and Sexual Minorities

Much of the material in this section of this review has been generated from within-groups sexual minority psychological health research that explored the impact of sexual minority stressors, identified associations of psychological health variables with risk factors and protective factors, studied functioning within a heterosexist majority society, and investigated the development of a positive sexual minority identity.

Stressors Related to Membership of a Sexual Minority

A minority stress model has emerged in the literature that proposed that any negative psychological health consequences of membership of a sexual minority could be attributed to the unique set of external and internal stressors experienced by

members of sexual minorities as they function in society and work through the coming out process where they gradually accept a sexual minority identity (DiPlacido, 1998; Gonsiorek, 1991; Greene, 1994; Meyer, 2003; Palma & Stanley, 2002; Warner et al., 2004). Coming out is the "revelation or acknowledgement that one is a gay man, a lesbian, or a bisexual" (American Heritage Dictionaries, 2004). External stressors associated with having a sexual minority status that have been identified in research included stigmatisation, prejudice, discrimination based on sexual orientation, oppression, victimisation, antigay violence, and homophobic comments offensive to members of sexual minorities. Several studies have reported associations with these external minority stressors and negative psychological health aspects such as fear, secretiveness, psychological distress, demoralisation, guilt, depression, lower self-esteem, suicidal ideation, decreased self-perceptions, and a feeling of isolation (Bradford, Ryan, & Rothblum, 1994; Frable, Wortman, & Joseph, 1997; Herek, 1993; Huebner, Rebchook, & Kegeles, 2004; Mays & Cochran, 2001; Meyer, 1995; Parks, Hughes, & Matthews, 2004; Prado et al., 2002; Smith & Ingram, 2004).

Several internal stressors associated with sexual minority status have also been identified in the research, and included anxiety related to coming out, internalised homophobia, self-concealment, emotional inhibition, adoption of a fearful avoidant attachment style, and concern about the AIDS epidemic. Internalised homophobia is the often unconscious self hate that is generated as a consequence of being raised in a society that is predominantly heterosexual and that frequently devalues non-heterosexuality (Garnets, Herek, & Levy, 2002; Garnets & Kimmel, 2002b; Huebner, Davis, Nemeroff, & Aiken, 2002). Several studies have reported associations with these internal stressors and negative psychological health aspects such as lower levels of self-esteem, satisfaction with life, and perceived psychological adjustment, as well

as higher levels of depression, substance misuse, anxiety, suicidal thoughts or behaviours, self-harming, denial, repression, dissociation, demoralization, guilt, fear and anxiety about sexual activity, difficulties in accepting a sexual minority orientation, insomnia, and neurotic anxiety (Dupras, 1994; Meyer, 1995; Miranda & Storms, 1989; Mohr & Fassinger, 2003; O'Hanlan, Cabaj, Schatz, Lock, & Nemrow, 1997; Polanski, Karasic, Spieir, Hastik, & Haller, 1997; Ross, 1990; Rothblum, 1994).

In a small qualitative American study of gay male college students, several interacting individual factors such as confidence and self-assurance, personally held stereotypes, feelings of rejection, isolation, invisibility, and internalised homophobia contributed to the personal beliefs of the sexual minority person, how they felt about themselves, as well as influencing how they processed critical events and reactions from people in their environment (Stevens, 2004).

Positive Psychological Functioning Despite Sexual Minority Stress

Research has shown that while some members within sexual minority groups experience pathology and dysfunction, many do not. A review of the limited empirical data on bisexual adjustment concluded that some bisexuals experienced identity conflict, while some experienced adaptive flexibility, and that there were varying levels of adjustment within the bisexual group (Zinik, 1985). Many sexual minority members coped, adapted and functioned with resilience in the face of often quite adverse pressure and stigmatisation (Elizur & Ziv, 2001; Garnets & Kimmel, 2002b; Meyer, 2003).

In reflecting on the work of some researchers, (Alderson, 2003; Bell & Weinberg, 1978; Gonsiorek & Rudolph, 1991), the reviewer proposes that psychological adjustment for sexual minorities should include consideration of

individual difference, context, and adaptation as much as any overall population trend or risk. Sexual minority groups should not be considered as one group with typical symptoms, but rather as a group encompassing diversity within typical population trends. There is also the likelihood that there are particular sexual minority individuals who are prone to symptomatology arising from interactions between personal and environmental aspects as they develop their sexual identity.

Aspects that emerged as protective factors for psychological health of sexual minority members were family relations and support, social support networks, involvement with the sexual minority community, self-acceptance of a sexual minority status, secure attachment style, inner strength, personal growth, and a sense of control (DiPlacido, 1998; Elizur & Mintzer, 2001; Elizur & Ziv, 2001; Kurdek, 1988; Stevens, 2004; Waldo, Kegeles, & Hayes, 1998).

Coming out involved working towards a positive gay identity, self-acceptance and disclosure of a gay identity, and as such was often a time of emotional distress with accompanying dangers for risk behaviours and suicidality (Alderson, 2003; Brady & Busse, 1994; Eskin, Kaynak-Demir, & Demir, 2005; Polanski et al., 1997). Notwithstanding this, coming out was generally viewed as having positive psychological health outcomes including lower levels of depression, despair, neurotic anxiety, suicidal thoughts and behaviours, risky sexual behaviour, guilt/anxiety/shame about being homosexual, and higher levels of self-esteem, satisfaction with life, perceived psychological adjustment, and satisfaction with physical appearance (Bell & Weinberg, 1978; Bradford et al., 1994; Coleman, 1981; Crawford, Allison, Zamboni, & Soto, 2002; Elizur & Ziv, 2001; Garnets et al., 2002; Garnets & Kimmel, 2002a; Herek, 2002; McDonald, 1982; Miranda & Storms, 1989; Morris, Waldo, &

Rothblum, 2001; Palma & Stanley, 2002; Ryan & Futterman, 1998; Stevens, 2004; Waldo et al., 1998; Wong & Tang, 2004).

Clearly, sexual members display positive psychological functioning despite considerable minority stress as a consequence of their sexual orientation. The reviewer proposes that this body of research on positive functioning in sexual minority populations provides justification for the wider use of a positive psychological perspective and measures exploring well-being and competence in future sexual minority research. A positive perspective would provide a better understanding of sexual minorities and a timely alternative view to the medical model given the emergence of positive psychology and an increased focus on well-being

Comparative Between-Groups Research

There have been mixed findings on the psychological health of sexual minority samples compared to the heterosexual majority. As an example, a review of studies comparing the psychological health of sexual minority and heterosexual participants found the majority of studies returned a conclusion of no difference, but that some studies concluded higher levels of psychological health for sexual minorities, with still other studies concluding lower psychological health for sexual minority participants (Savin-Williams, 1990). As discussed before in an earlier section of this review, in many cases it may be difficult to make conclusions due to methodological concerns about small sample sizes, different sampling methods, inadequate control of moderating or mediating variables, and selection bias.

While sufficient detail is included in this review to capture the general sense of findings of between-groups research in this area, the reviewer proposed that any definitive conclusion should take into account the considerable methodological challenges and confounds in comparative studies of the psychological health of

heterosexual and sexual minorities. Such an analysis would be a fruitful topic for a separate review, and beyond the scope of this paper.

Findings of No Difference

Several studies and reviews found no differences in psychological health between sexual minority participants and their heterosexual counterparts. In a critical review of comparative studies it was concluded that homosexual groups had been unfairly compared to heterosexuals in many studies, and that there was no differences between heterosexual groups and homosexual groups on measures of psychological functioning related to sexual orientation per se, but rather to particular stresses that had not been adequately controlled in comparative studies (Gonsiorek, 1991).

An overall conclusion from an ethnographic study of gay and heterosexual American men and women was that "homosexual adults who have come to terms with their homosexuality, who do not regret their sexual orientation, and who can function effectively sexually and socially, are no more distressed psychologically than are heterosexual men and women" (Bell & Weinberg, 1978, p. 216.).

In a review of justifications for the denial or extended processing of U.S. security clearances for sexual minority members, it was concluded that lesbians and gay men were no more likely than heterosexuals to suffer a personality disorder, emotional distress, or psychological instability (Herek, 1990). It was concluded from an American study that involved nearly 2,000 lesbians that, while lesbians were exposed to high levels of stressful life events, there was little difference between the lesbians in the study and heterosexual women based on a comparison with general population data for depression, suicide, and eating disorders (Bradford et al., 1994). In a study involving 825 Chicago homosexual and bisexual men, scores for the Rosenberg Self-Esteem Scale and the Hopkins Symptoms Checklist were normative

in their distribution, indicating no differences related to being gay per se on these aspects, but with the consideration that this lack of difference could be a function of positive identity and social support within the study sample (Frable et al., 1997).

Findings of Difference

A comparatively larger number of studies and reviews have found differences in psychological health between members of sexual minorities and their heterosexual counterparts. Many of these studies involved large national or community samples. A relatively rigorous community study in Australia conducted a comparison of the mental health of heterosexual, homosexual, and bisexual groups with heterosexuals. Bisexuals had higher levels of anxiety, depression, and negative affect than heterosexuals, with homosexuals between heterosexuals and bisexuals on these measures. Both bisexuals and homosexuals recorded higher levels of suicidality than heterosexuals. This study statistically controlled for risk factors associated with mental health such as adverse childhood, adverse current life events, socio-economic status, and social support. Taking these risk factors into account explained lower levels of mental health for homosexuals compared to heterosexuals on anxiety, depression and negative affect in terms of minority stressors rather than as from homosexuality per se. Suicidality remained associated with both homosexual and bisexual groups even after risk factors were taken into account (Jorm et al., 2002).

A population-based American study concluded that there was an increased risk for suicide symptoms among homosexually experienced men compared to men with only female sexual partners, as well as a small increased risk of recurrent depression among gay men (Cochran & Mays, 2000a). In a related study, a small increased risk for 1-year psychiatric morbidity was noted for homosexually active participants, with the caveat that most sexual minority participants did not record clinical levels of the

disorders (Cochran & Mays, 2000b). In a national American study it was found that gay-bisexual men experienced a higher prevalence of depression, panic attacks, and psychological distress than heterosexual men, that lesbian-bisexual women showed greater prevalence of generalized anxiety disorder than heterosexual women, and that the use of mental health services was also more frequent for those of minority sexual orientation (Cochran, Sullivan, & Mays, 2003). Longitudinal Australian survey data from women across a range of metropolitan and rural settings and found that non-heterosexual women reported significantly higher levels of drug use across a spectrum ranging from cigarettes and alcohol, through marijuana and ecstasy, to heroin (Hillier et al., 2004).

In a national United Kingdom study it was found that gay males and lesbians scored greater levels of psychological distress than their heterosexual peers, and were more likely to have consulted a mental health professional, deliberately harmed themselves, and used recreational drugs than their heterosexual counterparts. In the same study, lesbians were more likely to have experienced verbal and physical intimidation and to consume more alcohol than heterosexual women (King et al., 2003). When compared to previous community surveys of predominantly heterosexual people, sexual minority members in England and Wales were found to have higher rates of self-harm and psychiatric morbidity than heterosexuals (Warner et al., 2004). This comparison may be flawed in that community surveys would typically include both sexual minority and heterosexual people. In a population-based American National co-morbidity study, participants having same-sex sexual partners were found to have an elevated risk of anxiety, mood and substance disorders, and suicidal thoughts and plans compared to participants with opposite-sex partners (Gilman et al., 2001).

In a relatively rigorous population-based study of older US Vietnam veterans that employed co-twin comparison, and controlled for confounding factors like other demographic aspects, depression, substance abuse, and military service factors, a substantially increased lifetime risk of suicidal behaviours was found for same-sex sexually active gay men compared to their heterosexual co-twin, even after depression and substance misuse were controlled (Herrell et al., 1999). The 1996 National Household Survey on Drug Abuse data from America was analysed, controlling for demographic factors potentially related to alcohol use, and it was found that lesbians reported using alcohol more frequently and in greater amounts than heterosexual women, but that gay men did not differ significantly from heterosexual men in alcohol use patterns of morbidity (Cochran et al., 2000). Data from the National Survey of Midlife Development in the United States (MIDUS) with participants aged 25 to 74 was analysed and it was found that homosexual and bisexual participants reported higher levels of psychiatric morbidity and harmful effects on quality of life than heterosexuals, potentially explained by the positive association between psychiatric morbidity and perceived discrimination (Mays & Cochran, 2001).

Analysis of health data on lesbians from Chicago community databases revealed higher levels of suicidal ideation and suicide attempts among lesbians compared to heterosexual women, and found that lesbians were more likely to include sexual identity, suicidal feelings, sexual abuse, and alcohol and other drugs as reasons for seeking therapy or counselling than heterosexual women (Matthews et al., 2002). An American National Lesbian Health Care Survey found that lesbians reported higher alcohol and drug use, and higher use of counselling than heterosexual women based on a comparison with general population data (Bradford et al., 1994). In a national Netherlands study it was found that same-sex sexual behaviour placed people at

greater risk for psychiatric disorders, with homosexual men having higher 12-month prevalence of mood disorders and anxiety disorders than heterosexual men, and homosexual women having higher 12-month prevalence of substance use disorders than heterosexual women (Sandfort, de Graaf, Bijl, & Schnabel, 2001).

Other reviews and studies have also found psychological health differences between sexual minority participants and heterosexuals. One review supported the contention that sexual minority people have a higher prevalence of mental disorders than heterosexuals (Meyer, 2003). A Turkish study of largely urban university students concluded that identifying oneself with a sexual minority was associated with greater risk for suicidal behaviour compared to heterosexuals (Eskin et al., 2005). In a small preliminary study, higher levels of psychological distress were reported for homosexual HIV+ African American women than for heterosexual HIV+ African American women (Prado et al., 2002). An Internet-based survey found that heterosexual people in Asia, North America and South America were less likely to report suicidal ideation than their homosexual/bisexual counterparts, but there was no association for Europe (Mathy, 2002). In a UK study it was proposed that there was a psychological burden for gay men constructing a gay identity roughly equivalent to the potentially traumatic events of divorce and loss of a spouse, and that this was related to the associated stresses involved with being a member of a sexual minority (Coyle, 1993).

Lack of Consensus

There is no consensus or consistent pattern of findings about the psychological health of sexual minorities generated from between-groups comparative research. The larger body of research concluded that, at least for some members of sexual minorities, there were psychological health issues, but several researchers concluded

that there was no difference in psychological health between heterosexuals and sexual minority members. Methodological inconsistencies between studies are likely to have been a factor influencing the mixed research findings (Savin-Williams, 1990). While it may superficially be concluded from the larger body of research supporting differences between the psychological health of sexual minorities and the heterosexual majority, the present review proposes that it is important to critically review this body of comparative research in the light of the methodological concerns and issues raised earlier in this review to determine if this conclusion is justified by the larger body of research.

Measurement of Psychological Health

This section of the review will highlight the bias towards the medical model of illness with regard to the types of measures of psychological health used in sexual minority research. For clarity of discussion the reviewer has categorised measures of psychological health as either negative or positive. High scores on a negative measure would indicate pathology or dysfunction. Some examples of negative measures used in sexual minority psychological health research are psychiatric symptoms, depression, anxiety, psychological distress, suicidal thoughts or behaviours, substance misuse, and negative self-concepts. High scores on a positive measure would indicate wellness or competence. Some examples of positive measures used in sexual minority psychological health research are positive sexual minority identity, positive affect, self-esteem, satisfaction with life, and self-acceptance of a minority sexual identity.

In an analysis of 32 relevant studies, the reviewer found a bias towards negative measures. Eleven of the studies (34%) used a single negative measure of psychological functioning, thirteen (41%) used more than one negative measure of

psychological functioning, one (3%) used a single positive measure of psychological functioning, and seven (22%) used a combination of negative and positive measures.

Negative Measures

Negative measures of psychological health were used in most sexual minority studies, biasing the research towards a medical model by considering only the single dimension of illness. A summary of the negative measures used in research projects is provided to provide a sense of breadth and depth of measures for the reader's information.

The 34% of sexual minority psychological health studies that involved a single negative measure of psychological health used the Composite International Diagnostic Interview (CIDI) based on The Diagnostic and Statistical Manual of Mental Disorders (DSM)-III-R criteria; questions about therapeutic history, treatments for depression, suicidal ideation and suicide attempts; the Center for Epidemiological Studies Depression Scale; the General Health Questionnaire-28 and -30; the Lesbian and Gay Identity Scale; questions from the Diagnostic Interview Schedule DIS-III-R; and the level of use of cigarettes, alcohol, and illicit drugs to measure mood disorders, anxiety disorders, substance misuse or dependence, depression, psychological distress, negative sexual minority identity, and suicidal behaviour depending on the purpose of the research (Cochran et al., 2000; Coyle, 1993; Eskin et al., 2005; Hays, Turner, & Coates, 1992; Herrell et al., 1999; Hillier et al., 2004; Mathy, 2002; Matthews et al., 2002; Mohr & Fassinger, 2003; Sandfort et al., 2001; Schneider, Farberow, & Kruks, 1989; Wong & Tang, 2004).

The 41% of sexual minority psychological health studies that involved more than one negative measure of psychological health used the Brief Symptom Inventory BSI; the Hamilton Rating Scales; the CIS-R Clinical Interview Schedule; the General

Health Questionnaire-12; the Composite International Diagnostic Interview Long and Short Forms; the 12-item Short Form measure of quality of life; the short form of the Symptom Checklist-90-Revised; the Scales from the Psychiatric Epidemiology Research Instrument; the Internalized Homophobia 9-item instrument; the Impact of Event Scale; questions about suicide; and a gay-modified Gay Affect and Life Events Scale to measure psychological distress, depression, anxiety, the presence and severity of somatic complaints, psychological distress, emotional disorders, DSM-III-R disorders, suicidal ideation and behaviour, mania, demoralisation, guilt, sex problems, AIDS-Related Traumatic Stress Response, and unease and avoidance about the participant's homosexuality depending on the purpose of the research (Cochran & Mays, 2000a; Cochran et al., 2003; Gilman et al., 2001; King et al., 2003; Martin & Dean, 1993; Mays & Cochran, 2001; Meyer, 1995; Morris et al., 2001; Prado et al., 2002; Ross, 1990; Warner et al., 2004).

Positive Measures

Positive measures of psychological health were included in relatively few studies only, and often in combination with a comparatively larger number of negative measures. The 3% of sexual minority psychological health studies analysed that involved a single positive measure of psychological health used a 13-item questionnaire developed by Bell and Weinberg, translated into Hebrew as a positive measure of self-acceptance of gay male identity (Elizur & Mintzer, 2001).

The 22% of sexual minority psychological health studies that involved a combination of positive and negative measures of psychological health were two-dimensional in the sense that they involved a combination of positive and negative measures of psychological health, covering both dimensions of well-being and psychological distress. Specific detail of these two-dimensional studies is included by

the reviewer, intentionally, to exemplify the use of these two dimensions of measures within the one study.

A between-groups community study in Australia, designed to compare the mental health of homosexual, and bisexual groups with heterosexuals, used negative measures such as the Goldberg Anxiety and Depression Scales, the Alcohol Use Disorders Identification Test, suicidality thoughts and actions questions, and negative affect using the Positive and Negative Affect Scale (PANAS), as well as the positive measures of the Positive Affect as part of the PANAS (Jorm et al., 2002). A within-group study of psychological adjustment of lesbians and gay men involved the negative measure of neurotic anxiety as measured by the Eysenk Personality Inventory, as well as positive measures such as acceptance of a lesbian or gay identity, pleasure about life, perceived psychological strength and adjustment (Miranda & Storms, 1989). A within-group study of homosexual French men to investigate the relationship between internalised homophobia and psychosexual tendencies used a French translation of the Nungesser Homosexual Attitudes Inventory to measure internalised homophobia, a negative measure (Dupras, 1994). Some of the psychosexual tendencies measured in this French study could be considered negative, such as sexual depression, sexual anxiety, sexual preoccupation, fear of sexuality, internal sexual control, external sexual control, and sexual image concern, while some of the psychosexual tendencies measured could be considered positive, such as internal sexual awareness, sexual motivation, sexual assertiveness, sexual esteem, and sexual satisfaction.

Other studies that used a combination of negative and positive psychological health measures included an Israeli study of gay men investigating the associations of family support and acceptance with gay male identity formation and psychological

adjustment, where the Mental Health Inventory was used as a measure of global mental health including items negative measures such as anxiety, depression, and loss of control, and positive measures such as a well-being scale that measured general positive affect, and Rosenberg's self-esteem inventory (Elizur & Ziv, 2001). In a Chicago study of gay men exploring identity and self-perceptions, the Hopkins Symptom Checklist was used as a negative measure of psychiatric symptoms such as somatisation, obsessive-compulsive behaviour, interpersonal difficulties, depression, and anxiety, and positive measures included positive self-perceptions measured using a newly created well-being scale with items to assess general satisfaction with life and particular satisfaction with particular roles, a positive measure about positive gay identity involving questions about commitment to and positive feelings about being gay, and the Rosenberg Self-Esteem Scale (Frable et al., 1997). In a study of African-American gay and bisexual men to investigate the influence of dual-identity development on psychological functioning, the negative measures of Male Gender Role Stress Scale and the Symptom Checklist-90 Revised were used, as well as the positive measures of the Coopersmith Self-Esteem Inventory and the Life-Satisfaction Scale (Crawford et al., 2002). An American gay and bisexual male study of the impact of internalised homophobia on HIV preventive interventions the negative measure of a question on suicidal ideation, as well as the positive measure of the Rosenberg Self-Esteem inventory (Huebner et al., 2004).

This analysis also highlighted a gap in the research in that no studies on psychological health of adult sexual minority members could be located that used a substantial positive eudaimonic measure of psychological well-being, such as the Scales of Psychological Well-Being (SPWB) which has subscales for autonomy, environmental mastery, personal growth, positive relations with others, self-

acceptance, and purpose in life (Ryff & Keyes, 1995). The SPWB could potentially be very useful as a positive measure of psychological health in sexual minority research, especially considering research that found social and family support from others, self-acceptance, personal growth, and a sense of control to be protective factors for psychological health of sexual minority members (DiPlacido, 1998; Elizur & Mintzer, 2001; Elizur & Ziv, 2001; Kurdek, 1988; Stevens, 2004; Waldo et al., 1998).

The reviewer emphasises that positive measures are important in that they provide the opportunity for health professionals to work with clients towards building on strengths and competencies, rather than eliminating illness as is characterised by the medical model. In reality, both approaches can complement each other in therapeutic work. This would be in keeping with the evolution of therapeutic approaches, which have moved from a focus on pathology and conversion, through affirmative adaptive coping, to the current acknowledgment of the impact on psychological health of considerable minority stressors associated with belonging to a sexual minority (American Psychological Association, 2000; Garnets & Kimmel, 2002a, 2002b; Meyer, 1995).

Conclusion

Research into the psychological health of members of sexual minorities has been biased towards a medical model of illness. The reviewer encourages the increased use of substantial measures of wellbeing, including psychological well-being, in research on the psychological health of sexual minorities, and the consideration of psychological health from the broadest perspective that includes both well-being and pathology. Several researchers provided suggestions for future research to explore positive factors promoting psychological adjustment, including resilience of sexual minority members (Elizur & Ziv, 2001; Goldfried, 2001), personal and interpersonal

resources, strengths and competencies that are useful to reduce psychological distress and cope in often hostile environments (Bradford et al., 1994; Elizur & Ziv, 2001; Parks et al., 2004), self-acceptance and secure attachment (Elizur & Mintzer, 2001), and supportive social and family networks (Prado et al., 2002; Russell & Joyner, 2001). Research into these aspects would enhance the understanding and application of the positive psychology and well-being theoretical frameworks.

The methodological problems highlighted in this present review have the potential to provide future researchers with a guide to research design that addresses these problems so that research findings related to psychological health of sexual minority populations are as fair and informative as possible. The reviewer proposes that the mixed findings of between-groups comparative research may be better understood if an analysis was made of this body of research using the methodological issues and aspects raised in this present review as a guide.

This review concludes that many members of sexual minorities experience considerable internal and external stressors, but that many also exhibit considerable levels of positive psychological functioning despite these stressors, and continued research into these areas is supported. Minority stress, including multiple minority stress, have been proposed as useful areas of future research (DiPlacido, 1998; Gilman et al., 2001; Katz, Joiner, & Kwon, 2002; Meyer, 1995). Combining comparative research involving sexual minorities and heterosexual participants with within-group research to explore causality was considered a way to provide more definitive evidence for a minority stress model (Meyer, 2003). The reviewer considers that qualitative research would be useful to provide opportunities to explore development, causality, individual differences, and interactions of personal and

environmental factors, to complement the comparatively large body of quantitative research that was often cross-sectional or correlational.

Other scholars have proposed some future areas of psychological health research involving sexual minority populations. Causality of psychological health issues for sexual minority members should also be included in future research (Cochran et al., 2003). The need for an increased focus on females in sexual minority research was proposed by several researchers (DiPlacido, 1998; Katz et al., 2002; Matthews et al., 2002). Other areas of suggested research included the distinct aspects of bisexuality and how they develop over time (Fox, 2002; Warner et al., 2004), and further work, including longitudinal research, into the factors contributing to suicide for sexual minority members (Cochran & Mays, 2000a; Remafedi, French, Story, Resnick, & Blum, 1998).

This review considers that research comparing sexual minorities to heterosexuals still has a place in future research, but not for purposes of creating negative impressions about sexual minorities. The value of comparative research is that it provides opportunities to explore psychological dimensions between and within sexual minority and heterosexual populations, as well as providing useful reference points and functional ranges for psychological functioning when working with both sexual minority and heterosexual clients. Therapeutic interventions can be informed by both within- and between-groups sexual minority psychological health research, and a positive psychological perspective would aim to build on existing levels of client competence towards even higher levels of positive psychological functioning.

It is timely to use positive psychology and well-being perspectives, coupled with high levels of methodological rigour, to include wellness and competence as an equal and complementary component of research and therapy in relation to the

psychological health of sexual minorities. The strengths, resilience and competencies displayed by members of sexual minorities should be acknowledged to provide a more balanced perspective to the medical model bias that may have negatively influenced societal and practitioner perceptions of this marginalised group.

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Running Head: GAY AND LESBIAN PSYCHOLOGICAL WELL-BEING

A Comparative Exploratory Study of the Psychological Well-Being of Gay Male, Lesbian and Heterosexual Australian Metropolitan Adults

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Abstract

Psychological health research involving sexual minorities is biased towards a medical model perspective and measures. This exploratory study uses a positive psychological perspective on gay male and lesbian psychological health. The Scales of Psychological Well-Being (SPWB) (Ryff, 1989; Ryff & Keyes, 1995) were used with a sample of Australian metropolitan adults comprising heterosexual males (n = 43), gay males (n = 59), heterosexual females (n = 58) and lesbians (n = 55). Significant differences on SPWB were related to gender and not to sexual orientation, with females scoring higher than males for positive relations, environmental mastery, personal growth and total SPWB score. Further exploration of resilience and the use of SPWB in sexual minority populations is proposed.

A Comparative Exploratory Study of the Psychological Well-Being of Gay Male, Lesbian and Heterosexual Australian Metropolitan Adults

Positive psychology and well-being perspectives are relevant to psychological health research involving sexual minorities. Gay men and lesbian women, as members of sexual minorities, face many pressures in a predominantly heterosexual and often homophobic society. Whilst psychological health research involving sexual minorities has been biased towards a medical model with a focus on measures and perspectives of illness and dysfunction, members of sexual minorities have been found to display positive psychological functioning. There has been an increase in well-being research and a shift away from studying pathology towards prevention (Ryan & Deci, 2001). By exploring psychological functioning of sexual minority members within the heterosexual majority from a positive perspective, it will be possible to narrow the gap in the body of knowledge and pave the way for more informed psychological practice involving sexual minority members.

Positive psychology complements longer-standing well-being research, and has sharpened the focus on understanding and nurturing strengths, competencies and resilience, and this positive perspective has encouraged exploration of how positive subjective experiences, positive individual traits, and positive institutions contribute to well-being and functionality (Seligman & Csikszentmihalyi, 2000). The fields of contemporary counselling and clinical psychology have developed a shared interest in promoting human adaptation, adjustment, personal development, well-being, and more highly functioning lives (Lent, 2004). Within this positive psychology / well-being framework, scholars have encouraged the exploration of aspects of healthy, optimal functioning (Gelso & Fassinger, 1992; Ryff & Singer, 1998a).

Psychological health can be considered to include two different dimensions, psychological distress and psychological well-being (Heady & Wearing, 1992; Masse et al., 1998; Veit & Ware, 1983), both of which are important given that the presence of wellness does not automatically equate to absence of illness (Ruini et al., 2003; Ryff, Keyes, & Hughes, 2003). Sexual minorities are defined as groups that are non-heterosexual, typically including people who self-identify, or are categorised as homosexual, gay, gay male, lesbian, or bisexual. A homosexual, gay, gay male, or lesbian person will have "a consistent pattern of sexual arousal toward persons of the same gender, encompassing elements of fantasy, conscious attraction, emotional and romantic feelings, sexual behaviours, and possibly other components" (Lesbian Gay and Bisexual (LGB) Youth Sexual Orientation Measurement Work Group, 2003 p. 18.).

Stressors Related to Membership of a Sexual Minority

To set the context of daily life for gay males and lesbians, the minority stress model has been used to attribute any negative psychological health consequences of membership of a sexual minority to the unique set of external and internal stressors experienced by members of sexual minorities as they function in society and work through the coming out process where they gradually accept a sexual minority identity (DiPlacido, 1998; Gonsiorek, 1991; Greene, 1994; Meyer, 2003; Palma & Stanley, 2002; Warner et al., 2004). Coming out "involves a complex process of intra- and interpersonal transformations, often beginning in adolescence and extending well into adulthood which lead to, accompany and follow the events associated with acknowledgment of one's sexual orientation" (Hanley-Hackenbruck, 1989 p 21.). External stressors associated with having a sexual minority status included stigmatisation, prejudice, discrimination based on sexual orientation, oppression,

victimisation, antigay violence, and homophobic comments offensive to members of sexual minorities. Several studies have reported associations with these external minority stressors and negative psychological health aspects such as fear, secretiveness, psychological distress, demoralisation, guilt, depression, lower self-esteem, suicidal ideation, decreased self-perceptions, and a feeling of isolation (Bradford, Ryan, & Rothblum, 1994; Frable, Wortman, & Joseph, 1997; Herek, 1993; Huebner, Rebchook, & Kegeles, 2004; Mays & Cochran, 2001; Meyer, 1995; Parks, Hughes, & Matthews, 2004; Prado et al., 2002; Smith & Ingram, 2004).

Internal stressors associated with sexual minority status included anxiety related to coming out, internalised homophobia, self-concealment, emotional inhibition, adoption of a fearful avoidant attachment style, and concern about the Acquired Immunodeficiency Syndrome (AIDS) epidemic. Internalised homophobia is the often unconscious self-hate that is generated as a consequence of being raised in a society that is predominantly heterosexual and that frequently denegrates membership of a sexual minority (Garnets, Herek, & Levy, 2002; Garnets & Kimmel, 2002b; Huebner, Davis, Nemeroff, & Aiken, 2002). Several studies have reported associations with these internal stressors and negative psychological health aspects such as lower levels of self-esteem, satisfaction with life, and perceived psychological adjustment, as well as higher levels of depression, substance misuse, anxiety, suicidal thoughts or behaviours, self-harming, denial, repression, dissociation, demoralization, guilt, fear and anxiety about sexual activity, difficulties in accepting a sexual minority orientation, insomnia, and neurotic anxiety (Dupras, 1994; Meyer, 1995; Miranda & Storms, 1989; Mohr & Fassinger, 2003; O'Hanlan, Cabaj, Schatz, Lock, & Nemrow, 1997; Polanski, Karasic, Spieir, Hastik, & Haller, 1997; Ross, 1990; Rothblum, 1994).

Positive Psychological Functioning Despite Sexual Minority Stress

While some members of sexual minorities experienced pathology, there was also evidence of positive psychological functioning within sexual minority populations (Elizur & Ziv, 2001; Garnets & Kimmel, 2002b; Meyer, 2003; Zinik, 1985). Protective factors for psychological health of sexual minority members included family relations and support, social support networks, involvement with the sexual minority community, self-acceptance of a sexual minority status, secure attachment style, inner strength, personal growth, and a sense of control (DiPlacido, 1998; Elizur & Mintzer, 2001; Elizur & Ziv, 2001; Kurdek, 1988; Stevens, 2004; Waldo, Kegeles, & Hayes, 1998).

The process of coming out involved working towards a positive gay identity, self-acceptance and disclosure of a gay identity, and as such was often a time of emotional distress with accompanying dangers for risk behaviours and suicidality (Alderson, 2003; Brady & Busse, 1994; Eskin, Kaynak-Demir, & Demir, 2005; Polanski et al., 1997). Notwithstanding this, the resolution of the coming out journey was generally viewed as having positive psychological health outcomes for sexual minority members including lower levels of depression, despair, neurotic anxiety, suicidal thoughts and behaviours, risky sexual behaviour, guilt/anxiety/shame about being homosexual, and higher levels of self-esteem, satisfaction with life, perceived psychological adjustment, and satisfaction with physical appearance (Bell & Weinberg, 1978; Bradford et al., 1994; Coleman, 1981; Crawford, Allison, Zamboni, & Soto, 2002; Elizur & Ziv, 2001; Garnets et al., 2002; Garnets & Kimmel, 2002a; Herek, 2002; McDonald, 1982; Miranda & Storms, 1989; Morris, Waldo, & Rothblum, 2001; Palma & Stanley, 2002; Ryan & Futterman, 1998; Stevens, 2004; Waldo et al., 1998; Wong & Tang, 2004).

Comparative Between-Groups Research

There have been mixed findings on the psychological health of sexual minority samples compared to the heterosexual majority (Savin-Williams, 1990). Several studies and reviews found no differences in psychological health between sexual minority participants and their heterosexual counterparts on aspects such as psychological distress, personality disorders, depression, suicide, eating disorders, and self-esteem (Bell & Weinberg, 1978; Bradford et al., 1994; Frable et al., 1997; Herek, 1990). A comparatively larger number of studies and reviews, many involving large national or community samples, have found differences in psychological health between members of sexual minorities and their heterosexual counterparts, including higher levels of suicidality, depression, psychiatric morbidity, panic attacks, psychological distress, generalised anxiety disorder, drug use, self-harm, and mood disorders in sexual minority populations compared to heterosexual populations (Bradford et al., 1994; Cochran, Keenan, Schober, & Mays, 2000; Cochran & Mays, 2000a, 2000b; Cochran, Sullivan, & Mays, 2003; Coyle, 1993; Eskin et al., 2005; Gilman et al., 2001; Herrell et al., 1999; Hillier, de Visser, Kavanagh, & McNair, 2004; Jorm, Korten, Rodgers, Jacomb, & Christensen, 2002; King et al., 2003; Mathy, 2002; Matthews, Hughes, Johnson, Razzano, & Cassidy, 2002; Mays & Cochran, 2001; Meyer, 2003; Prado et al., 2002; Sandfort, de Graaf, Bijl, & Schnabel, 2001; Warner et al., 2004). It is important to note that assessments of sexual minority members on these measures have not been consistently outside the normal range (Cochran, 2001; Ross, Paulsen, & Stalstrom, 1988).

Methodological inconsistencies have been proposed as a contributing factor to the mixed research findings of comparative studies exploring the psychological health of sexual minorities (Savin-Williams, 1990). Conclusions from such studies can be

confounded by methodological shortcomings involving small non-representative convenience samples (Barber, 2002; Hillier et al., 2004; Horowitz, Laflin, & Weis, 2001; Meyer, 2003; Warner et al., 2004); the inclusion of insufficient numbers of sexual minority participants to obtain sufficient power in any comparative analysis with heterosexuals (Mays & Cochran, 2001; Meyer, 2003); lack of explicit definition of the normal range of scores on the psychological health measures used in studies (Gonsiorek, 1991); different sampling methods and different methods of determining sexual minority status (Barber, 2002; Cochran et al., 2000; Gonsiorek, 1991); response bias (Mays & Cochran, 2001; Meyer, 2003); and selection bias (Barber, 2002; Catania, Gibson, Chitwood, & Coates, 1990; Cochran et al., 2000; Gonsiorek, 1991; Horowitz et al., 2001). Several scholars considered it was beneficial to control mediating factors and confounds such as substance misuse, depression, stress, social support, relationship status, age, professional background, educational experience, socio-economic status, place of residence, adverse childhood, and adverse current life events by using them as covariates in statistical analyses, or by matching participants in comparative sexual minority research (Goldfried & Goldfried, 2001; Gonsiorek, 1991; Herrell et al., 1999; Jorm et al., 2002; Mohr & Fassinger, 2003; Rothblum, 2002).

Measurement of Psychological Health

Having reviewed 32 relevant studies, the current author found a bias toward a medical model, both in the range and number of measures of psychological health used in sexual minority research. In other words, the focus was predominantly on identifying and reducing psychological illness, dysfunction or distress. To clarify this bias, the current author categorised measures of psychological health as either negative or positive. Negative measures were defined as those on which a high score

indicated pathology, dysfunction or distress. Positive measures were defined as those on which a high score indicated wellness or competence. Some examples of negative measures used in sexual minority psychological health research involved the assessment of psychiatric symptoms, depression, anxiety, psychological distress, somatic complaints, suicidal thoughts or behaviours, substance misuse, demoralisation, guilt, sex problems, negative affect, loss of control, interpersonal difficulties, obsessive-compulsive behaviour, gender role stress, and negative self-concepts. Positive measures used in sexual minority psychological health research assessed positive sexual minority identity, positive affect, self-esteem, satisfaction with life, sexual satisfaction and assertiveness, and self-acceptance of a minority sexual identity.

In the 32 studies reviewed, negative measures predominated, with 75% of the studies involving negative measures (Cochran et al., 2000; Cochran & Mays, 2000a; Cochran et al., 2003; Coyle, 1993; Eskin et al., 2005; Gilman et al., 2001; Hays, Turner, & Coates, 1992; Herrell et al., 1999; Hillier et al., 2004; King et al., 2003; Martin & Dean, 1993; Mathy, 2002; Matthews et al., 2002; Mays & Cochran, 2001; Meyer, 1995; Mohr & Fassinger, 2003; Morris et al., 2001; Prado et al., 2002; Ross, 1990; Sandfort et al., 2001; Schneider, Farberow, & Kruks, 1989; Warner et al., 2004; Wong & Tang, 2004). Of the 25% studies that used positive measures (Crawford et al., 2002; Dupras, 1994; Elizur & Mintzer, 2001; Elizur & Ziv, 2001; Frable et al., 1997; Huebner et al., 2004; Jorm et al., 2002; Miranda & Storms, 1989), most used these positive measures in conjunction with negative measures.

The Need for Sexual Minority Research into Well-Being

The above analysis also highlighted a gap in the body of knowledge in that no studies were located that used a comprehensive, positive measure of psychological

well-being within the context of sexual minority populations. Well-being research in the context of sexual minorities operating within a heterosexual majority would enhance the body of knowledge and inform practice towards strengthening sexual minority members and potentially prevent psychological difficulties faced by them. Such studies could generate directions for future positive psychological research involving sexual minorities, and provide some baseline data for mental health practitioners working with a positive focus on building upon both homosexual and heterosexual client strengths and competencies as they negotiate the opportunities and challenges within their lives.

The Scales of Psychological Well-Being (SPWB) (Ryff, 1989; Ryff & Keyes, 1995), with subscales for autonomy, environmental mastery, personal growth, positive relations with others, self-acceptance, and purpose in life, have been used extensively to study eudaimonic well-being in many other contexts. Appendix A includes a description of high and low scorers for the six SPWB subscales, as supplied by the developer, Carol Ryff. Eudaimonic well-being related to personal meaning and optimal functioning in life (Ryan & Deci, 2001). The SPWB have been used to investigate negotiating a life transition / challenge (Hart, Fonarvera, Merluzzi, & Mohr, 2005; Holland & Holahan, 2003; Kling, Seltzer, & Ryff, 1997; Kwan, Love, Ryff, & Essex, 2003; Mangelli, Gribbin, Buchi, Allard, & Sensky, 2002) and as such would have relevance to the journey of sexual minority members toward establishing a positive sexual identity.

The SPWB could potentially be very useful as a positive measure of psychological health in sexual minority research because many of the items in the SPWB have conceptual and empirical links with positive identity development and protective factors for sexual minority psychological health. The broader body of

research on identity has described autonomy as being linked to having a sense of one's own identity (Bonnie, 1995; Tobias, 2004), as has environmental control (Bonnie, 1995). Sexual minority identity development has been linked to self-acceptance (Alderson, 2000; Elizur & Mintzer, 2001; Stevens, 2004), personal growth (DiPlacido, 1998), autonomy (Alderson, 2000), and environmental control (Stevens, 2004). Sexual minority research has concluded that social and family support from others, self-acceptance, personal growth, and a sense of control to be protective factors for psychological health of sexual minority members (Alderson, 2000; DiPlacido, 1998; Elizur & Mintzer, 2001; Elizur & Ziv, 2001; Kurdek, 1988; Stevens, 2004; Waldo et al., 1998). All these aspects are reflected or implied in the SPWB subscales.

The SPWB has been found to be appropriate to use across various life stages from young adults to older people (Ryff, 1989; Ryff & Heidrich, 1997; Ryff & Keyes, 1995), and also in racial minority research where it was concluded that membership of a racial minority did not always bring negative consequences, with psychosocial strengths exhibited that operated in parallel with more negative outcomes associated with minority status (Ryff et al., 2003). Because gay males and lesbians are members of sexual minorities, the use of SPWB with these populations could be useful. Gender differences have also been explored and identified using the SPWB. American research using the SPWB found that females tended to score higher on positive relations than males, indicating that females perceived their relations with others to be more positive than males. Females also tended to score higher on personal growth than males indicating that females perceived their personal growth through life experiences to be higher (Ryff, 1989; Ryff & Keyes, 1995; Ryff, Lee, Essex, & Schmutte, 1994; Ryff & Singer, 1998b). A different result emerged from an Italian

study involving 450 participants aged 15-85 years that found that males scored significantly higher than females on all SPWB subscales except positive relations with others, where there no statistically significant differences were identified across genders (Ruini et al., 2003). The SPWB would therefore be suitable to explore both the gender aspects and the homosexual sexual minority aspects of gay males and lesbians in relation to their psychological well-being.

Research Directions

Several researchers provided suggestions for future sexual minority research to explore positive factors promoting psychological adjustment, including resilience of sexual minority members (Elizur & Ziv, 2001; Goldfried, 2001); personal and interpersonal resources, strengths and competencies that are useful to reduce psychological distress and cope in often hostile environments (Bradford et al., 1994; Elizur & Ziv, 2001; Parks et al., 2004); self-acceptance and secure attachment (Elizur & Mintzer, 2001); supportive social and family networks (Prado et al., 2002; Russell & Joyner, 2001); and minority stress, including multiple minority stress related to membership of two or more minorities (DiPlacido, 1998; Gilman et al., 2001; Katz, Joiner, & Kwon, 2002; Meyer, 1995).

In keeping with the broadest conceptualisation of psychological health, the current study was designed from a positive perspective to measure psychological well-being in homosexuals and heterosexuals. Findings from such a study would balance and complement the medical model bias that may have negatively influenced societal and practitioner perceptions about frequently marginalised members of sexual minorities. The current study used the SPWB to compare the psychological well-being of homosexual and heterosexual Australians. The research question was "Is

there a difference in the psychological well-being of homosexual and heterosexual adults?"

Method

Participants

The sample of 215 Australian metropolitan adults aged 21 years and over comprised heterosexual males (n = 43), gay males (n = 59), heterosexual females (n = 58), and lesbians (n = 55). The majority of the participants (94 %) lived in the Perth metropolitan area in Western Australia. The average age of participants was 39.8 years for heterosexual males (SD = 14.8), 41.4 years for gay males (SD = 16.4), 34.8 years for heterosexual females (SD = 11.6), and 35.3 years for lesbians (SD = 11.2).

Materials / Measure

The materials of the current study comprised the SPWB (See Appendix A), an anonymous questionnaire containing an information and consent form (see Appendix B), and a demographics section (see Appendix C). The 84-item SPWB used in the current study with permission from the developer Professor Carol Ryff has been used extensively in contemporary research. The SPWB comprises six subscales of autonomy, environmental mastery, personal growth, positive relations with others, self-acceptance, and purpose in life (Ryff, 1989; Ryff & Keyes, 1995). There are 14 items in each subscale. Half the items in each subscale were worded in the positive, and these items were scored on a Likert scale from 1 (strongly disagree) to 6 (strongly agree). Half the items in each subscale were worded in the negative and these items were reverse scored from 1 (strongly agree) to 6 (strongly disagree). The minimum possible score for each subscale was 14 and the maximum possible score was 84. In the current study, the total for all subscales was also calculated. The internal consistency Cronbach alpha coefficients supplied with the 84-item SPWB from Ryff

were $\alpha = .83$ for autonomy, $\alpha = .86$ for environmental mastery, $\alpha = .85$ for personal growth, $\alpha = .88$ for positive relations with others, $\alpha = .88$ for purpose in life and $\alpha = .91$ for self-acceptance, and these are consistent with Cronbach alphas reported in other studies (Grossbaum & Bates, 2002; Ryff et al., 1994).

Procedure

Having received ethical approval for the study from the Ethics Committee of the Faculty of Community Services, Education and Social Sciences of Edith Cowan University, questionnaires were distributed either directly to participants by the researcher, or were emailed or mailed to potential participants by the researcher on request. Advertising for volunteer participants utilised printed press classified advertisements, community noticeboards, Internet classified advertisements, a gay/lesbian webcaster, press articles, a radio guest appearance by the researcher, and personal networking by the researcher. Advertising primarily, but not exclusively, targeted gay male and lesbian participants due to the small percentage of these groups in the population. Numerous gay/lesbian support and community groups were contacted, as well as members of a university psychology research participant register. A webpage was written with information about the study and contact details. A snowball technique, acknowledged and used as a typical recruitment method (King et al., 2003; National Health and Medical Research Council, 2005; Warner et al., 2004), was used. Participants contacted the researcher using a virtual telephone message bank, an email address, or through direct contact. Depending on the preference of the participant, the anonymous questionnaire was returned by post, email or handed directly to the researcher.

The study initially recruited adults aged 25 to 35 years from the Perth metropolitan area in Western Australia. In the final weeks of data collection, in an

effort to increase participant numbers, the age range was widened to 21 years and advertising extended nationally using Internet classified advertisements and discussion groups. Approximately 70 % of the participants were recruited under the expanded criteria.

Results

Prior to analysis, questionnaires were screened for missing data, and 19 incomplete questionnaires were discarded. A total of 215 usable questionnaires remained, the majority of these (68 %) collected directly from participants, and the remainder returned from distribution by email or post, with a response rate of approximately 35%, consistent with previous studies that used similar methods of data collection (Roy & Berger, 2005).

The Statistical Package for the Social Sciences (SPSS) version 13.0 for Windows was used for data entry, screening and analysis. Data screening was conducted for outliers and violations of normality within each participant group for each of the six SPWB subscales, as well as the total SPWB prior to analysis. No missing data values were detected. Eight univariate outliers were detected. One outlying value was detected for heterosexual males on the dependent variable of autonomy, one for gay males on personal growth; one for heterosexual females on autonomy, one for heterosexual females on personal growth, two for heterosexual females on total SPWB; and two for lesbians on environmental mastery. The eight univariate outlier scores were replaced with a value equal to three standard deviations below their means prior to the MANOVA analysis as a method of retaining the cases in the analysis, yet reducing the effect of outliers on the analysis.

Normality was assessed by examining visual and computed SPSS output for skewness and kurtosis, as well as manually calculated skewness and kurtosis

deviations with an alpha set at .001 (Hair, Anderson, Tatham, & Black, 1998; Tabachnick & Fidell, 2001). This revealed negative skewness violations of normality for lesbians on positive relations, personal growth, and self acceptance; and for heterosexual females on personal growth and self acceptance. A positive kurtosis violation of normality was noted for heterosexual females on self acceptance. A decision was made not to transform the data because, in this exploratory study, difficulties associated with interpretation of the analysis as a result of transformations outweighed the skewness and kurtosis violations, especially considering there were cell sizes greater than 30 per cell which should reduce the impact of these violations of normality (Tabachnick & Fidell, 2001).

Multivariate outliers were screened using Mahalonobis distances with alpha < 0.001, which revealed that 13 cases (6 %) were multivariate outliers. A decision was made to retain the multivariate outliers as real responses within an exploratory study, and because there was no procedural or scoring error reason for their deletion (Hair et al., 1998). Internal consistency was assessed via Cronbach alpha and ranged from .82 to .98, which was satisfactory. Internal consistency values are displayed in Table 1.

A 2 X 2 factorial MANOVA was conducted, with gender (male or female) and sexual orientation (homosexual or heterosexual) as the independent variables. The dependent variables were participant's SPWB subscale scores on positive relations, autonomy, environmental mastery, personal growth, purpose in life and self acceptance, as well as the total of all subscales. MANOVA was an appropriate analysis method because all the six SPWB subscales were significantly inter-correlated (Hair et al., 1998), and because all the subscales are related to the superordinate construct of psychological well-being (Ryff & Keyes, 1995). The assumption of homogeneity of variance was tested with Levene's test and was met for

all of the scales. The assumption of equality of covariance matrices across the groups was tested with Box's test and was violated. Because violations of the Box test have less impact when the largest to smallest cell ratio does not exceed 1:1.5, as is the case in this study (Hair et al., 1998), a decision was made to proceed with the MANOVA analysis. Pillai's Trace, a conservative criterion appropriate for unequal cell sizes, was used to assess the MANOVA test results (Hair et al., 1998; Tabachnick & Fidell, 2001). Descriptive statistics of SPWB means and standard deviations are presented in Table 2. With an alpha set at .05, the combined dependent variables were significantly affected by gender $F(7, 205) = 4.36, p < .001$

The MANOVA univariate test results showed that gender significantly affected the dependent variables of positive relations $F(1, 211) = 10.81, p < .05$; environmental mastery $F(1, 211) = 4.10, p < .05$; personal growth $F(1, 211) = 18.85$, $p < .05$; and total SPWB score $F(1, 211) = 6.85, p < .05$.

To aid in the interpretation of the significance of gender revealed in the MANOVA, four separate 2 x 2 factorial ANOVAS (gender male or female) x orientation (homosexual or heterosexual) were conducted for positive relations, environmental mastery, personal growth, and the total SPWB score. The assumption of homogeneity of variance was tested with Levene's test and was met for positive relations with others, environmental mastery, personal growth, and total SPWB score.

With alpha set at .05, a significant gender effect was revealed for positive relations with others, $F(1, 211) = 10.81, p < .05$, with subsequent post hoc tests using Tukeys HSD indicating that both heterosexual females and homosexual females scored significantly higher than homosexual males. For environmental mastery, a significant gender effect was revealed, $F(1, 211) = 4.10, p < .05$, with subsequent post hoc tests using Tukeys HSD indicating that homosexual females scored

significantly higher than homosexual males. For personal growth, a significant gender effect was revealed, $F(1, 211) = 18.85$, $p < .05$ with subsequent post hoc tests using Tukeys HSD indicating that both heterosexual females and homosexual females scored significantly higher than both heterosexual males and homosexual males. For total SPWB scores, a significant gender effect was revealed, $F(1, 211) = 6.85$, $p < .05$, with subsequent post hoc tests using Tukeys HSD not detecting any significant differences between the means, reflecting the likelihood of Type II errors in this uncommon situation, that are typically resolved by using larger sample sizes (Zar, 1999).

Discussion

At the broadest level of analysis differences that emerged in this exploratory study were more affected by gender than they were by sexual orientation. Sexual orientation did not have a significant impact per se on positive psychological functioning, specifically eudaimonic psychological well-being as measured by SPWB. Female scores were typically higher than male scores in aspects such as positive relations with others, environmental mastery, personal growth and total SPWB scores, with this trend being more marked for homosexual participants. The purest and most confident finding at all levels of analysis was in relation to personal growth, with females of either sexual orientation scoring significantly higher than males of either sexual orientation.

This discussion, delivered from a positive psychological perspective in keeping with protecting gay and lesbian communities from stigmatization and further marginalization (National Health and Medical Research Council, 2005) will use the findings of this current study to suggest directions for future positive psychological research involving sexual minorities.

Relationship of the Current Study to Other Studies

This current study adds to the comparatively small but growing body of sexual minority research exploring positive measures and perspectives of psychological health. Support was provided for positive psychological functioning within the gay and lesbian community, complementing findings from within-groups sexual minority research and from the few between-groups sexual minority research that used positive perspectives and measures such as self-esteem (Frable et al., 1997), positive affect (Jorm et al., 2002), and ego strength (Miranda & Storms, 1989). Previous sexual minority studies using positive measures of psychological health did not consistently use a positive psychological perspective. The current study addressed this gap in the body of knowledge by using a comprehensive measure of well-being within a positive psychological framework to measure and celebrate positive psychological functioning in homosexuals and heterosexuals.

To discuss the findings of this current study in relation to previous sexual minority studies that used negative measures of pathology or psychological distress would have little meaning because negative and positive measures relate to different dimensions of psychological health. The current study may be the first to use the SPWB as a positive measure of well-being in a sexual minority context and therefore no other studies were available for direct comparison. When comparing the findings of this current study to other comparative studies that used the SPWB in general population studies, conclusions that females score higher than males on positive relations with others, and personal growth were supported by the current study (Ryff, 1989; Ryff & Keyes, 1995; Ryff et al., 1994; Ryff & Singer, 1998b). The finding of a significant gender effect for environmental mastery, with higher scores for females, is

a unique finding from this current study. The present study contradicts Italian findings of no significant difference in positive relations scores between females and males, and lower scores for females than males on all other SPWB subscales (Ruini et al., 2003), possibly indicating that contextual and cultural considerations are important to acknowledge when using the SPWB. Data on total SPWB scores was not available from other studies, and the current author considered that inclusion of the total SPWB score would be a valuable addition to future SPWB research as a reflection of the superordinate construct of psychological well-being.

Given that homosexual participants in this current study had progressed sufficiently along their journey towards a positive sexual minority identity to self-identify as gay males or lesbians, the current findings also provided support for previous studies describing the psychological benefits related to coming out and the integration of a sexual minority identity (Crawford et al., 2002; Elizur & Mintzer, 2001; Elizur & Ziv, 2001; Miranda & Storms, 1989).

Strengths and Limitations

There were several strengths of the current study that addressed particular criticisms of previous sexual minority research. In the current study, responses were collected from a wide range of sources rather than exclusively targeting gay and lesbian venues. The number of homosexual and heterosexual participants was approximately equal, and large enough to provide adequate power, ranging from 0.8 to 0.95 based on the effect sizes of the significant post hoc gender comparisons for positive relations with others, environmental mastery, and personal growth (Kraemer & Thiemann, 1987). Anonymity of responses was designed to maximize sexual minority participation through the reduction of potential tension related to self-disclosure. The participation age of 21 years and over was designed to maximise the

likelihood that sexual minority participants had made sufficient progress through their journey of developing a positive sexual minority identity (Cass, 1979, 2004) to comfortably self-identify on sexual orientation by that age (Grimes & Merighi, 2000; Pryor, Weinberg, & Williams, 1995; Remafedi, Resnick, Blum, & Harris, 1992; Weinberg, 1994). The researcher wanted to measure psychological well-being in people who had stabilised their sexual orientation, and so the exclusion of people questioning their sexual orientation minimized a potential confound related to extraneous impacts on psychological functioning related to the often turbulent stages of questioning one's sexual orientation (Elizur & Ziv, 2001; Wong & Tang, 2004). The extensive use of advertising and the use of snowballing were designed to minimise any potential researcher bias related to targeting participants. Self-reporting was considered by the researcher to be particularly appropriate for accessing the participants' personal meaning in relation to the aspects measured in the SPWB. Recruiting participants from metropolitan areas was designed to maximise the possibility that people from sexual minorities had access to supportive social networks, a protective factor for psychological health, which may have been a possible confound if people from remote areas, where such networks may be more difficult to establish for people from sexual minorities, were included in the study. Guided by contemporary scholars (Lesbian Gay and Bisexual (LGB) Youth Sexual Orientation Measurement Work Group, 2003), an identical set of sexual orientation descriptions was used by all participants, removing a possible confound of different subjective interpretations of the terms gay male, lesbian, and heterosexual by different participants. The inclusion of gender and sexual orientation as two separate independent variables provided an opportunity to analyse which independent variable

or variables affected the SPWB scores in a significant way, either on their own or through an interaction between the two.

There were several limitations in this current study. Selection bias may have limited the generalisability of the findings of this present study to the wider homosexual and heterosexual population, given that participants needed to have been willing to be involved in comparative well-being research, to identify their sexual orientation, and motivated to return a completed questionnaire. It may have been the case, as has been found in other sexual minority research, that only those people who were the most open about their sexual orientation, or highly motivated to participate, may have participated in the present study. This current study provided a cross-sectional snapshot of mean scores on SPWB aspects, and as such was not designed to consider the equally important personal profile scores for individual participants, or how these profiles changed over time and through life transitions. Advertising for the widened age range at a national level was mainly internet based, compared to the more extensive and varied advertising in Perth, but this was not considered a major issue because the vast majority of participants (94%) were from Perth. Covariates generated by research that used a medical model perspective and measures of psychological health cannot be assumed to automatically apply to well-being, and there was insufficient research to identify and include suitable covariates that might have affected eudaimonic psychological well-being for both homosexuals and heterosexuals in the current study.

Future Directions

The use of exploratory comparative research to identify directions for future research has been encouraged (Meyer, 2003). The researcher considered that, because general population findings using the SPWB were replicated in the current study with

good internal reliability for gay males and lesbians, further exploration of the use of the SPWB with sexual minorities was warranted. Future research, potentially through qualitative research, could establish if the aspects of positive relations with others, autonomy, environmental mastery, personal growth, purpose in life, and self-acceptance inherent in the SPWB are valid within the experiences of people from sexual minorities, and in their journey towards establishing a positive sexual minority identity. There is as much information within the individual personal profiles on the SPWB subscales as there is in group means for these subscales, so how these personal SPWB profiles may change through life transitions and therapeutic interventions is of potential interest, especially suited to future longitudinal studies exploring the coming out transition for sexual minority people.

The positive functioning observed in this present study should be considered within the context of sexual minority members operating in an environment with potential minority stressors. The mixed findings of previous comparative studies involving sexual minorities suggest that there may be unmeasured conditions or contexts that support better functioning in some cases. Future qualitative research would also have the potential to elicit any other protective factors, personal strengths, and interpersonal attributes contributing to coping and resilience for sexual minority members, and explore the impacts of sexual minority stressors on the unique contexts of gay male and lesbian experiences.

Should a larger comparative study be undertaken to replicate or further explore the findings of this present study, the author considered it important to identify potential covariates related to psychological well-being for both homosexuals and heterosexuals. The protective factors for psychological health of sexual minority members identified from with-group research, such as family relations and support;

social support networks; involvement with the sexual minority community; self-acceptance of a sexual minority status; secure attachment style; inner strength; personal growth; and a sense of control would be useful to consider as initial covariate candidates, with others potentially emerging from the previously suggested qualitative research exploring the relevance of the SPWB subscales to gay male and lesbian experiences. The inclusion of a self-identifying bisexual group could be warranted, as research in the area of bisexuality is limited.

Conclusion

A positive perspective identifying and building on strengths and competencies is appropriate for both sexual minorities and the heterosexual majority. Based on the findings of this current study, the author proposes that clinicians should not treat self-identifying homosexual and heterosexual metropolitan Australian adults any differently in relation to eudaimonic psychological well-being based on their sexual orientation per se, given that differences in psychological well being were related more to gender than to sexual orientation. Clinicians are encouraged, however, to consider gender as an important element in their work with clients, either homosexual or heterosexual, on positive relations with others, environmental mastery, and personal growth. The findings of this current study allay the misconception of excessive dysfunction within sexual minorities. Positive measures of psychological functioning and health are useful to complement and provide an alternative to the medical model focus of remedying deficiencies. There is a place for the medical model approach to reduce psychological distress, as there is for the positive psychological focus on building strengths, and the two are not mutually exclusive. Using a positive perspective and using positive measures of psychological health provides the opportunity to build further on existing strengths as well as potentially

preventing difficulties encountered by sexual minority members as they experience life with all its challenges and opportunities. The SPWB has potential to be relevant to sexual minority people as they function effectively in everyday life, and further exploration of the use of this comprehensive measure of well-being in sexual minority research is encouraged.

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Table 1

Cronbach Alpha Internal Reliability Values

Subscale	Heterosexual		Homosexual		Total
	Male	Female	Male	Female	
	$n = 43$	$n = 58$	$n = 59$	$n = 55$	$n = 215$
PR	0.89	0.84	0.87	0.89	0.88
AU	0.86	0.87	0.82	0.88	0.86
EM	0.87	0.85	0.88	0.92	0.89
PG	0.83	0.80	0.80	0.88	0.86
PU	0.86	0.84	0.88	0.91	0.88
SA	0.92	0.91	0.91	0.94	0.92
All	0.96	0.96	0.97	0.98	0.97

PR=Positive Relations, AU=Autonomy, EM=Environmental Mastery, PG=Personal Growth, PU=Purpose, SA=Self-Acceptance, All = total of all subscales, Total = heterosexual + homosexual irrespective of gender

Table 2

Mean SPWB Scores for Heterosexuals and Homosexuals

Subscale	Heterosexual				Homosexual			
	Male $n = 43$		Female $n = 58$		Male $n = 59$		Female $n = 55$	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Positive Relations	64.35	12.40	68.83	9.92	62.71	12.66	68.78	11.68
Autonomy	63.60	10.29	60.93	11.41	61.69	10.56	64.36	11.12
Environmental Mastery	63.35	11.03	64.02	9.66	60.44	12.70	66.13	11.93
Personal Growth	67.44	9.60	73.66	7.14	68.51	9.48	72.93	9.37
Purpose in Life	65.65	10.49	67.74	9.61	63.39	12.61	67.27	12.35
Self-Acceptance	62.79	13.04	66.14	11.61	63.36	13.78	66.98	13.68
All subscales	387.05	54.69	401.48	48.03	379.95	60.24	406.22	61.91

Appendix A – The Scales of Psychological Well-Being

AUTONOMY

Definition: High Scorer: Is self-determining and independent; able to resist social pressures to think and act in certain ways; regulates behavior from within; evaluates self by personal standards.
Low Scorer: Is concerned about the expectations and evaluations of others; relies on judgments of others to make important decisions; conforms to social pressures to think and act in certain ways.

(-) 1. Sometimes I change the way I act or think to be more like those around me.

(+) 2. I am not afraid to voice my opinions, even when they are in opposition to the opinions of most people.

(+) 3. My decisions are not usually influenced by what everyone else is doing.

(-) 4. I tend to worry about what other people think of me.

(+) 5. Being happy with myself is more important to me than having others approve of me.

(-) 6. I tend to be influenced by people with strong opinions.

(+) 7. People rarely talk me into doing things I don't want to do.

(-) 8. It is more important to me to "fit in" with others than to stand alone on my principles.

(+) 9. I have confidence in my opinions, even if they are contrary to the general consensus.

(-) 10. It's difficult for me to voice my own opinions on controversial matters.

(-) 11. I often change my mind about decisions if my friends or family disagree.

(+) 12. I am not the kind of person who gives in to social pressures to think or act in certain ways.

(-) 13. I am concerned about how other people evaluate the choices I have made in my life.

(+) 14. I judge myself by what I think is important, not by the values of what others think is important.

(+) indicates positively scored items, (-) indicates negatively scored items

Internal consistency (coefficient alpha) = .83, Correlation with 20-item parent scale = .97

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ENVIRONMENTAL MASTERY

Definition: High Scorer: Has a sense of mastery and competence in managing the environment; controls complex array of external activities; makes effective use of surrounding opportunities; able to choose or create contexts suitable to personal needs and values.
Low Scorer: Has difficulty managing everyday affairs; feels unable to change or improve surrounding context; is unaware of surrounding opportunities; lacks sense of control over external world.

(+) 1. In general, I feel I am in charge of the situation in which I live.

(-) 2. The demands of everyday life often get me down.

(-) 3. I do not fit very well with the people and the community around me.

(+) 4. I am quite good at managing the many responsibilities of my daily life.

(-) 5. I often feel overwhelmed by my responsibilities.

(+) 6. If I were unhappy with my living situation, I would take effective steps to change it.

(+) 7. I generally do a good job of taking care of my personal finances and affairs.

(-) 8. I find it stressful that I can't keep up with all of the things I have to do each day.

(+) 9. I am good at juggling my time so that I can fit everything in that needs to get done.

(+) 10. My daily life is busy, but I derive a sense of satisfaction from keeping up with everything.

(-) 11. I get frustrated when trying to plan my daily activities because I never accomplish the things I set out to do.

(+) 12. My efforts to find the kinds of activities and relationships that I need have been quite successful.

(-) 13. I have difficulty arranging my life in a way that is satisfying to me.

(+) 14. I have been able to build a home and a lifestyle for myself that is much to my liking.

(+) indicates positively scored items, (-) indicates negatively scored items

Internal consistency (coefficient alpha) = .86, Correlation with 20-item parent scale = .98

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PERSONAL GROWTH

Definition: High Scorer: Has a feeling of continued development; sees self as growing and expanding; is open to new experiences; has sense of realizing his or her potential; sees improvement in self and behavior over time; is changing in ways that reflect more self knowledge and effectiveness.
Low Scorer: Has a sense of personal stagnation; lacks sense of improvement or expansion over time; feels bored and uninterested with life; feels unable to develop new attitudes or behaviors.

(-) 1. I am not interested in activities that will expand my horizons.

(+) 2. In general, I feel that I continue to learn more about myself as time goes by.

(+) 3. I am the kind of person who likes to give new things a try.

(-) 4. I don't want to try new ways of doing things--my life is fine the way it is.

(+) 5. I think it is important to have new experiences that challenge how you think about yourself and the world.

(-) 6. When I think about it, I haven't really improved much as a person over the years.

(+) 7. In my view, people of every age are able to continue growing and developing.

(+) 8. With time, I have gained a lot of insight about life that has made me a stronger, more capable person.

(+) 9. I have the sense that I have developed a lot as a person over time.

(-) 10. I do not enjoy being in new situations that require me to change my old familiar ways of doing things.

(+) 11. For me, life has been a continuous process of learning, changing, and growth.

(+) 12. I enjoy seeing how my views have changed and matured over the years.

(-) 13. I gave up trying to make big improvements or changes in my life a long time ago.

(-) 14. There is truth to the saying you can't teach an old dog new tricks.

(+) indicates positively scored items, (-) indicates negatively scored items

Internal consistency (coefficient alpha) = .85, Correlation with 20-item parent scale = .97

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POSITIVE RELATIONS WITH OTHERS

Definition: High Scorer: Has warm satisfying, trusting relationships with others; is concerned about the welfare of others; capable of strong empathy, affection, and intimacy; understands give and take of human relationships.
Low Scorer: Has few close, trusting relationships with others; finds it difficult to be warm, open, and concerned about others; is isolated and frustrated in interpersonal relationships; not willing to make compromises to sustain important ties with others.

(+) 1. Most people see me as loving and affectionate.

(-) 2. Maintaining close relationships has been difficult and frustrating for me

(-) 3. I often feel lonely because I have few close friends with whom to share my concerns.

(+) 4. I enjoy personal and mutual conversations with family members or friends.

(+) 5. It is important to me to be a good listener when close friends talk to me about their problems.

(-) 6. I don't have many people who want to listen when I need to talk.

(+) 7. I feel like I get a lot out of my friendships.

(-) 8. It seems to me that most other people have more friends than I do.

(+) 9. People would describe me as a giving person, willing to share my time with others.

(-) 10. I have not experienced many warm and trusting relationships with others.

(-) 11. I often feel like I'm on the outside looking in when it comes to friendships.

(+) 12. I know that I can trust my friends, and they know they can trust me.

(-) 13. I find it difficult to really open up when I talk with others.

(+) 14. My friends and I sympathize with each other's problems.

(+) indicates positively scored items, (-) indicates negatively scored items

Internal consistency (coefficient alpha) = .88, Correlation with 20-item parent scale = .98

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PURPOSE IN LIFE

Definition: High Scorer: Has goals in life and a sense of directedness; feels there is meaning to present and past life; holds beliefs that give life purpose; has aims and objectives for living.
Low Scorer: Lacks a sense of meaning in life; has few goals or aims, lacks sense of direction; does not see purpose of past life; has no outlook or beliefs that give life meaning.

(+) 1. I feel good when I think of what I've done in the past and what I hope to do in the future.

(-) 2. I live life one day at a time and don't really think about the future.

(-) 3. I tend to focus on the present, because the future nearly always brings me problems.

(+) 4. I have a sense of direction and purpose in life.

(-) 5. My daily activities often seem trivial and unimportant to me.

(-) 6. I don't have a good sense of what it is I'm trying to accomplish in life.

(-) 7. I used to set goals for myself, but that now seems like a waste of time.

(+) 8. I enjoy making plans for the future and working to make them a reality.

(+) 9. I am an active person in carrying out the plans I set for myself.

(+) 10. Some people wander aimlessly through life, but I am not one of them.

(-) 11. I sometimes feel as if I've done all there is to do in life.

(+) 12. My aims in life have been more a source of satisfaction than frustration to me.

(+) 13. I find it satisfying to think about what I have accomplished in life.

(-) 14. In the final analysis, I'm not so sure that my life adds up to much.

(+) indicates positively scored items, (-) indicates negatively scored items

Internal consistency (coefficient alpha) = .88, Correlation with 20-item parent scale = .98

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SELF-ACCEPTANCE

Definition: High Scorer: Possesses a positive attitude toward the self; acknowledges and accepts multiple aspects of self including good and bad qualities; feels positive about past life.
Low Scorer: Feels dissatisfied with self; is disappointed with what has occurred in past life; is troubled about certain personal qualities; wishes to be different than what he or she is.

(+) 1. When I look at the story of my life, I am pleased with how things have turned out.

(+) 2. In general, I feel confident and positive about myself.

(-) 3. I feel like many of the people I know have gotten more out of life than I have.

(-) 4. Given the opportunity, there are many things about myself that I would change.

(+) 5. I like most aspects of my personality.

(+) 6. I made some mistakes in the past, but I feel that all in all everything has worked out for the best.

(-) 7. In many ways, I feel disappointed about my achievements in life.

(+) 8. For the most part, I am proud of who I am and the life I lead.

(-) 9. I envy many people for the lives they lead.

(-) 10. My attitude about myself is probably not as positive as most people feel about themselves.

(-) 11. Many days I wake up feeling discouraged about how I have lived my life.

(+) 12. The past had its ups and downs, but in general, I wouldn't want to change it.

(+) 13. When I compare myself to friends and acquaintances, it makes me feel good about who I am.

(-) 14. Everyone has their weaknesses, but I seem to have more than my share.

(+) indicates positively scored items, (-) indicates negatively scored items

Internal consistency (coefficient alpha) = .91, Correlation with 20-item parent scale = .99

Permission to include in thesis but not a published article from the author, Carol Ryff

Appendix B – Information and Consent Form From Questionnaire

An Australian Well-Being Study

This is an anonymous questionnaire. Please ensure that you do not write your name, or any other comments that will make you identifiable, on the questionnaire. By completing the questionnaire you are consenting to take part in this research. As such, you should first read the following "Invitation to Participate" carefully as it explains fully the intention of the research project.

Invitation to participate

This is an invitation to participate in a study that aims to collect some important baseline information about the well-being of Australian heterosexual men and women, gay men and lesbians who live in the metropolitan area from any Australian State or Territory and are 21 years or older.

The topic of well-being is important and was chosen because it is a positive measure of how people function in life, rather than a negative measure of their psychological distress. There is no data on the topic of this study, psychological well-being, for Australian metropolitan adults. Few studies across the full spectrum of people, including members of sexual minorities, have used such a comprehensive and positive measure of well-being as this study is using. For both these reasons this is an important study, with the results being useful for health professionals working positively with both heterosexual and sexual minority clients in areas related to operating effectively in life with all its challenges and opportunities. Participation in the study is on a volunteer basis. The study forms part of my Honours degree in Psychology and has been approved by the Ethics Committee of the Faculty of Community Services, Education and Social Sciences of Edith Cowan University.

Participation involves completing an anonymous questionnaire with questions about functioning in everyday life. You are also asked to indicate your sexual orientation and your gender. Whilst answering all questions is a requirement, participation is completely voluntary and you can withdraw at any time. The questions are not designed to cause any distress, but should you experience any discomfort while answering the questions, some phone contacts for health professional support are Lifeline 24 hour telephone counselling 13 1114, SANE Mental Illness Helpline 9-5 EST 1800 688 382, Samaritans 9381 5555, and Gay and Lesbian Community Services of WA 9420 7201.

Any questions concerning the project can be directed to my supervisor, Dr. Eyal Gringart, Edith Cowan University, e-mail e.gringart@ecu.edu.au. If you have any concerns about the project or would like to talk to an independent person, you may contact Dr. Craig Speelman, Head of the School of Psychology, Edith Cowan University, Phone (08) 6304 5724.

Appendix C – Demographic Section of Questionnaire

Please read the following information carefully, because this survey asks whether you self-identify as a heterosexual male or a heterosexual female, a gay male, or a lesbian.

In general, a **heterosexual** person has a consistent pattern of sexual arousal toward persons of the opposite gender. This may involve fantasy, conscious attraction, emotional and romantic feelings, or sexual behaviours.

In general, a **gay male** has a consistent pattern of sexual arousal toward other men. This may involve fantasy, conscious attraction, emotional and romantic feelings, or sexual behaviours.

In general, a **lesbian** has a consistent pattern of sexual arousal toward other women. This may involve fantasy, conscious attraction, emotional and romantic feelings, or sexual behaviours.

For the purposes of the study, people who have a consistent pattern of sexual arousal for both males and females (**bisexual**), or who are uncertain about their sexual attractions and desires (**questioning**) are not included in this study.

Please answer the four final questions below:

- My gender is (male, female) _____
- In terms of your sense of self, which best describes you?

(gay, lesbian, heterosexual) _____

- What was your age, in years, at your last Birthday? _____
- What Australian State or Territory do you live in? _____

Appendix D - Raw Data Prior to Analysis and Adjustment of Outliers

Partic	Group	Pos	Auton	EMast	PGrowth	Purpose	SAccept	PWB	Age	State
1	4	82	66	70	82	81	81	462	26	WA
2	1	49	70	50	68	66	51	354	34	WA
3	3	68	67	65	77	66	60	403	26	WA
4	4	80	82	78	80	84	84	488	34	WA
5	3	59	58	74	77	78	80	426	30	WA
6	1	60	54	71	66	77	76	404	35	WA
7	2	57	65	59	58	63	60	362	28	WA
8	3	69	51	62	76	70	55	383	32	WA
9	3	74	66	68	78	70	75	431	25	WA
10	1	63	62	63	62	68	68	386	28	WA
11	3	66	55	58	76	67	67	389	29	WA
12	4	73	57	65	77	71	69	412	25	WA
13	3	71	50	50	62	53	50	336	27	WA
14	1	74	58	58	74	69	67	400	30	WA
15	3	80	68	81	82	80	72	463	25	WA
16	1	67	67	54	77	69	59	393	25	WA
17	4	62	60	72	83	76	68	421	35	WA
18	1	75	65	55	80	67	59	401	29	WA
19	3	71	60	62	64	62	72	391	32	WA
20	3	80	52	68	74	76	68	418	26	WA
21	3	66	54	64	58	64	68	374	33	WA
22	2	50	60	47	72	62	56	347	33	WA
23	1	68	73	50	69	60	65	385	32	WA
24	2	69	53	61	69	83	70	405	25	WA
25	4	53	51	57	54	50	49	314	25	WA
26	4	80	60	72	74	74	75	435	34	WA
27	1	66	79	73	79	52	70	419	25	WA

Key:

Participant number

Group:
- 1 = hetero males
- 2 = gay male
- 3 = hetero females
- 4 = lesbians

Positive Relations score

Autonomy score

Environmental **Mast**ery score

Personal **Growth** score

Purpose in Life score

Self **Accept**ance score

Total S**PWB** score

Age in years at last birthday

State in which lived

Partic	Group	Pos	Auton	EMast	PGrowth	Purpose	SAccept	PWB	Age	State
28	1	67	66	68	72	69	66	408	25	WA
29	4	80	70	54	80	71	63	418	25	WA
30	1	81	74	76	80	75	68	454	26	WA
31	4	46	55	34	55	36	37	263	35	WA
32	3	62	58	61	75	51	63	370	25	WA
33	3	43	21	43	59	45	33	244	34	WA
34	1	64	71	74	73	75	73	430	64	NSW
35	3	67	54	58	70	68	67	384	28	WA
36	2	84	84	84	84	84	77	497	23	WA
37	3	73	66	75	78	74	75	441	28	WA
38	3	65	40	64	69	67	65	370	27	WA
39	3	77	56	74	79	72	75	433	25	WA
40	2	84	60	79	82	84	84	473	23	WA
41	2	45	48	46	52	44	23	258	32	WA
42	4	60	63	68	67	45	51	354	28	WA
43	4	78	76	71	79	79	78	461	25	WA
44	4	66	72	69	78	72	74	431	25	WA
45	4	56	63	57	63	53	56	348	36	WA
46	3	57	47	47	78	50	43	322	36	WA
47	2	77	68	65	74	69	62	415	48	NSW
48	3	64	61	68	73	67	60	393	26	48
49	2	74	78	75	76	80	70	453	56	WA
50	2	42	45	53	71	46	41	298	27	QLD
51	2	59	51	45	70	69	64	358	25	WA
52	3	71	55	61	67	62	65	381	33	ACT
53	2	39	45	57	64	62	46	313	46	VIC
54	1	66	25	60	76	71	57	355	23	WA
55	1	48	50	43	50	44	36	271	48	WA

Key:

Participant number

Group:
- 1 = hetero males
- 2 = gay male
- 3 = hetero females
- 4 = lesbians

Positive Relations score

Autonomy score

Environmental **Mast**ery score

Personal **Growth** score

Purpose in Life score

Self **Accept**ance score

Total **SPWB** score

Age in years at last birthday

State in which lived

Partic	Group	Pos	Auton	EMast	PGrowth	Purpose	SAccept	PWB	Age	State	
56	1	61	47	56	79	76	78	397	26	WA	56
57	2	51	60	55	64	53	54	337	40	WA	57
58	2	71	58	56	72	78	64	399	35	WA	58
59	2	82	70	84	68	75	84	463	35	WA	
60	2	52	64	77	70	74	76	413	34	WA	
61	2	66	56	71	67	67	65	392	35	WA	
62	2	76	66	61	79	73	73	428	43	WA	
63	2	63	62	38	68	56	57	344	28	WA	
64	2	78	69	75	73	76	69	440	53	WA	
65	4	69	71	61	67	60	63	391	29	WA	
66	4	58	57	59	62	55	61	352	32	WA	
67	4	69	52	69	67	55	65	377	36	WA	
68	4	63	71	67	75	71	62	409	24	WA	
69	4	78	55	55	61	57	55	361	25	WA	
70	4	64	58	59	80	66	72	399	39	WA	
71	4	37	57	23	79	45	26	267	24	WA	
72	4	73	61	71	79	76	72	432	43	WA	
73	4	61	62	78	66	62	76	405	65	WA	
74	3	71	64	52	79	69	55	390	42	WA	
75	2	45	55	56	62	54	53	325	26	WA	
76	3	43	36	42	56	45	26	248	24	WA	
77	4	75	69	78	84	71	77	454	46	WA	
78	2	79	64	72	84	78	81	458	33	WA	
79	3	84	77	63	73	73	72	442	26	WA	
80	2	70	77	58	77	67	79	428	23	WA	
81	3	69	64	72	80	71	73	429	29	WA	
82	4	69	67	79	77	81	72	445	56	TAS	
83	2	67	78	81	70	77	79	452	62	WA	

Key:

Participant number

Group:
- 1 = hetero males
- 2 = gay male
- 3 = hetero females
- 4 = lesbians

Positive Relations score

Autonomy score

Environmental **Mast**ery score

Personal **Growth** score

Purpose in Life score

Self **Accept**ance score

Total **SPWB** score

Age in years at last birthday

State in which lived

Partic	Group	Pos	Auton	EMast	PGrowth	Purpose	SAccept	PWB	Age	State
84	3	61	58	57	68	66	64	374	32	WA
85	4	79	82	76	84	84	77	482	45	WA
86	2	78	73	81	82	77	83	474	57	WA
87	3	75	62	60	68	68	74	407	31	WA
88	4	79	58	72	82	78	82	451	21	WA
89	2	57	64	58	67	66	70	382	26	WA
90	2	68	53	46	73	68	46	354	31	WA
91	4	81	67	77	71	67	71	434	60	WA
92	3	83	76	64	80	61	63	427	28	WA
93	2	43	54	32	29	27	29	214	46	WA
94	4	80	78	84	84	78	84	488	21	WA
95	3	74	76	71	81	81	78	461	60	WA
96	2	49	67	45	65	47	57	330	22	WA
97	4	77	55	69	69	69	66	405	21	WA
98	3	59	74	69	69	54	59	384	21	WA
99	2	64	63	66	70	64	67	394	70	WA
100	4	70	54	65	73	65	71	398	56	WA
101	3	77	80	68	75	73	80	453	64	WA
102	2	32	49	47	63	48	55	294	45	WA
103	4	71	53	58	80	77	77	416	39	WA
104	3	72	66	73	76	78	69	434	65	WA
105	2	62	66	63	73	63	57	384	49	WA
106	4	67	63	67	79	67	71	414	38	WA
107	3	79	70	73	73	76	73	444	34	WA
108	2	76	40	68	78	66	54	382	31	TAS
109	4	68	68	78	80	74	78	446	43	WA
110	3	55	82	54	66	49	57	363	47	WA
111	2	66	61	52	63	43	58	343	21	WA

Key:

Participant number

Group:
- 1 = hetero males
- 2 = gay male
- 3 = hetero females
- 4 = lesbians

Positive Relations score

Autonomy score

Environmental **Mast**ery score

Personal **Growth** score

Purpose in Life score

Self **Accept**ance score

Total **SPWB** score

Age in years at last birthday

State in which lived

Partic	Group	Pos	Auton	EMast	PGrowth	Purpose	SAccept	PWB	Age	State
112	4	78	60	67	76	78	72	431	28	WA
113	3	75	71	69	70	62	73	420	50	WA
114	2	48	67	47	62	56	59	339	41	WA
115	4	70	69	68	79	65	74	425	28	WA
116	3	68	66	68	78	68	69	417	50	VIC
117	2	61	54	47	69	57	52	340	30	WA
118	4	82	82	82	83	82	74	485	25	WA
119	3	76	66	66	75	74	70	427	61	WA
120	2	63	71	59	64	65	77	399	21	WA
121	4	39	48	48	48	47	52	282	29	WA
122	3	71	62	69	70	68	69	409	39	WA
123	2	72	66	63	73	63	68	405	44	ACT
124	4	76	83	84	83	82	84	492	38	WA
125	3	51	66	46	81	61	53	358	50	TAS
126	2	63	41	37	74	60	52	327	22	WA
127	4	50	35	48	58	53	53	297	46	WA
128	2	72	55	64	79	66	69	405	23	WA
129	4	65	74	61	71	62	64	397	24	WA
130	2	57	69	51	65	53	64	359	32	WA
131	4	69	66	62	73	70	62	402	33	WA
132	1	70	65	65	76	73	66	415	25	WA
133	3	83	52	68	73	66	57	399	32	WA
134	4	42	32	40	50	38	27	229	26	WA
135	3	53	53	51	51	53	47	308	38	WA
136	2	69	61	64	63	62	68	387	44	WA
137	3	70	41	66	79	71	67	394	35	WA
138	2	58	54	61	80	62	79	394	22	WA
139	4	80	79	76	65	76	82	458	53	WA

Key:

Participant number

Group:
- 1 = hetero males
- 2 = gay male
- 3 = hetero females
- 4 = lesbians

Positive Relations score

Autonomy score

Environmental **Mast**ery score

Personal **Growth** score

Purpose in Life score

Self **Accept**ance score

Total **SPWB** score

Age in years at last birthday

State in which lived

Partic	Group	Pos	Auton	EMast	PGrowth	Purpose	SAccept	PWB	Age	State
140	3	75	70	71	81	79	76	452	31	WA
141	2	74	76	68	71	70	79	438	55	WA
142	4	77	62	57	77	69	55	397	21	WA
143	3	76	76	76	83	78	80	469	25	QLD
144	2	68	60	66	67	70	71	402	39	WA
145	4	84	82	81	82	80	81	490	38	WA
146	4	75	66	64	74	71	65	415	35	WA
147	4	81	74	81	79	79	74	468	48	WA
148	4	73	69	66	82	56	68	414	45	WA
149	4	53	48	49	54	58	57	319	42	WA
150	4	76	70	75	69	79	83	452	26	WA
151	4	72	73	60	74	72	68	419	21	WA
152	4	62	62	47	63	49	38	321	39	WA
153	4	64	61	73	79	73	81	431	48	WA
154	4	54	72	69	71	56	57	379	41	WA
155	4	77	59	75	78	81	72	442	34	WA
156	1	78	71	73	81	78	80	461	44	WA
157	1	67	56	70	65	70	78	406	51	WA
158	3	81	73	78	77	81	83	473	50	WA
159	1	80	65	72	68	74	58	417	56	WA
160	1	66	71	66	77	64	72	416	36	WA
161	1	70	65	68	62	67	71	403	35	WA
162	1	49	60	62	47	48	42	308	57	WA
163	1	73	71	72	65	68	66	415	57	WA
164	1	84	76	71	72	79	72	454	51	WA
165	1	73	68	70	70	68	70	419	26	WA
166	4	80	81	78	73	74	78	464	57	QLD
167	3	70	64	62	72	62	62	392	33	WA

Key:

Participant number

Group:
- 1 = hetero males
- 2 = gay male
- 3 = hetero females
- 4 = lesbians

Positive Relations score

Autonomy score

Environmental **Mast**ery score

Personal **Growth** score

Purpose in Life score

Self **Accept**ance score

Total **SPWB** score

Age in years at last birthday

State in which lived

Partic	Group	Pos	Auton	EMast	PGrowth	Purpose	SAccept	PWB	Age	State
168	3	60	64	67	68	61	57	377	34	WA
169	2	81	74	82	81	80	84	482	29	WA
170	2	67	51	48	75	35	51	327	25	SA
171	1	69	59	68	69	72	68	405	51	WA
172	3	74	61	74	78	79	74	440	55	WA
173	3	81	83	83	82	79	83	491	62	WA
174	1	83	74	84	67	79	83	470	61	WA
175	2	50	53	46	46	51	50	296	60	WA
176	2	81	83	82	78	82	83	489	68	WA
177	2	59	75	73	77	75	69	428	67	WA
178	2	60	50	61	62	63	59	355	62	WA
179	2	73	68	78	79	83	83	464	55	WA
180	2	70	66	58	62	62	67	385	66	WA
181	2	58	56	56	55	53	50	328	65	WA
182	2	51	51	54	52	53	61	322	58	WA
183	2	59	48	60	55	54	59	335	73	WA
184	2	46	84	69	58	49	75	381	76	WA
185	2	52	57	55	59	54	53	330	75	WA
186	1	68	65	83	80	82	84	462	53	WA
187	1	63	47	52	61	53	43	319	30	WA
188	1	66	72	59	52	66	55	370	66	WA
189	1	31	70	63	75	73	61	373	21	WA
190	1	45	53	47	61	49	44	299	40	WA
191	1	53	59	57	61	54	46	330	47	WA
192	1	56	48	46	49	57	49	305	23	WA
193	1	81	66	72	75	71	77	442	54	WA
194	1	80	78	78	78	76	78	468	23	WA
195	1	74	68	72	63	75	69	421	25	WA

Key:

Participant number

Group:
- 1 = hetero males
- 2 = gay male
- 3 = hetero females
- 4 = lesbians

Positive Relations score

Autonomy score

Environmental **Mast**ery score

Personal **Growth** score

Purpose in Life score

Self **Accept**ance score

Total **SPWB** score

Age in years at last birthday

State in which lived

Partic	Group	Pos	Auton	EMast	PGrowth	Purpose	SAccept	PWB	Age	State
196	1	63	77	73	71	62	70	416	40	WA
197	1	40	58	46	50	50	46	290	21	WA
198	3	52	59	48	61	59	51	330	22	WA
199	3	71	61	73	78	78	80	441	24	WA
200	3	77	68	62	79	80	69	435	30	WA
201	3	81	60	77	81	75	80	454	31	WA
202	3	76	42	55	68	56	62	359	21	WA
203	3	72	61	73	80	80	72	438	36	WA
204	3	66	63	56	76	66	57	384	32	WA
205	3	59	42	63	77	69	73	383	42	WA
206	3	65	60	65	78	65	71	404	31	WA
207	3	48	58	46	81	74	69	376	21	WA
208	2	42	64	49	61	54	37	307	32	WA
209	1	50	51	51	65	58	48	323	37	WA
210	2	71	60	55	77	65	56	384	24	WA
211	1	72	70	69	62	62	70	405	61	WA
212	1	58	71	73	59	64	59	384	67	WA
213	1	46	48	43	52	37	35	261	37	WA
214	3	76	63	60	78	79	76	432	35	WA
215	1	50	66	47	63	56	47	329	67	WA

Key:

Participant number

Group:
- 1 = hetero males
- 2 = gay male
- 3 = hetero females
- 4 = lesbians

Positive Relations score

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Personal **Growth** score

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Total **SPWB** score

Age in years at last birthday

State in which lived