

Editorial

Vol 1, Issue 1

On behalf of the Editorial Board and our Executive Management Committee, I am very excited and honoured to launch the first edition of *Counselling, Psychotherapy, and Health* hosted at www.cphJournal.com.

An enormous ‘congratulations!’ is extended to the Australian Counselling Association (ACA) for their support and encouragement in developing a new international research journal in the fields of counselling, psychotherapy, and health. This endeavour is the first of its kind in Australia. That is, we are the first dedicated counselling research journal to be supported by a professional counselling association in the national context. This journal signifies how ACA is a changing and dynamic association of professionals, who are taking on the challenges that are facing counselling and allied disciplines at this time in our history.

Like most association sponsored journals, our vision maintains editorial independence inspired by the need to create dialogical spaces, where practitioners and researchers can share ideas and concerns. Unlike many existing journals that tend to remain exclusive to members and select others, we endeavour to open up this space for anyone who is interested in the topics and concerns published under cphJournal.com. We intentionally seek to generate interest and dialogue between diverse voices that may include different associations, professions, interest groups, and the public. For this reason, we chose to launch the project in an open access format that utilises the latest technology available on the internet.

The counselling profession, like cphJournal, is a relatively new and emerging field in Australia. We feel that cphJournal represents an evolving need in Australia to support and to encourage awareness of research, as well as to inspire a research culture among counsellors and allied practitioners. There are many benefits from opening up space to dialogue and share ideas. One such outcome is how this project will support education and awareness among practitioners and the public on many issues. Among the many benefits, this approach will also contribute to improving professional standards for training and practicing in counselling and allied fields. We hope that cphJournal will provide one vital link in a new research infrastructure, and that our project will encourage other associations to take our lead, and to build a stronger professional base across the sector.

Introducing Volume 1, Issue 1

Volume 1, Issue 1, showcases the expertise of several board members, who bravely volunteered their time and talents by submitting an article for review. We begin the Issue with Dr Nadine Pelling's article which reports on a research project that profiles the membership of ACA. Her research increases our knowledge of the demographics and characteristics of the counselling profession 'down under', and will likely support many more investigations in these areas in future.

Dr James Essien's esteemed research team discusses the significance of an HIV risk-reduction strategy in the Nigerian Uniformed Services. We are delighted to support an international and interdisciplinary focus at cphJournal.com, both of which are highlighted by Dr Essien's article which reports on significant social and health issues.

Dr Randolph Bowers and team present findings from a qualitative study on homophobia in the everyday lives of gay, lesbian, bisexual, and transgender people. The article highlights some of the issues in minority research and practice that cphJournal.com endeavours to support. It is our hope that new research in this area, and in other areas, will be forthcoming. For example, the journal seeks to support research from different minority, ethnic, racial, and special-interest groups, including Aboriginal Australian, New Zealand, and First Nations communities in North America and elsewhere.

Dr Travis Gee presents findings from a study on meta-analysis as a tool in quantitative measures. While his work suggests fairly in-depth knowledge of statistics, and this level of knowledge is beyond many of us, the article is published here to signify the journals' interest in discussing statistical and quantitative issues in counselling research. It is my hope that future articles will include clear and direct instructions for stats-dummies, like myself, in how to interpret and understand statistical analysis as applied to the practice of counselling.

At the date of posting this editorial, Issue 1 is not yet complete. Our standard Issues are rolling, which means we publish articles as they become available. An Issue is closed when the content has reached the maximum level. There are several papers under review currently, and we are experiencing a very positive response from the web site, so we look forward to a steady volume of submissions and publications.

It is our hope that these papers will provide examples of different styles and approaches, and will suggest the diversity of issues that cphJournal.com is interested to support. These papers offer examples of the layout and editorial style of the journal for interested authors, and we hope, will encourage writers to submit materials in future. Our editorial policy is a growing and improving process, and is updated as necessary. Please access and read our guidelines, which can be found under the Author link from our home page.

Bowers, R. (2005), Launching the new international journal *Counselling, Psychotherapy, and Health* – An editorial, *Counselling, Psychotherapy, and Health*, 1(1), i-iii, July 2005.

Board membership

To learn more about the evolution of cphJournal, please visit the About Us link from our home page. We invite interested people to consider Board membership. We are seeking members who are willing and able to take up editorial projects like special editions, leadership roles on our management committee, and of course, the reviewing of papers. Board membership is open to a wide range of people including practitioners, postgraduate student researchers, senior or early career researchers, academics, and people who represent diverse disciplinary endeavours. Membership is by invitation only, but we invite people to nominate themselves and/or other colleagues by sending us a CV along with information about the contributions you feel you or the other person could make.

Invitations for articles and special issues

We always invite new submissions for review. Please check our Author Guidelines by taking the Author link from our homepage.

From time to time, a spark of an idea suggests that we support a special issue. These might be built around a theme, a conference, or some other inspiration like a debate, a controversy, or a political, economic, or ecological concern. For example, during a conference in Canada early in 2005, I invited the conference delegates to publish the proceedings of the conference with cphJournal. Three Associate Editors were appointed from among the Canadian association, and the project is projected for publishing during 2006. Other special issue ideas are welcomed, and our management committee encourages interested parties to develop an idea and present it to the committee.

As our mandate supports multicultural, ethnic, and minority issues we currently invite submissions for two separate issues:

- (1) in the areas of gay, lesbian, bisexual, and transgender concerns,
- (2) in the areas of Aboriginal and First Nations concerns.

We encourage interested parties to come forward with ideas for articles and special editions for the board to consider. We are open to new ideas and to encouraging people to take up leadership on various projects that may arise. cphJournal is like an empty container that relies on the writing of interested people, who will transform the journal into what it is meant to be. Thank you for visiting the pages of cphJournal.com. Please bookmark our homepage and return on a regular basis to pick up the new articles that are published as they become available.

Best wishes,

Dr Randolph Bowers

University of New England

Armidale, NSW Australia 2351

1 July 2005

Uploading date: 12 September 2005: www.cphjournal.com

Bowers, R., Plummer, D., Minichiello, V. (2005) Homophobia and the everyday mechanisms of prejudice: Findings from a qualitative study, *Counselling, Psychotherapy, and Health*, 1(1), 31-51, July 2005.



Homophobia and the everyday mechanisms of prejudice: Findings from a qualitative study

Dr Randolph Bowers
Professor Victor Minichiello

School of Health
University of New England
Armidale, NSW, Australia 2350

Professor David Plummer
University of the West Indies

Please direct correspondence about this paper to R Bowers at
rbowers@une.edu.au
School of Health
University of New England
Armidale, NSW, Australia 2350

Abstract

This paper explores the meaning of 'homophobia' from a phenomenological, interpretative and social constructivist perspective. We postulate that homophobia is a useful repository for understanding experiences of prejudice and trauma expressed in 34 qualitative interviews with gay, lesbian, bisexual, and transgender clients of counselling and (heterosexual) counsellors. Homophobia can be further explained by examining mechanisms of social isolation – the ways that people deploy homophobic behaviours and thus, how minority people experience homophobia as isolating and alienating in everyday family life. Experiences of homophobia and the fear of homophobia appear to be extremely powerful, formative, and often traumatic, with long term implications for individuals' adjustment and/or family functioning. The importance of a supportive therapeutic relationship is highlighted.

Keywords: Homophobia, Heterosexism, Counselling, Isolation, Alienation, Trauma

Acknowledgement

This research was sponsored by a PhD Teaching and Research Scholarship from the School of Health, Faculty of Education, Health, and Professional Studies, at the University of New England. The authors gratefully acknowledge the support of the participants who made this project so valuable. We also wish to thank Associate Professor Margot Schofield, who contributed to the early part of the project.

Defining Homophobia

The term 'homophobia' first appeared in 1972 and was suggested to mean the dread of being in close proximity to homosexuals (Weinberg, 1972). This definition agrees with the clinical model of phobias found in the DSM IV (American Psychiatric Association, 1994). Since the 1970s, however, the emphasis on 'phobia' has broadened to include 'a wide range of negative emotions, attitudes and behaviours toward homosexual people' (Haaga 1991, p. 171), and also the internalised attitudes of sexual and gender different persons.

Plummer (1999, p. 2, 4) defines the term 'homophobia' as a 'repository' of beliefs, values and behaviours related to concepts like 'not self', 'difference' and 'otherness.' He identifies five characteristics that distinguish homophobia from a clinical phobic response. First, phobic responses typically originate in fear, but homophobia often includes hatred and anger. Second, phobias are considered unreasonable and extreme, whereas homophobia is often judged to be understandable and justifiable. Third, phobias usually involve avoidance mechanisms, but homophobia often manifests as hostility and aggression. Fourth, phobias do not relate to political issues in any direct clinical sense, though homophobia has clear socio-political dimensions that include prejudice and demonstrations of discrimination. Finally, people with phobias often recognise their need for treatment and how their phobic responses get in the way of everyday functioning. On the other hand, people that harbour homophobia do not usually see their condition as disabling and may not be motivated to change.

Debate over the usefulness of the term 'homophobia' continues in the literature, with various authors suggesting alternative labels. For example, Herek (2000) suggests that the phrase 'sexual prejudice' is more apt to describe the broad context of social and psychological research on prejudice. Herek hopes to avoid value judgements and attitudes conveyed by 'homophobia,' though the phrase 'sexual prejudice' is just as loaded. Plummer (1999, p. 5-6) explores a lengthy list of alternatives, concluding that all terms offer inadequate explanations of a complex phenomenon. He proposes staying with the term 'homophobia' because other terms attempt to name aspects of homophobia while fragmenting the field of knowledge now associated with the term. Also, given the short history of the term 'homophobia' the body of literature associated with the phenomenon is relatively small and there is no generally accepted alternative.

Exploring the phenomenon of homophobia

Rather than begin with a precise definition we use 'homophobia' as a 'coding category' that best describes a large body of data related to experiences of isolation, alienation and discrimination in everyday life and in counselling (Strauss & Corbin, 1994). In this way the term takes on provisional and tentative methodological significance (Blumer, 1969; Bogdan, 1992; Bowling, 1997; Maning & Cullum-Swan, 1994; Minichiello, Aroni, et al, 1995). The usefulness of the term is then directly related to how the body of analysis holds together in coherence, intelligibility and rationality (Rennie, 1998). If the analysis can be defended through rigorous critique, the term 'homophobia' will not stand on its own merit but will be somewhat revised by the meanings attached to the term that emerge in the data.

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The primary environment for experiences of isolation, lack of understanding, and prejudice are peer groups (Plummer, 1999) and the family (Kaufman and Raphael, 1996). For instance, the Gay, Lesbian, and Straight Education Network (GLSEN) (1999) conducted a survey of gay, lesbian, bisexual and transgendered students affiliated with local youth service organisations from 32 states in America. The responses included 496 completed questionnaires. Over 90% reported sometimes or frequently hearing homophobic remarks in school, and almost all reported hearing these remarks from other students. Of the respondents, 69% reported experiencing some form of harassment or violence, 13% reported experiencing physical assault, and two out of five stated they did not feel safe in school. Over one third of the sample did not feel comfortable speaking to school staff about issues related to status as a lesbian, gay, bisexual or transgendered person.

Homophobia is a mainstream concern

Underlying findings related to homophobia is the notion that the problem exists primarily in heterosexual people's attitudes towards difference. For example, Wilson (1999) explores five themes underlying mainstream cultural expressions of homophobia towards lesbians: (i) anxiety over sexual difference, (ii) fear of female sexuality, (iii) the sexualisation of lesbianism, (iv) the characterisation of lesbianism as sick and unnatural, and (v) the inability to identify lesbians with any certainty. Fear and anxiety toward lesbians and sexual difference correspond with a classical definition of homophobia. But reactions are not logical, nor consistent. For example, making lesbianism more sexual than is warranted appears opposite from making lesbianism sick and unnatural. Both responses are psycho-emotive. It is possible that elevating the erotic versus demonising the sexual are two sides to one psycho-emotive process that objectifies the other into a role that is 'played out' by the homophobic or gender-biased individual in direct relationship to their projected fantasy. Homophobia, like sexism, works to discredit the 'other' in irrational ways, while building up the self in a false and self-deceptive manner.

To further illustrate the point that homophobia relies on irrational but consistent motivations, Bank and Hansford (2000) found that men's same-sex friendships tend to be less intimate and supportive than women's because of (i) a lack of parental role models for friendship, (ii) emotional restraint, (iii) homophobia, (iv) masculine self-identity, (v) competitive striving, and (vi) role conflicts. The results indicate that emotional restraint and homophobia (toward gay men) are the most significant causal factors that decrease the likelihood of intimacy and support in male friendships. Similar results were suggested for gay males whose internalised levels of homophobia were rated high. Though the study confirmed the significance of internalised homophobia in heterosexual and homosexual populations, the meaning and function of this problem requires investigation.

Male socialisation and homophobia

Allen and Oleson (1999) investigated the relationship between internalised homophobia, shame, and self-esteem in gay men, suggesting that the longer one is out of the closet the less shame and internalised homophobia are felt and the greater is one's sense of self-esteem. While these findings appear reasonable, further analysis suggests the authors rely

heavily on uncritical propositions related to the social construction of homosexuality and they are useful to illustrate how irrational homophobic cultural scripts translate into research which further isolates minority persons by the use of pathological labels. For example, the scholars found significant correlations between internalised homophobia and seven 'self-consciousness variables', or ways that gay men felt about self. These were: (i) perverted, (ii) effeminate, (iii) weak, (iv) sick/defective, (v) passive, (vi) engage in anal sex, and (vii) dirty. All variables except 'dirty' had a significant correlation with shame, and the study concludes that shame may be a principle 'pathogenic factor' in internalised homophobia. It is interesting to note that the authors construction of variables likely resulted from their own proposition of (culturally dominant homophobic) terms inserted into their research instrument.

In contrast, Plummer (1999) investigated homophobia in male development and socialisation from early childhood to adulthood. He found that homophobic beliefs precede and inform the development of sexuality and gender identity, effectively underwriting the negative binary system of heterosexuality versus homosexuality. Further, homophobic language emerges early in male development and peaks between the age of fourteen to eighteen. Afterwards, homophobic language tends to level out and become less of an issue as the male matures. Use of pejoratives like fag, queer, sissy, poofter, faggot, homo, and lesbo, dyke, butch, etc., are predominant among grade school boys who may not understand the meaning of the words they use. As meaning clarifies, the young male's fear of being labelled intensifies. Their gendered identity forms in contrast to these terms and to the lesser-than-male femininity implied in phrases like 'you're just like a girl!' or 'you sissy, why don't you go play with the girls'. The fear, anxiety and identity-uncertainty embedded in these early years of (homophobic and largely male initiated) childhood socialisation predate and influence adult (male) constructions of meaning.

Methods

Thirty-four adult participants were interviewed, consisting of 18 clients and 16 counsellors. Clients comprised four gay, six lesbian, four bisexual and four transgender participants. The criteria for selection were the client's self-identification in the above categories, and that they had experienced counselling at least once. Client experiences of counselling varied from single sessions to lengthy therapeutic relationships that spanned several years. Because counselling is difficult to define, is a relatively new field in most Western nations, and tends to vary to great degrees depending on the approach of the practitioner, 'counselling' was not specified by the researchers and was self-defined by each participant. Ten clients came from rural and eight from urban settings.

Regarding counsellor participants, several identified as gay male, bisexual female and lesbian. Several expressed overlapping counsellor/client identity. Through the use of theoretical sampling, counsellors sampled first were chosen because of their expertise in the area. It was felt they may serve as key informants, and may also offer snowball referrals to colleagues who may become participants. Hearing their perspectives did alert the project to relevant issues. Later, counsellors who had no experience were sought for a contrast. Counselling practitioners included psychologists, clinical social workers, health

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workers, sexual health workers, private practitioners, ministers of religion, alternative practitioners, and counsellors in individual, couple and family work. Eleven counsellors came from rural and five from urban environments.

Participants were recruited using three methods: (i) snowball referrals; (ii) posting requests for volunteers on community e-mail list servers; and (iii) contacting counsellors through the telephone directory. Interview duration was between one and three hours. Interviews were audio taped. The three questions used in all interviews were: (i) Can you tell me a bit about yourself and how you came to be where you are now? (ii) Tell me a bit about your experiences of a) counselling, or b) working with gay, lesbian, bisexual and transgendered clients and, (iii) If you could speak directly to counsellors, what would you tell them that you most want them to know about working with gay and lesbian clients?

Interview data was transcribed and coded according to self-apparent content, using the words found in the interview to code the material. Interviews were subdivided according to these codes, and related codes were sorted as relationships between codes became apparent. Over 800 initial codes were identified, and the growing mass of coded data was sorted using a systematic process facilitated by a qualitative data analysis programme (Qualitative Solutions 1997). When codes logically combined, categories developed. Categories expressed areas of commonality between bits of data, suggesting areas that appeared to bring together significant statements. This analytical process was documented at each turn by analytical memos. As categories were tested, contrasted, and clarified they were subsumed into themes. The themes came to express the dominant groupings of categories that later spoke through the structure of the research findings. Because of time and resource restrictions, subsequent analysis focused on sorting data according to the dominant themes that had emerged through the first half of the study. These themes were tested to have wide applicability across the complete sample. Overall we acknowledged an emphasis on client-initiated themes, which supported our approach to honouring the stories of minority participants. Themes related to homophobia fell into three areas: (i) family, school, community and religion, (ii) healing from homophobia, and (iii) counselling.

The study utilised a phenomenological, interpretative and social constructivist approach that sought to explore how participants located their experience of counselling. From this theoretical perspective we began with the premise that people both experience reality and shape reality according to the way meaning is constructed in everyday life. For these reasons, we accept that participant's perceptions are enough for us to gain insights into their worldviews. While we took a social critical stance to the investigation of ideas and perceptions coming forward, we also wished to affirm the stories of marginalised people as valid and as primary data for understanding their experiences of therapy.

Our orientation to homophobia began as a tentative proposition based in prior research literature discussed above. As evidence continued to emerge in the data, a systematic analysis suggested that 'homophobia' was a phenomenon that described experiences of bias, prejudice and discrimination in everyday life. Homophobia was not only the dominant theme across all cases, but was also a linking concept that transcended the

sexuality and gender differences represented by the sample. While we acknowledge that further investigation is warranted to highlight particular emphasis among each population group, the purpose of this study was to explore the *common themes* that emerged across the different populations represented.

To ensure a rigorous design, information relating to homophobia was unsolicited and the term 'homophobia' was not used by the researcher to ensure a minimum of bias in the data coming forward. If and when the term 'homophobia' was used by participants, the interviewer inquired by asking open-ended questions that encouraged the participant to describe their experiences. In many instances participants did not use the word 'homophobia'. Rather, participants described social interactions that appeared directly linked to their sexual and/or gender identity and that were in some manner difficult, traumatic, and that increased their sense of social isolation. Our intention was to offer participants a forum to discuss issues related to past counselling interactions, and was not to foreclose or to presume any particular emphasis. The themes related to homophobia emerged only after extensive analysis of data following the first four, and then eight interviews. After these interviews were analysed, the dominant themes centring around homophobia were apparent. In subsequent interviews, the rigorous nature of the design warranted continued caution, and the term 'homophobia' was not raised directly by the interviewer but was allowed to emerge through the stories of participants, as was the case with the first interviews.

In spite of taking a reserved stance to issues of homophobia, and in spite of the term 'homophobia' being a somewhat controversial and less-than-adequate expression of the phenomena it attempts to represent, the study confirmed the importance of this term as a repository of meanings, experiences, and issues surrounding sexual and gender difference in modern society. Not only did these themes suggest significant issues exist in everyday life, they also highlighted important issues that need to be addressed within the field and practice of counselling specifically. This paper restricts itself to presenting themes related to homophobia in everyday life. The emphasis is to describe in qualitative ways the everyday experiences of homophobia that all participants suggested overall. While doing this, the intention is to foreground the voices of participants themselves, because we believe their word and their life experiences have the most to say to the research, professional, and public communities.

Discussion of data

Homophobia in family life – an isolating reality

When participants recounted many and varied experiences of prejudice, violence, and more subtle experiences of being judged and feeling discomfort related to their sexual or gender identity, we asked, 'what is the common thread between these stories?' We realised that one common element across the stories was how people appear to isolate the 'other' and feel isolated. It was then we learned the etymology of 'isolation': 'Iso' means equal. To isolate, then, means *to separate equals*. This definition is helpful because it drew together seemingly disconnected experiences and suggested that mechanisms of isolation (rightly conceived of as experiences of prejudice much like racism and/or

sexism) were at play and form one significant component of how homophobia operates through social interactions and internalisations.

The stories below illustrate how families deploy isolating behaviours to separate themselves from their awkward and shameful attitudes and beliefs toward homosexuality and gender difference. Likewise, many families appear to navigate healing paths that reframe difference in ways that make those differences more acceptable, and perhaps even special. However, the pain and alienation caused by family rejection and a lack of ability to deal with difference cannot be underestimated. These experiences are summarised by a transsexual participant, Rebecca:

I think the family aspect of it... is one thing that gays and lesbians and transsexual people have in common... how families just don't deal with it and that is the hardest. Even when they think they are dealing with it they really don't, you know, that is the hardest part [sigh].

The sense of not dealing with difference even when family members say they are may indicate unacknowledged homophobic attitudes, making it all the more isolating for gay and lesbian children. For instance, Claire relates that:

I felt different because I was different and that is true, I was different in lots of ways... I think about isolation because that was what my family was like, we were very isolated and I didn't have a lot of access to people outside my home... and I had what was probably a nervous breakdown when I was 15 and the school got very distressed about it.

In most cases being 'different' was experienced as how others see me, and as 'who I am', and being different is related to feeling isolated. For example, Claire dared to assert her identity in her latter teenage years and was met with violence:

I can tell you about my mother throwing me into the loony bin if you like, that's always a good story [laughter] my brother cracking three of my ribs, that's another good story [laughter] being lesbian wasn't popular in my family.

What could be more isolating than being committed to a mental health ward, and later being confined to a bed with broken ribs, because she suspected she was a lesbian? Her laughter throughout the transcript when speaking about her trauma suggested two levels of feeling. The first was a sense of moving beyond the experience and no longer giving it power. The second was a form of denial of the pain caused by those who were supposed to protect her, a kind of internalised isolation from her painful history. This was a powerful irony Claire lived with all her life. After over 40 years of healing from her past, Claire had only recently found a place of deeper acceptance of being different:

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I had made a pact with myself when I was in my twenties that I would give to my family and to the straight world, I would give my life to them until I was 40, and that if I still felt the way I did at 40, well it wasn't something I was going to get over...

Such promises are not unusual as a way of bargaining with a world that conspires against your sense of identity (Kaufman and Raphael, 1996). The person who is labelled different and marginalised actually compromises their happiness and freedom to accommodate their family's strong heteronormative expectations (Sedgwick, 1993).

Josh, a 20 years old gay male, grew up in very different cultural and socioeconomic circumstances from Claire, but echoes the same sentiment when he bargained that he may come out to his family at the age of 30. He expressed the heart-wrenching side of this isolation:

That's my biggest regret out of all this, is the fact that they're going to miss a great chunk [of my life], simply because they're not able to understand, but, I don't know how else to do it basically...

Homophobia as silence and suspicion

In certain cases, isolation can force the separation of families. For instance, Josh related a story of recently meeting a cousin (whom he did not know existed) and discovering discretely that his cousin was gay after twenty years of silence:

I hadn't met him in twenty years, he hadn't been home in twenty years, he'd been in [the city]... He was one of these people who dreaded coming home cause it meant... having to deal with the family.

Feldon, a gay male, also implied how silence and a sense of isolation characterised his family upbringing:

My family... appeared to be supportive of me but in key respects were not... I was born into a Baptist family... We were brought up in [a country town]. My mother was a strong churchgoer. [We] went to Sunday school at the church. I was born in... the evangelical end of Christianity... Sexuality was essentially the missionary position after you were married, you know, to the extent that it was ever thought about at all, homosexuality you know, was never discussed.

Silence can be a very powerful instrument of homophobic values (Plummer, 1999, Sedgwick, 1993). The lack of open discussion of issues of sexual difference at home may indicate lack of knowledge, lack of awareness, or intentional prejudice against the other – not knowing that 'the other' is one of your own children. The experience of silence breeds fear of disclosing identity, as the following statements by Alex, a transgender participant, indicates:

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Fear of family rejection... is similar to gay experience in that way is huge... The people that have children, will their children accept me? And most of them don't, they don't ever want to see them, speak to them again, they're not going to be the gender they were...

Gender factors heavily in decoding homophobic family values (Plummer, 1999), as the following illustration shows. Julian, a gay counsellor, describes the experience of his clients. The parents were upset because their son kissed a boy of the same age while working in the theatre:

The director of the show said to the father 'Would it have been different if it was an older female kissing your son?', he said 'Yes of course it would'. And that really you know, typifies the homophobic reactions that are still right at the surface of everything.

In this case, the parents were being confronted with something they had known or 'suspected' for some time. The term 'suspected' is telling. It is used in discourse related to sexual and gender difference as if to say a crime is under investigation. *We suspected he was gay but we never wanted to admit the worst*. People on trial are held suspect until proven innocent. That which is suspected is also subjected to taboos that place the person suspected under silence and confidentiality. But most of all, family members' suspicion appears to further isolate people from each other. For example, Julian expressed that:

The parents were being confronted with something they had suspected for a long time and never had someone to blame. They can blame this other dancer. And I've subsequently done some work with them to say 'Look. This is a really delicate situation. This kid, if he's gay, it's not going to go away, and your behaviour now is really making him hate you.'

Homophobia as finding cause, blame, and guilt by association

In the above illustration, the need to blame their son's possible gayness on something is significant and is linked to finding a cause for 'deviance.' People's need to find cognitive frameworks that 'explain' difference is supported in the literature (Pardie, 1999; Van-de-Ven, 1996). Blaming appears to be one way of creating a cognitive framework that links something considered shameful with specific causes (Kaufman, 1996). Blaming may 'externalise' the shock, horror, and ignorance surrounding sexual and gender difference. The process of externalisation or projection may create an artificial separation of the disallowed and denied element. Parents are often thrown into confusion when confronted by their son or daughter's difference (Herdt, 1993). Hlony, a lesbian, speaks about her relationship with her step-mother and her fear of being crushed. She describes staying in the closet to prevent hearing the judgements she imagined would come if she told her truth out loud:

I feel like, I'm not going to give her the benefit of enjoying really, really crushing me, you know, I'm not going to do that.

After Hlony had gained enough strength and independence, she told her step-mother she was a lesbian. She received a complex and mixed message that sounded something like: *I don't want to know about it really. On one hand, it is your choice as an adult but on the other hand, don't make me part of it by coming out in our community. I am worried what the neighbours will think.* Hlony shares the experience:

I eventually did you know... she was suspecting a lot... she was like, 'it's none of my business really, you are an adult now, it's your choice. I think the most important thing is that you are happy, but I don't want to be part of you... when you come back home... just for my sake keep it cool...'

Hlony found herself planning a lengthy stay at home. She pondered openly the difficulties of living in a small rural village under her step-mother's request:

All of a sudden, it's not only me coming out, it's her also coming out to the society as a mother of a lesbian. Do you know what I mean? Because she doesn't want to go for that and I thought that it was fair.

Her understanding and desire to keep her step-mother's request is commendable, on one hand. But one wonders, how long Hlony could stay in the closet for the sake of her step-mother's fear of social rejection because her daughter is a lesbian? And what degree of pressure did this conspiracy of silence place on a young lesbian woman? Remafedi (1994) suggests that denial of identity may lead to higher risk of suicide and self-harming patterns of behaviour. She said:

I hate it. My family, they know, my sister and my mum, they know, and my aunties, they know it. But because of that conversation I had with her, you know, that's enough, don't make me come out, you know. It's... sometimes I think I'm going to have a really big, big problem. I think I'll probably need somebody to talk to because I'll just be so frustrated.

Hlony related that her step-mother believed she is only going through a phase, and when she came home she would get back to her 'old self.' Again, by associating with 'Western' values, her mother considered her somehow tainted. This would disappear with time if she changed her ways. Her expression of profound frustration was a key moment that unlocked the illogical and emotionally devastating nature of her step-mother's demands:

She still believes that I'm going through a phase... and also she's going to say that it's because of western influences that I became like this. She has this belief that if I go and stay home for a while, I'll forget about these bad influences and then become straight again.

Looking at the stigma and long-term self reflection involved in acknowledging a gay or lesbian identity, it is doubtful that a temporary phase is involved. But even if Hlony was going through a phase, her step-mother's response is still homophobic. Inherent in the phase assumption is that the deviant will return to 'the straight and narrow', revert to 'normal', and come back to the 'true self' who is seen to be heterosexual. This could well be true. However, by making heterosexual identity normative and confining homosexual identity into an abnormal category, homophobia takes on a defining role in how it contrasts with the normal (Plummer, 1999). Homophobia defines both homosexual and heterosexual identities in a way that stigmatises one while artificially strengthening the other. By 'artificial' is meant how heterosexuality is defined by homophobic contrast – strengthened by what it is not, rather than by what it is.

Homophobia and mixed emotions

Because sexual and gender difference is denied, silenced and rendered shameful it is not part of everyday life unless parents are confronted with their child's realisation of difference. A rural heterosexual counsellor related a conversation with his partner:

We knew that we couldn't have kids at that time. I said what would you do if one of our nephews or nieces said they were gay? And she said, I'd kill them. And I said do you mean that? And she said, no of course I don't. And I think it was probably the first time that [we] had really thought about the sexual orientation of somebody who was... in family.

In Jen's experience, her family reacted without much fuss but for her partner Marie, the situation was quite different:

It was the day after Marie and I had kissed and we'd only kissed that was all. And I knew... No more men. That was it. And I said to my mum, I've got something to tell you. And she said, well what is it? And I said, last night I went on a date with a woman. And she went, okay. And I said, and we kissed. And she said, oh, and how was it? And I said, well actually it was good. And she went, oh okay, well whatever takes your fancy, you know, as long as you're happy that's the main thing.

Marie's story was different:

I remember... sitting down at the coffee table with mum and she was like, well there's something really has happened to you... And I said, yep, something has happened to me... So mum said to me, so and so has done something to you? And I said, yep, yep. And I wasn't giving my mum an inch actually. She had to work it all out... And she said, she broke your heart? And I remember this conversation very much because the minute she said that, I just welled up, that was the end of me. And I managed to splutter out through tears and saliva and whatnot, that yeah that was it. And she burst into tears.

Marie's relationship with her mother quickly deteriorated after she came out. Marie reports being screamed at, being made to feel miserable, and feeling persecuted in the household for anything that went wrong. It got to the point where her father took her aside:

My dad said to me, you know you're going to have to get away from her, you're going to have to move out of home because you need to... it was an amazing conversation, he said to me, you need to be with your people. It was really strange, but that's how dad put it, you need to be with your people and in the environment where you get the support, because you'll get a lot of affirmation from being around them.

Marie soon moved, and later realised that much of her mother's behaviour was created by her fears that Marie would live with an 'army boot-wearing shaved-head, hairy armpit lesbian.' But it was her grandmother who saw clear:

If you don't get over it, you'll lose two daughters, not just one.

After this her mother asked to meet Jen. Since then, their relationship is mended.

Homophobia and long-term reactions and adjustment

One lesson that might be learned by this experience is that parents often require a period of adjustment. The length of time required varies according to the circumstances, beliefs and the strength of parents' homophobic values. For example, Elizabeth, a bisexual, spoke about her parents:

They don't have much of a comfort with my chosen lifestyle in the sense that they'll ignore it as much as possible, or will be rude about it if they have to talk about it.

Elizabeth basically chose to give up on her parents and accept a superficial level of communication:

I haven't made a great deal of effort to educate them since my first attempt. So I sort of bear a lot of the responsibility there and that I've sort of given up, which I probably shouldn't, but I've simply got other things in my life that I consider important now, and I'd rather get on with them at least on a superficial level rather than continuously argue.

Some clients endure chronic negative responses toward their sexual and/or gender identity from those they love most. When issues are not resolved, they may also live with a generalised post-traumatic stress related to their experience. For reasons of family rejection, Bert suggested that the Mardi Gras and the gay scene created an alternative family.

At something like Mardi Gras... it is just so clear... you just go up and kiss everyone and you love everyone... we all have the same potential needs... everyone just wants to be loved.

Chronic family isolation leaves people very needy. Isolation of this kind can also lead to extreme sexual risk-taking, as his description of the Mardi Gras dance party suggests:

That's when I'm happiest, when I'm in a real family, when I'm at some big dance or event like Marty Gras, you know everyone is there for a reason.

The increased vulnerability experienced because of social and emotional isolation in families, in Bert's experience, left him more open to letting down his boundaries and experimenting sexually and getting involved with drugs and alcohol. Later he described leaving the city to find his own space in the country. He needed time to heal in his identity and in his relationships with others. Whether through the gay community or in relationships with people dearly loved, participants re-cast their lives. They were finding ways to mend their families, to move on, or to create new families. For example, Jane shared the ups and downs of creating a new family with her female partner:

I'm in a really nice place in my life. We're really excited and really happy about moving and living together. We shared in a flat, to see that it actually was going to work because we hadn't lived together before. And then when things were right, we looked around and bought this house. And the boys now are very accepting of us. My youngest one was always, but my eldest found it extremely difficult. Now he's a father and he seems to have matured along with that.

Internalised homophobia and homophobiaphobia

Plummer (1999) called the fear of homophobia 'homophobiaphobia,' an important concept that defines internalised isolation based in fear, a process that originates as a response to prevalent social values. Josh, a gay man in his early 20s, learned early on to guard his identity and find ways to cope while still growing as a person:

Interviewer: I'm wondering is there a connection between your being a social recluse and your being gay?

Josh: Possibly... it's a big part of it... I don't think it's the only thing... I'm not sure how other people would perceive it... I'm naturally very careful who I tell and everything... I'm always being very careful as to how I [act], and so I don't like going out. I don't like socialising.

Family, school and community were environments of caution and isolation for Josh. Josh admitted that his attitudes came from his rural farming background, but in some ways he felt powerless to change. This is another example of 'homophobiaphobia' as a fear of homophobia that regulated Josh's behaviour and enabled him to manage difficult social interactions:

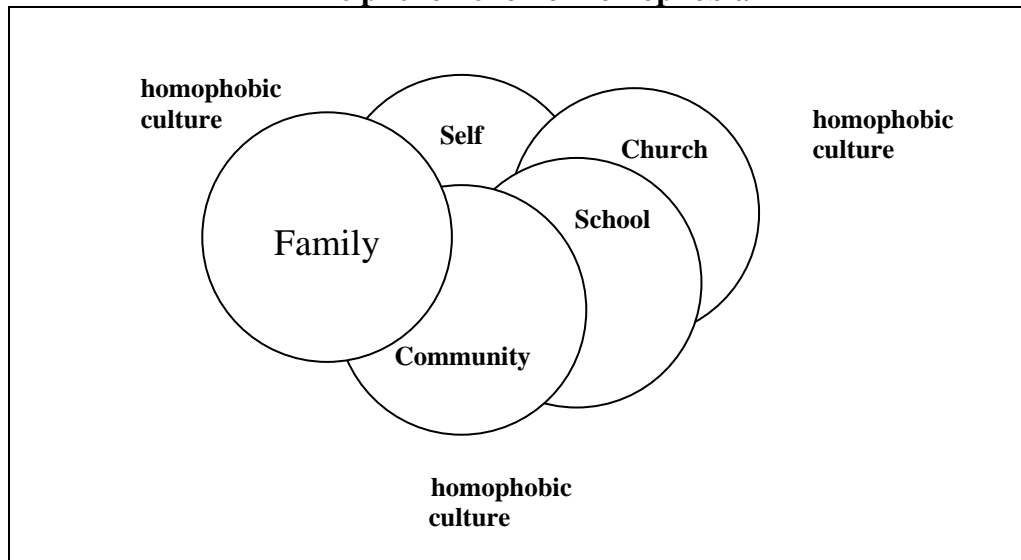
I eventually sort of worked out a process of outing myself... If they're not OK with that, then I'll work on a way of dissociating myself with them, because I... developed an attitude if they're not going to be OK with it then they're probably not very good to hang around with.

When experiences of discrimination are so intensely sustained over one's lifetime, developing elaborate procedures for revealing certain parts of one's identity should not seem surprising. Further, developing boundaries around how one will be treated may limit relationships with certain people, but will open up doors for more positive and affirming friendships with others.

Conceptualising homophobia

Following on our discussion of the data above, we turn to conceptualising the way homophobia influences participants' lives. Figure 1 illustrates the importance of social interactions where homophobia is present. The specific ways that these interactions influence people we label 'mechanisms of homophobia', which are forms of prejudicial actions. The settings where these interactions occur include the spheres of family, school, community and church. We show these four homophobic environments as overlapping circles that cover the self and render difference virtually invisible. Family is rendered in larger typeface to suggest its primary significance in the lives of individuals and, in many cases, as a primary location for experiences of homophobia. The overlapping spheres of influence may be experienced as dominant and oppressive.

Figure 1
The phenomenon of homophobia



Individuals influenced by homophobia must then negotiate a path toward acceptance and support of difference. A person may need to 'break away' from these environments to find a sense of 'self-definition' in contrast to homophobic cultural scripts. However, relationships with formative environments appear to continue across the lifespan. Over

time, homophobic environments may take on less contemporary significance. Though the wider homophobic culture may change slowly, the person who faces homophobia may experience some form of social transformation. Most people describe their formative experiences of homophobia as shaping their identities (Plummer, 1999), and the path of healing from homophobia is often life-long.

Healing from homophobia

Figure 2 illustrates one possible outcome of healing from homophobia. The impact of homophobic culture is always present, but may become less intense as the individual integrates acceptance, affirmation and support of difference into everyday life. Receding strength and impact is represented by the words 'homophobic culture' appearing in brackets and no longer in bold print type. The brackets also represent an individual's increasing ability to put homophobic values into a new context that limits the damage these values create. 'Self' has come to define meanings associated with difference, and the spheres of influence are less formative, powerful and dominant. The environments of church, school, community and family are repositioned into more of a self-actualised context, though their influence may be no less significant.

Figure 2
Healing from homophobia

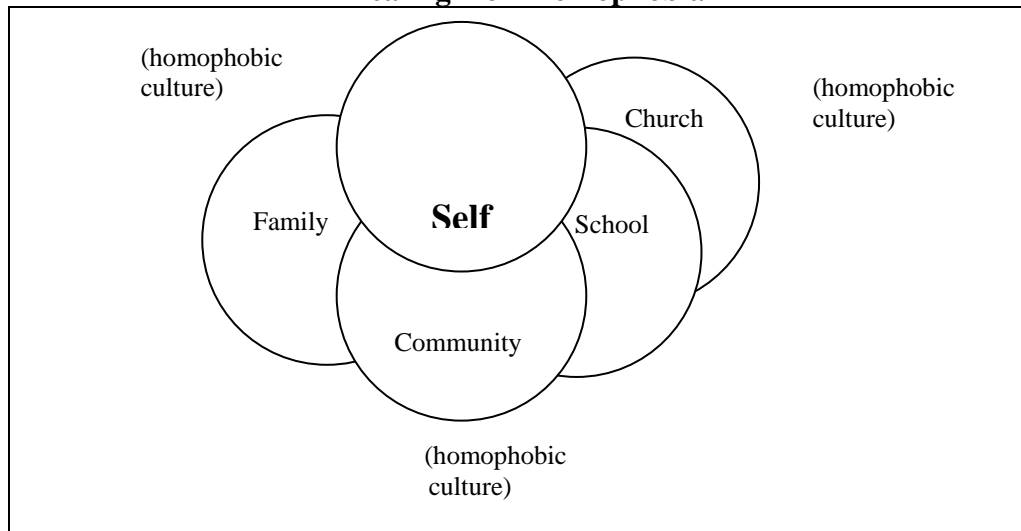


Figure 2 shows the changing relationships between each sphere, represented by the circle of self being in a more 'central' position. When a person lives under the weight of homophobia, their sense of self may be troublesome and the relationships between areas of their lives may be not well integrated. The self in this case may over-compensate for needs, like needing to feel accepted, valued and respected. By representing the self in non-bold type along with the other spheres, more ease of relating is suggested as healing from homophobia includes greater congruence and less conflict (Pardie, 1999). The person knows where they stand, and can 'get on with life' without as much concern over basic identity issues, self-consciousness or fear of self-disclosure (Plummer, 1999). What

this configuration looks like for each person will be unique, and may be contingent on cultural values. However, the nature of an individual's arrangement of these areas will define in many ways their response to the social pressures of homophobia.

Concluding thoughts

This paper explores the disconcerting everyday realities faced by minority people whose sexuality and gender identity challenge mainstream conceptions of normality. In this way, homophobia is experienced as a form of trauma. This trauma is both subtle and extreme, and ranges from chronic insidious attitudes that may never be stated overtly to blatant experiences of gay bashing and other forms of violence. We have come to look at healing from homophobia as a form of post-traumatic recovery. We consider this to be a less than acknowledged reality in both professional and research spheres. The lack of acknowledgment creates a continued culture where retraumatisation is more likely to occur. This largely overlooked problem may often arise because of the well-meaning efforts of practitioners whose awareness is not raised to the sensitive nature of homophobia-based trauma. This of course is the topic of another paper arising from these research findings (Bowers, et al 2005). Suffice it to say here that a central theme throughout the narratives is how homophobia creates environments of trauma, which in turn lead to life-long patterns of self-regulation for the sake of safety and peace of mind. On one hand, individuals may internalise social and familial values and become by default regulators of the social system by placing their personal needs second. On the other hand, individuals make choices over time to accept their differences.

Coming out is one such choice, and attempting to quietly accept these circumstances, and to change one's life are difficult choices one considers. Regardless of how the change is made, relationships and social systems also change in turn. This sometimes fast change, and many times prolonged and painful change, occurs in any number of variations. The rate of change seems to depend largely on how engrained are family members' beliefs against same-gender relationships.

But the most fundamental change relies on the children of difference, who must choose how and when to face their identity and to disclose this to their family members. This is an awesome responsibility, because when you are standing on the inside of the closet looking out there is no guarantee of a positive outcome should you venture forth. Furthermore, in this place of decision making one faces the fact that relationships will be forever changed just because of coming out of the closet by saying in one way or another: *I am different*. In the process, lives are recast through the fires of coming out and through healing from homophobia over time, and families must also adjust, either to accepting or rejecting their children who are different.

What practitioners and people who wish to assist sexual and gender minority people may consider is, firstly, to understand more about what homophobia is and how it operates. This covers the bulk of our presentation. By understanding the phenomenon of homophobia, we may dispel much of the fear and misunderstandings surrounding the experience. Secondly, we suggest that the role of the helper will be largely about listening to the stories of minority persons and offering gentle, consistent, and ongoing

support. Table 3 aligns experiences of homophobia as trauma with suggestions for supportive actions by persons willing to assist gay, lesbian, bisexual and transgender people on the path of continued fulfilment. We believe that sensitive and gentle encouragement is an important part of post-trauma recovery, and that this quality of relationship comes through demonstrating acceptance of difference through building relationships of trust, honesty, and sharing of daily life.

Table 3
Homophobia as trauma, and creating environments of healing

Homophobia as trauma	Supportive actions
Lack of understanding	Demonstrate understanding
Lack of support	Show your support
Lack of encouragement	Offer encouragement
Rejection	Express acceptance
Harassment and violence	Openness to listen & be with
Blaming for being different	Affirm the goodness of the person
Suspecting and subjecting to scrutiny	Acknowledge love & endurance
Fearing rejection	Affirming difference
All children are the same	Some children are different, OK?
What will the relatives think?	I love you as you are.
Underlying personal motives	Honest and forthright self-disclosure
Silence... shame...	Take pride in & celebrate difference
Putting oneself aside for years on end	Offer a little spoil, why not?
Not feeling safe	Dare to share your true self
Double mixed messages, I love you but...	Examine yourself, clear the air
Being asked the impossible	Be impossibly loving
Having children is inevitable, right?	Childless couples are not uncommon
Being told to hide your true self	Create a space for self expression
Rudeness, intimidation and name-calling	Affirm and call on good qualities
Superficial conversation, silence, denial	Acceptance, sharing, honesty
Ignoring discussion of difference	Discretionary openness to dialogue

In areas related to marginalisation, building an alliance of trust and confidence is essential. It is necessary for the helper to be a companion along the path of post-trauma recovery. This suggests that it is essential for the helper to be willing to listen, to be sensitive to how trust builds over time, and to be appropriately and safely transparent when issues arise that may hinder a trusting relationship. The use of skills like basic empathy, offering feedback on meaning and feeling, attending to subtle cues, and resisting assumptions and stereotypes, are central skills in the process of counselling within minority settings. As Table 3 suggests, there may be many pitfalls that helpers can engage in with minority clients. But there are equally as many, if not more, ways that helpers can activate a trusting and supportive therapeutic relationship that counters the affects of past experiences of homophobia. As you consider the lists presented, you will

Bowers, R., Plummer, D., Minichiello, V. (2005) Homophobia and the everyday mechanisms of prejudice: Findings from a qualitative study, *Counselling, Psychotherapy, and Health*, 1(1), 31-51, July 2005.

note that we suggest therapists and helpers need to take a proactive stance towards post-trauma recovery in relation to homophobia. This stance follows the lead of worldwide ethical guidelines and research that supports the healthy lifestyle of gay and lesbian people. It is not adequate for helpers to 'tolerate' sexual and gender difference. Helpers need to confront their internalised homophobia and/or bias towards difference, and need to take a strong and ethical stance towards supporting clients from minority groups. While we acknowledge that certain moral debates may prevent some helpers from openly supporting difference, we also suggest that where such barriers exist it is the responsibility of the practitioner to search their motivations and intentions, and to refer sexual and gender minority clients on to someone who can support them if the obstacles to practising in this area are prohibitive.

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Effectiveness of a situationally-based HIV risk-reduction intervention for the Nigerian Uniformed Services on readiness to adopt condom use with casual partners

E. James Essien, MD, DrPH

The HIV Prevention Research Group. College of Pharmacy. University of Houston; WHO Center for Health Promotion and Prevention Research. The University of Texas School of Public Health

Angela F. Meshack, DrPH

WHO Center for Health Promotion and Prevention Research. The University of Texas School of Public Health

Ernest Ekong, MD, MPH

Nigerian Army Reference Hospital

Mark L. Williams, PhD

Charles E. Amos, DrPH

T.M. James, DrPH

Ronald J. Peters, DrPH

WHO Center for Health Promotion and Prevention Research. The University of Texas School of Public Health

Gbadebo Ogungbade, DVM, MPH

The HIV Prevention Research Group. College of Pharmacy. University of Houston; WHO Center for Health Promotion and Prevention Research. The University of Texas School of Public Health

Michael. W. Ross, PhD, MPH

WHO Center for Health Promotion and Prevention Research. The University of Texas School of Public Health

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Contact details:

The HIV Prevention Research Group. College of Pharmacy. University of Houston. 1441 Moursund Street, Houston, Texas 77030, U.S.A.

WHO Center for Health Promotion and Prevention Research. The University of Texas School of Public Health. P.O. Box 20036, Houston, Texas 77225, U.S.A.

Nigerian Army Reference Hospital. Yaba, Lagos, Nigeria

Address correspondence to Dr. Essien at the University of Houston, EJEssien@uh.edu.

Abstract

Nigerian uniformed services personnel are at risk of HIV/AIDS infection when they are stationed in areas of high HIV prevalence. Yet, only a limited number of studies have evaluated the effectiveness of HIV/AIDS risk-reduction interventions for Nigerian uniformed services personnel who serve on peacekeeping missions. The goal of the present study was to evaluate the effectiveness of a situationally-based HIV risk-reduction intervention for the Nigerian uniformed services on readiness to adopt condom use with casual partners. Men and women (N=2209) from two purposely-selected regiments from the same service were assigned to either a five-session HIV prevention interactive condition or a wait-list control condition. The intervention consisted of five possible modules that were presented to groups of up to 50 personnel. The intervention aimed to increase condom use with regular and casual partners. Data were collected on reported sexual behaviors, condom beliefs, stages of change for condom use, and sexual risk behaviors with casual partners. Participation in the intervention resulted in increased condom use with casual partners at 6- and 12-months follow-up assessments. Specifically, 36% of the participants in both regiments reported that they hadn't even thought of using condoms with a casual partner at baseline. However, a positive intervention effect was observed in the intervention, but not the control regiment at the 6-months (40% vs. 0.9%) and 12-months' (46.8% vs. 4.3%) follow-up assessments ($p < 0.05$). These data confirm that a situationally-based intervention with uniformed service personnel in West Africa has a significant and powerful impact on reported readiness to engage in HIV-preventive activities with casual partners, and specifically, condom use.

KEYWORDS: Nigeria, security forces, HIV, AIDS, risk behaviors

Acknowledgement

This study was funded by grant # 01-038-258, from the World AIDS Foundation, Paris, France. Preparation of this manuscript was facilitated in part by National Institute of Mental Health grant # RO1 MH 062960-03.

Introduction

The devastating impact of the HIV/AIDS epidemic on sub-Saharan Africa is increasingly being recognized by the scientific community. Forty two million cases of HIV/AIDS have been diagnosed worldwide, of which twenty-nine million cases have been reported in sub-Saharan Africa (Kristoffersson, 2003). While the HIV epidemic has been slower to impact Nigeria than many other countries in the region, research evidence suggests that HIV prevalence in Nigeria is high, as well as geographically and socially distributed. For example, Esu-Williams et al (1997) report that in a sample of 2300 persons from five states in Nigeria, HIV-1 appears in over 60% of commercial sex workers (CSW), 8% of blood donors in some states and in 8%, 9%, and 21% of male clients of CSWs, truck drivers, and STD patients, respectively. Their data suggest a rural HIV/AIDS epidemic.

Several groups have been identified as being at high risk of acquiring HIV/AIDS in Africa, including uniformed services personnel and long distance truck drivers. The rates of HIV infection in uniformed services personnel have been observed to be seven to ten times higher than the rates in civilian populations (Miles, 2004; Fleshman, 2001; Newman et al, 2001). Current estimates indicate that the rate of HIV infection among uniformed services personnel in Africa ranges from 10 to 75%, with Zimbabwe and Malawi having the highest infection rates in the continent (Miles, 2004). A United States Intelligence Council Report has suggested that the rate of infection in the uniformed services is higher than the rate in the general public (Gordon, 2002). Yet, only a limited number of studies have examined the characteristics of sexual risk behaviors in the Nigerian uniformed services, and no scientifically rigorous interventions have been conducted or shown to be effective in preventing HIV transmission in this highly vulnerable group.

The Nigerian uniformed services are at particularly heightened risk of HIV infection because of several sociocultural and economic factors. Nigeria recently transitioned from a military dictatorship to a re-emerging democracy. As one of the most populated and significant countries in Africa (population > 130 million), Nigeria has a large uniformed services which was well funded under the previous military dictatorship. As such, Nigerian uniformed services personnel play a major role as peacekeepers both within the region and for the United Nations. Nigerian peacekeepers have recently been or are currently serving in Liberia, Sierra Leone, Zaire, Sudan, and Somalia. Further, there is unrest within Nigeria characterized mainly by religious affiliations (between the mainly Christian south and the Muslim north) and the Nigerian uniformed services personnel are often called upon to keep the peace within the Nigerian federation. As a consequence, the Nigerian uniformed services personnel are characterized by being separated from family and spouses and are frequently mobile both nationally and internationally. Bazergan (2002) notes that peacekeepers that serve in high prevalence areas could contract HIV infection in the field and bring the infection home to their families, and they could also serve as vectors, increasing the risk of infection in mission areas.

Apart from social and economic factors, misperceptions about HIV transmission may also contribute to the efficiency of HIV transmission in this population. Nwokoji and Ajuwon (2004) assessed HIV/AIDS knowledge and HIV sexual risk behaviors in the Nigerian uniformed services by surveying 480 military personnel in Lagos, Nigeria. The results revealed that although the overall knowledge score was high (7.1 on a 10 point scale), 52% of the respondents

believed that there was a cure for AIDS and that one can contract HIV by sharing personal items with an infected person. The majority of the respondents (88%) reported having lifetime multiple partners ranging from 1-40 with a mean of 5.1. Thirty two percent said that they have had contact with a commercial sex worker in the past six months and 40% had not used a condom on that occasion. Nwokoji and Ajuwon (2004) concluded that the Nigerian uniformed services constitute a potential bridging group for the dissemination of HIV into the larger population because members of the uniformed services live and interact freely with the civilian population.

In the absence of a cure or vaccine for HIV/AIDS, behavioral change remains the most promising method for preventing the spread of HIV/AIDS (Pequegnat and Stover, 2000). However, a major challenge facing HIV prevention interventionists is the issue of understanding an individual's status in the behavioral change process so that interventions can be tailored to meet the specific needs of individuals in a target population. The present intervention assessed the stages of change for condom use among Nigerian uniformed services personnel as part of a situationally-based HIV/AIDS risk reduction intervention for this population.

Theoretical framework

The Transtheoretical Model of Behavior Change (TM) provides the theoretic underpinning for the present intervention. This model was developed to explain how new behaviors are acquired and the mechanism by which people make purposive behavior change (Parson et al, 2000). According to the TM, people move through a process of change that is determined by degrees of motivation and behavior (Kalichman, 1998; Prochaska et al, 1992). The TM describes a framework for understanding the processes of change, stages of change, self-efficacy and decisional balance and is a means of tailoring education and intervention approaches for health behavior change (Prochaska et al, 1994). There are five stages of change readiness and in relation to condom use, they are: precontemplation (not considering the behavior change in the near future nor recognizing the need for change or feeling that change is possible), contemplation (actively considering condom use but lacking the short term intentions to do so), preparation (having a proximal goal to use condoms and making commitments and initial plans to make this behavior change), action (using condoms consistently and adopting strategies to prevent relapse) and maintenance (using condoms consistently and consolidating the change and integrating it into one's lifestyle). Relapse is also considered at which time the individual may return to the precontemplation, contemplation or action stages. Kalichman (1998) notes that understanding an individual's status in the change process could facilitate the tailoring of HIV prevention efforts. The TM states that a person's place along the stages of change continuum is useful in determining which processes are most helpful in achieving the desired behavior change (Schulz et al, 2001).

Participatory action research

Participatory action research (PAR) "in health is a collaborative approach to research that equitably involves all partners in the research process and recognizes the unique strengths that each brings. PAR begins with a research topic of importance to the community with the aim of combining knowledge and action for social change to improve community health and eliminate health disparities" (Minkler and Wallerstein, 2003a). This method has been identified as a particularly effective way of reducing health disparities in underserved communities and

provides opportunities for interventions to take place outside the traditional setting often used with minority communities such as churches and health clinics (Kim et al, 2004). PAR stresses community collaboration in investigating and acting on locally identified concerns (Minkler et al, 2003b) The methods used in PAR may be qualitative or quantitative but always involve the people whose lives are affected by the topic of consideration and involves a shared commitment by the researcher and the community members (Minkler, 2000). Community members involved in PAR are aware of their community's sociocultural background, experiences, trials, and assets, and are in a unique position to provide peer support for other community members and can use their knowledge, skills and resources to create culturally and linguistically competent programs (Kim et al, 2004).

Methods

The experimental intervention

The intervention was conducted in two phases. In phase one, Nigerian health educators were trained by one of the authors (TMJ). The Nigerian health educators in turn conducted the intervention with the Nigerian uniformed services personnel. Participatory action research was used as the basis for the training. The experimental intervention consisted of five one-hour interactive group sessions, and involved: (1) Defining HIV/AIDS risk situations; (2) Geographical mapping of a typical security location and risk places; (3) Anticipated regrets (linking the situation to its antecedents and aftermath, including role playing); (4) Understanding “hot signs” and their associated locations, contexts, and dangers; and (5) Situational retraining to avoid risk situations and behaviors. The participants were taught in groups of approximately fifty. Copies of the training manual are available from the first author.

Design

The study was conducted in Lagos, Nigeria, the largest city in Africa, with a population of approximately 14 million. Two purposely-selected regiments from the same military service (approximately 1000 people per regiment) stationed on opposite sides of the city were used for the study. A modified version of a Center for AIDS Intervention Research Pridefest survey was used (Center for AIDS Intervention Research, 2003). Data were collected between June and December 2003. Each regiment represented a cohort that was sampled at baseline, and at six and twelve-months follow up. The variable reported in this study (stages of change for condom use) was measured by a single question on the last page of the questionnaire: Which of these statements best describes your current condom use with casual partners in the last six weeks (that is, someone who is not your primary partner). The participants were asked to circle one of the following responses: (1) I do not have any casual partners; (2) I haven't even thought of using condoms with all casual partners yet; (3) I am thinking about using condoms with all casual partners; (4) I am making definite plans to use condoms with all casual partners; (5) I have already used condoms with some, but not all, casual partners; and (6) I am already using condoms with all casual partners. The study was approved by the relevant Institutional Review Boards in both Nigeria and the United States, and the intervention was later made available to the control regiment.

Analysis

Data were entered in Houston, Texas, with quality control involving scanning of a random sample of questionnaires, and comparison of a further random sample of entered questionnaires with the electronic data record. Data were analyzed by calculation of percentages and by chi-square test using SPSS 11.5. Distributions in stages of change at baseline, 6-month and 12-month waves are the dependent variables of interest. The measure for statistical significance was established *a priori* as $p < 0.05$.

Results

Demographic data (N=2209) are presented in Table 1. There were no statistically significant differences between the intervention and control regiments by gender, sexual orientation, and proportion with a main partner. However, there were considerable differences in age groups (more younger people in the control regiment), ethnic background (more Hausa speaking people in the control regiment), level of schooling (more with just elementary school completed in the control regiment), and more in the control regiment who did not know their HIV status. Frequency of condom use with a casual partner in the last six weeks is described in Table 2. Baseline assessment revealed that most of the participants in the control regiment were at the pre-contemplation (36.9%) and contemplation (51.2%) stages of change for condom use, and there were no significant differences at 6- and 12-months follow-up. In contrast, there were favorable changes in the intervention regiment between the baseline and follow-up assessments. Table 3 displays the differences in the stages of change for condom use between the intervention and control regiments over time. Notably, 36% of the participants in both regiments reported that they haven't even thought of using condoms with a casual partner at baseline. However, a positive intervention effect was observed in the intervention but not in the control regiment at the 6-months (40% vs. 0.9%) and 12-months (46.8% vs. 4.3%) follow-up assessments ($p < 0.05$).

Discussion

These data show significant effects of the intervention in altering stage of change of condom use with casual partners from being largely pre-contemplation or contemplation stages to action or maintenance. The differences were not significantly different across the three time waves (baseline, 6-months, 12-months) for the control group but significant in moving the majority of the intervention group into action and maintenance stages at 6 and 12 months. The magnitude of the effect in those who reported casual partners is considerable, with over 90% of the intervention group reporting maintenance (condom use with casual partners) at twelve month follow-up. The comparison between the control and intervention groups suggests that this intervention had a substantial and statistically significant impact on condom use with casual partners over a period of less than a year.

These data are limited to those with casual partners (about half of the sample), and so the impact of the intervention on those with only a main partner cannot be estimated. Nevertheless, we must consider that HIV-related risks in uniformed service personnel who are posted to different regions of the country or overseas will largely relate to sex with casual partners, and on such deployments those who may have a main partner in their home base will likely be separated from that partner. If the level of change in stages of change in condom use is consistent in those who at present have a main partner, then this should also provide a significant increase in protection if

these reported changes are maintained. The extent to which these changes in intention will remain over time is unknown but it would be anticipated that there will be a need for follow-up interventions to maintain condom use with casual partners. Further, this study compared an intervention with no intervention, and it is unclear whether other forms of intervention may have different levels of impact on readiness to engage in HIV prevention activities. There is a clear intervention effect, but other interventions may be more or less effective compared with the situationally-based one, which was designed with non-western cultures in mind.

This intervention has important implications for HIV prevention interventions for uniformed services personnel in Nigeria. Fisher and Fisher (2000) argue that an understanding of the stage distribution of persons engaged in a particular behavior could enable interventionists to develop HIV programs that meet the needs of a particular population. They highlight that intervention programs that are matched to the stage of change of a particular population are more likely to promote positive changes in HIV risk behaviors. Most of the Nigerian uniformed services personnel recruited for this study were in the preparation stage of behavior change, suggesting that they were appropriate recruits for action oriented prevention interventions such as a situationally-based HIV prevention program (Fisher and Fisher, 2000).

These data are subject to several limitations. First, we followed a cohort which comprised a regiment, not individuals, and thus we will have lost people who were exposed to some of the interventions, and gained others who would have been exposed to none or few of the interventions. This would probably have biased toward the null hypothesis. Although we have no way of knowing the level of interaction between the two regiments, they were not stationed or deployed together during the time of the study. In a conurbation of over 14 million, we did not expect encounters between the personnel from each of the regiments which may have diffused the intervention. If this did occur, it would also have biased toward the null hypothesis.

These data confirm that a situationally-based intervention with uniformed service personnel in West Africa has a significant and powerful impact on reported readiness to engage in HIV-preventive activities with casual partners, and specifically, condom use. Further, despite the design limitations which were dictated by the operational requirements of active military units, the intervention was applied in a military setting without any major limitations. These data suggest that this type of intervention may have a major impact, at least in the short term, on STD and HIV rates in uniformed service personnel who operate in high HIV/STD prevalence areas. Further research on its longer-term outcomes and generalizability to security personnel in other non-western contexts is, however, required.

Essien J., Meshack A., Ekong E., Williams M., Amos C., James T., Peters R., Ogungbade G., and Ross M. (2005), Effectiveness of a situationally-based HIV risk-reduction intervention for the Nigerian Uniformed Services on readiness to adopt condom use with casual partners. *Counselling, Psychotherapy, and Health*, 1(1), 19-30, July 2005.

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Table 1. Description of sample – control and intervention groups

Variables	Control group (n = 987)		Intervention group (n = 1222)	
	Frequencies	%	Frequencies	%
Sex				
Female	128	13.0	167	13.7
Male	859	87.0	1055	86.3
Age*				
18-29	613	62.1	604	49.5
30-49	353	35.8	557	45.6
50 and above	21	2.1	60	4.9
Ethnic background*				
Hausa	296	30.0	266	21.8
Ibo	205	20.8	258	21.1
Ijaw	110	11.1	92	7.5
Yoruba	215	21.8	282	23.1
Ibibio	118	12.0	132	10.8
Other	43	4.4	192	15.7
Highest level of schooling completed*				
Elementary school	243	24.6	101	8.3
Junior Secondary	349	35.4	278	22.8
Senior Secondary	326	33.0	686	56.2
College	69	7.0	156	12.8
HIV status*				
HIV positive	13	1.3	11	0.9
HIV negative	454	46.0	735	60.1
Don't know	520	52.7	476	39.0
I usually have sex with...				
Females	854	86.6	1049	86.3
Males	129	13.1	163	13.4
Males and Females	3	0.3	3	0.2
Do you have a main partner (husband, wife, girlfriend, boyfriend, etc.)?				
Yes	504	51.7	656	53.8
No	470	48.3	563	46.2

* Significant difference between groups, p<0.05

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Table 2. Which of these best describes your current condom use with casual partners in the last 6 weeks? *

	CONTROL			INTERVENTION		
	Pretest % (n)	6 months % (n)	12 months % (n)	Pretest % (n)	6 months % (n)	12 months % (n)
Haven't thought of using condom with casual partner	36.9 (191)	40.7 (159)	46.8 (207)	36.2 (226)	0.9 (5)	4.3 (20)
Thinking about using condom with casual partner or making definite plans to use condoms with all casual partners	51.2 (265)	49.9 (195)	36.0 (159)	53.5 (334)	2.2 (12)	0.4 (2)
Have already used condoms with some, but not all casual partners	4.4 (23)	4.1 (16)	6.6 (29)	2.7 (17)	44.2 (249)	3.4 (16)
Already using condoms with all casual partners	7.5 (39)	5.4 (21)	10.6 (47)	7.7 (48)	52.8 (297)	91.9 (432)

*Represents only respondents who reported having a casual partner within the last 6 weeks

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Table 3. Stages of Change Comparison Between Control and Intervention Groups *

	Pretest**		6 months***		12 months****	
	Control % (n)	Intervention % (n)	Control % (n)	Intervention % (n)	Control % (n)	Intervention % (n)
Haven't thought of using condom with casual partner	36.9 (191)	36.2 (226)	40.7 (159)	0.9 (5)	46.8 (207)	4.3 (20)
Thinking about using condom with casual partner or making definite plans to use condoms with all casual partners	51.2 (265)	53.5 (334)	49.9 (195)	2.2 (12)	36.0 (159)	0.4 (2)
Have already used condoms with some, but not all casual partners	4.4 (23)	2.7 (17)	4.1 (16)	44.2 (249)	6.6 (29)	3.4 (16)
Already using condoms with all casual partners	7.5 (39)	7.7 (48)	5.4 (21)	52.8 (297)	10.6 (47)	91.9 (432)

*Represents only respondents who reported having a casual partner within the last 6 weeks.

** p=.44

*** p<0.001

**** p<0.001

Gee, T. (2005) Capturing study influence: The concept of 'gravity' in meta-analysis, *Counselling, Psychotherapy, and Health*, 1(1), 52-75, July 2005.



Capturing study influence: The concept of 'gravity' in meta-analysis

Dr. Travis Gee

School of Human Services
Griffith University
Meadowbrook, Qld.

Centre of National Research on Disability
and Rehabilitation Medicine

Mayne School of Medicine

University of Queensland
Herston, Qld., Australia

Address correspondence to Dr Travis Gee, at gee@ccs.uq.edu.au

Abstract

While much theory abounds over properties of meta-analyses, there appears to be very little work to date on examining jackknifed and exact distributions of the statistics generated by the method. This paper takes an initial step towards filling that gap by describing a SAS (SAS Institute, 2001) macro written by the author based on another macro due to others, that performs jackknifed estimates of average effect size. It also suggests that 'gravity' is a property of studies included in a meta-analysis. A computer simulation supports the utility of the approach, and proposals for future development of exact and approximate methods in 'combinatorial meta analysis' are set forward.

Acknowledgement:

Thanks to Joan Hendrikz of CONROD at the UQ School of Medicine for comments on the final draft of this article.

Meta-analysis (MA) is a method that uses statistical techniques to aggregate the results of other studies (Glass 1976; Glass, McGaw and Smith 1981); Rosenthal, 1991; Rosenthal and DiMatteo, 2001). It is promoted perhaps most strongly by the Cochrane Collaboration, which aims to use the method to substantiate the evidence base for all medical practice (see <http://www.cochrane.org>) and which provides reports on studies such as that of Montgomery and Dennis (2003), which combined the results of six trials that comprised 282 participants, and using meta-analytic procedures demonstrated that there is a case to be made for the use of cognitive-behavioral therapy for sleep problems in older adults.

Critical commentary has been sparse, but a growing chorus suggests that interpretation of meta-analyses is not as straightforward as some would assume (Ernst and Pittler, 2001; Gatchel and McGeary, 2001; Gee, Bellamy & Campbell, 2005; Hopayian, 2001; Olsen, Middleton, Ezzo, et al., 2001; Shrier, 2003). The present article adds to that chorus by suggesting that the current asymptotic theory that underlies detection of outliers in meta-analysis may be supplanted by more exact methods that do not rest upon distributional assumptions.

“Effect sizes” are the crux of the matter in MA, as these are the things that get added up to find out whether the effect of a treatment is large (or the relationship between two variables is strong). These are most clearly conceptualized in terms of a standard normal distribution, with mean zero and standard deviation 1 (denoted $N[0,1]$). For the purposes of this article, we are considering the case where we would be comparing two groups; say, those who received a treatment versus those who received a placebo, or who were in a wait-list control group, then an effect size (ES) of 1.0 is noted if the mean of the treatment group was one standard deviation away from the mean of the other group. This implies that the average member of the treatment group fared better than 84% of the other group. For this reason, an effect size of 1.0 is considered large. Smaller effect sizes are more common, and may be interpreted roughly with reference to the rule that .2 is small (average treatment did better than 54% of controls), .5 is moderate (treatment did better than 69% of controls) and .8 is the lower range of “large” (treatment did better than 79% of controls).

Expressing the ES as a standardized difference allows comparisons of studies that use different measures to quantify the same construct. It also allows the incorporation of research results that reflect other cases, such as the strength of association between measures instead of differences between groups. Pearson's r , for example, can also be expressed in terms that allow comparison with studies that report t -tests. However, a great strength of meta-analysis is that all can be reduced to a common metric, the ES, which makes all such cases amenable to the method proposed in this paper. An existing piece of software, *meta.sas* (Dimakos & Friendly, 1997), exists for SAS users to compute meta-analytic statistics and is available on the Internet.

Needless to say, not all studies are constructed equally. A clinical sample might have twenty cases in each group, whereas a population survey might have a thousand. It is possible to estimate the effect size both with and without reference to the number of studies. Common meta-analysis routines provide both weighted and unweighted means that reflect the overall ES for a given set of studies. Unweighted means are not commonly taken as serious indicators of overall ES because in any given MA, studies can range widely in terms of sample size. The weighted mean difference (WMD)

between two groups is a common statistic, which is usually taken as a good indicator of effect size, and can be used when studies all use the same measure. However, where multiple measures must be combined, the standardised mean difference, or SMD must be used (see <http://www.cochrane-net.org/openlearning/HTML/modA1-4.htm> for a discussion). Whilst there are numerous formulae by which study statistics can be converted to such indicators, for the present purposes, the traditional difference-between-two-means divided by pooled-standard-deviation is taken as the indicator. However, as noted above, any other measure can be subjected to the method proposed below.

Proposing Gravity as a Property of Studies in a Meta-Analysis

As to weighting, consider that if two otherwise-equivalent studies provided ES estimates of .2 and .4, then the unweighted estimate of the average effect size would be 0.3, which is equal to $ES = (.2 + .4) / 2$. However, if the first study had a sample size of 1000, and the second a sample size of 50, then the weighting procedures usually employed would result in the average being rather close to 0.2, because in the formula, the weight assigned to the study with $ES = 0.2$ would be a good deal higher than the weight assigned to the study where $ES = 0.4$.

Weighting is important, as it allows for the fact that due to the Central Limit Theorem, small studies can produce larger ES estimates just due to chance fluctuations in sampling. Such deviations would have undue influence unless we accounted for variation in n . The analogy to make here is that studies with a large sample size may influence the ES estimated by a meta-analytic procedure, and cause it to 'gravitate' towards the value of the 'weightier' study. Thus, we may consider 'gravity' as a property of studies in a meta-analysis, such that "negative gravity" would be present in studies which, when removed, cause the ES estimate to drop, and "positive gravity" would be present in studies which, when removed, cause the ES estimate to increase.

Typically, meta-analyses comprise a good deal more than two studies, but for simplicity, let us initially consider the scenario where there are three effect size estimates from three studies: .1, .2, and .9. Clearly the last is inconsistent with the other two, and the mean, .4 is substantially above the median, .2. Here, an "outlier" has created some "pull" away from what would (if the last study were excluded) be an average around .15 (at least, if the N 's were equal in the two studies that produced the smaller ES values). If we assume equal N 's in all studies, then the "pull" will be directly proportional to the distance of the outlying study from the average of the other two. However, if the first two studies had sample sizes of several hundred and the large-ES study had eight people in each group, random variation could possibly account for the large deviation in the smaller study's ES (and the estimated ES for the combination would certainly be closer to .2). In MA, the low N would result in less weight being placed on the small, deviant study, bringing it's 'gravitational' effect on the overall analysis down. The effect of the various studies on the overall average thus depends both on ES and N .

There are thus two sources of this “pull,” to which I will henceforth refer as ‘gravity.’ Heterogeneity amongst studies is a problem that reflects variability in the extent to which some studies may unduly influence a meta-analysis. As pointed out by Sidik and Jonkman (2005) “Valid inference about an overall treatment effect in random-effects meta-analysis depends on accurately quantifying such heterogeneity among studies.” It is of course important to understand the substantive differences that exist between studies in the literature (eg. different sample sizes, outcome measures, treatment qualities, study designs, etc.). However, it is also important to grasp the extent to which any single study may pull (or fail to pull) the overall ES estimate towards it. Key to the method presented herein is the idea of “jackknifing.”

Jackknifing

The key statistical technique to understand for the present application is that of jackknifing. Proposed by Quenouille (1949) and developed by Tukey (1958), it is a technique that has only really come into its own since the development of the computer, because it requires a great deal of computation. It is now recognised in standard texts (eg., Efron & Tibshirani, 1993).

The idea is simple. The spread of values obtained as statistics can be examined by eliminating each observation from the dataset, which creates perturbations in the estimate. As a simple example, if we have the scores 1, 2 and 3, the average is 2. But if we eliminate 1, it becomes as high as 2.5. Eliminating 2 has no effect, and eliminating 3 drags it down to 1.5. Observations may be considered “outliers” (see Kruskal's classic 1960 paper) when the effect that removing them has on the statistics that are computed becomes disproportionately large.

The technique is important, because whenever a statistic is estimated, there is some degree of error associated with it. In complex situations, the distribution of an average, for instance, might not conform to a simple normal bell curve. If there are a dozen means taken from a dozen studies that have a dozen different sample sizes, then the expected sampling distribution of those means is a composite of 12 variance estimates weighted by 12 sample sizes. The assumption that normality will make it all well and good is tenuous at best, and the suggestion by Lanyon (1987) that “Jackknifing and bootstrapping should be used in all cases where a statistic is generated and the distribution for that statistic is unknown or too complicated for the more conventional methods of dispersion estimation” rings true for MA, which almost invariably involves such complexities.

This method affords a direct approach to the estimation of the impact of a study on a meta-analysis, as it examines the effect of removing it directly, thereby permitting estimation of the degree of perturbation associated with the study relative to the remaining ones. Given how long it has been established as a method, it is surprising that a jackknifing approach to studying the relative contributions to studies in MA has not been taken before, however, to the present writer's knowledge, it does not appear to have been considered outside of its use in metaregression, where results are modelled on the basis of predicting ES from various methodological features of a study.

Approaching Gravity

The present approach to meta-analytic gravitation is based upon the premise that elimination of a study from a meta-analysis will tend to change the estimate of effect size to some degree, but not in the same way as is achieved with jackknifing. This is due to the fact that the 'pull' of a study on MA results is achieved not only through ES alone, but through the weighting due to sample size. Jackknifing, however, is a tool that can be used to study the phenomenon. A 'massive' study with high gravity but relatively low ES will, when removed, cause the ES estimate to be higher than it would be when that study is included. Equally, a 'massive' study with high gravity but relatively high ES will, when removed, cause the ES estimate to drop. Removal of low-gravity studies will have but little effect, but the *distribution* of the relative magnitudes in the set of studies may provide a yardstick by which a study might be identified as a potential outlier.

Measuring Gravity

Given the preceding considerations, it is possible to examine several features of the ES estimates. It is necessary to apply some shorthand to the terms we require. We will term the overall ES estimate that is obtained for all available studies ES_o , the average jackknifed effect estimate. If we denote the effect size that is obtained on the run where study i is excluded as ES_i ,

$$ES_o = \sum \left(\frac{ES_i}{k} \right) \quad 1.$$

If each ES_i is an estimate of ES_j , the deviations of ES_i around ES_j should distribute normally and thus the dispersion of these estimates may be described as the variance of the ES_i ,

$$Var(ES_j) = \sum (ES_i - ES_j)^2 / (k - 1) \quad 2.$$

which is the squared standard deviation of the individual estimates

$$S_j = \left(\sum (ES_i - ES_j)^2 / (k - 1) \right)^{\frac{1}{2}} \quad 3.$$

for k studies. This implies a normal distribution of the perturbation-based ES estimates, which in turn means that it is possible to refer to a Z table for estimates of probability. However, if the studies have a heterogeneous mixture such that some come from a population where the true ES is different than for the rest, it should be possible to identify such studies as outliers.

Study 1: Behaviour of Gravity in Homogeneous Samples

It is useful and instructive to study properties of populations of studies such as those typically seen in meta-analysis with computer simulation methods. The first property so considered here is a certain horseshoe effect that is implied by the fact that gravity will be affected both by sample size and effect size. To the extent that studies approximate the average ES their gravity will be small, almost irrespective of sample

size. However, as sample size grows, smaller deviations from the average will be expected to carry more weight, and gravity will be sizable even at values closer to ES_j . Thus, a certain “horseshoe” shape should emerge from large groups of studies that are subjected to jackknife estimation of gravity. This will be less visible according to the degree of homogeneity of the studies in terms of both ES and sample size.

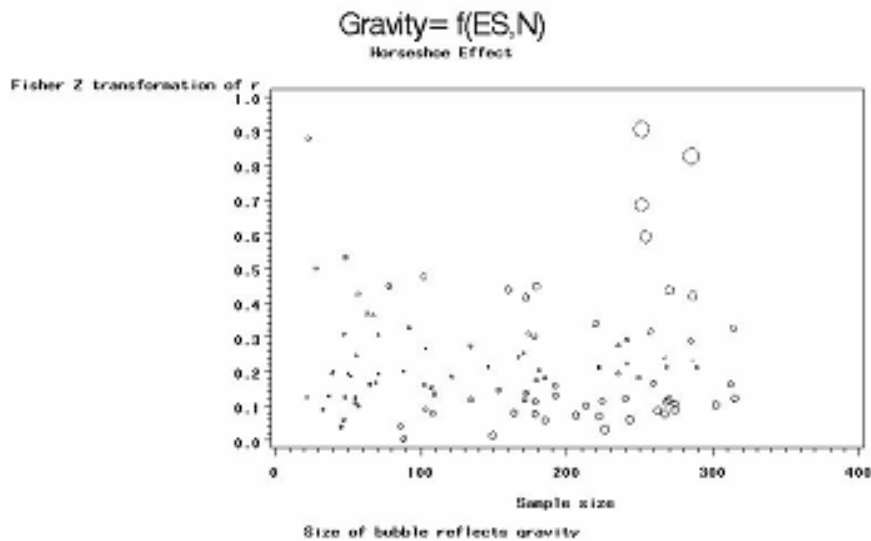
Method

To study this, 100 simulated study results were generated using the SAS System (SAS Institute) with a fixed modelled effect size of .3. The two-group t-test statistic was computed on simulated continuous data, with sample sizes modelled using a random number between 10 and 320 for the control group N, and a random number within +/- 0.3 of the control group N for the treatment group N. Standard deviations were modelled on a chi-square distribution (using n random Z^2 values, dividing by $df = n - 1$), and taking the square root for each group.

These data points then were subjected to jackknifing as described above. Estimates of gravity were obtained using the SAS macro *jackmeta.sas* (see Appendix A), and are plotted in Fig. 1.

Results

Fig. 1. Gravitational Horseshoe



Sample size (N) and ES (using the Fisher r to Z transformation applied in *meta.sas*) are plotted in Fig. 1, with circles showing the relative gravity of each study. The horseshoe shape created by the high-gravity (large circle) studies is plainly visible.

Discussion – Study 1

The visible horseshoe effect in Fig. 1 is consistent with the predicted behaviour of gravity as defined above. However, we must consider that the present results were modelled based on a control mean of zero and a fixed treatment effect of .3, with unit standard deviation. To study the horseshoe effect, variability in ES was not modelled. What is also visible, though, is a small group of rather extreme values that combine large sample sizes with large effect sizes. The extent to which such studies might have an undue influence raises the question of outliers in such studies. Fortunately, the concept of 'gravity' provides some access to whether or not a study may be considered sufficiently deviant to exclude it from further analysis, and therefore interpret it separately in the overall meta-analysis.

Study 2: Outlier Detection

We assumed before that gravity would be normally distributed around ES_j with a standard deviation as described in Eq. 2. On this assumption, we can compute z and p -values for the perturbation associated with the removal of each of k individual studies. This may of course be adjusted as the user wishes, as in the *jackmeta.sas* macro there is an option where alpha for outlier detection can be set to 5%, 1% or whatever value the user desires. This theory was tested using computer simulation, and a nominal alpha value of 5%.

Method

To examine the utility of using gravity to identify single outliers in sets of studies, 1000 simulations were run of sets of 20 studies, where the effect size in each simulation was set to 0.2 (small) for 5 studies, and 0.8 (large) for one study, the "outlier." The two-group t-test statistic was computed on simulated continuous data, with sample sizes modelled using a random number between 10 and 160 for the control group N , and a random number within ± 3 of the control group N for the treatment group N . Standard deviations were modelled on a chi-square distribution (using n random Z^2 values, dividing by $df = n-1$ and taking the square root for each group). The *jackmeta.sas* macro was run on each set of simulated values. Studies were identified as 'outliers' if the perturbation associated with removal of that study created a deviation from the overall result that had a standardized score in excess of ± 1.96 (for $\alpha=.05$).

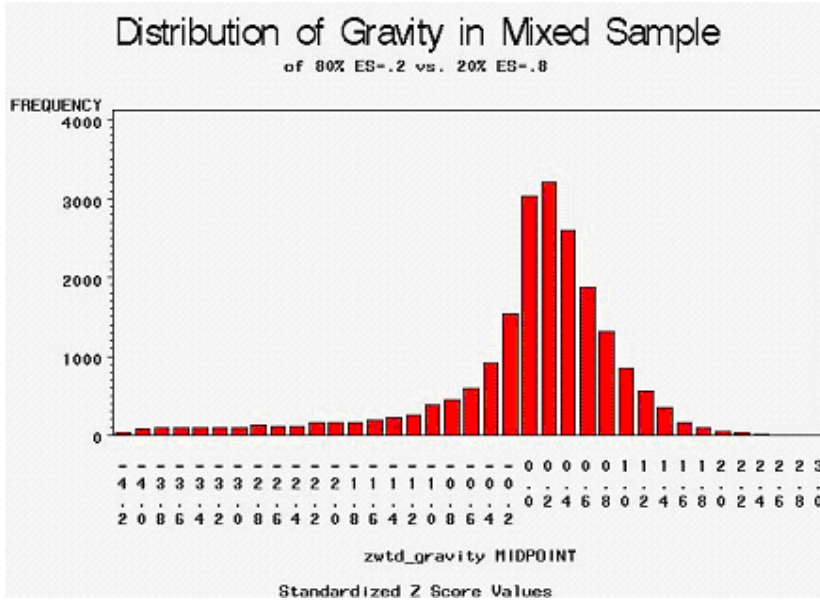
Results

Using $\alpha=.05$ to identify cases as 'outliers,' 17842 out of 19000 'non-outlier' studies (94%) were correctly identified as non-outliers, and 493 of the 1000 'outlier' studies were correctly identified as such, meaning that just under half of true outliers were detected, as against the 5% that would be expected by chance methods. There were 1158 false positives (making the true positive rate 89%) and 507 false negatives. In signal detection terms, this means that sensitivity was .493, and specificity was .939.

Gee, T. (2005) Capturing study influence: The concept of 'gravity' in meta-analysis, *Counselling, Psychotherapy, and Health*, 1(1), 52-75, July 2005.

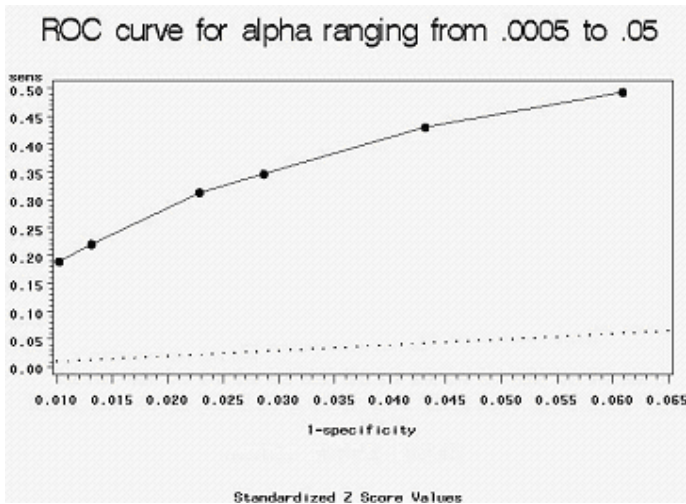
The distribution of the Z-scores for gravity estimates is provided in Fig. 2. The clear negative skew indicates that many more studies caused large drops in ES when omitted from the jackknife procedures than would be expected by chance, even though only 1 study in 20 (5%) were modelled to be 'outliers.'

Fig. 2 Distribution of Standardized Gravity Estimates



Re-examining the data using $\alpha = .01$ led to detection of 34.6% of genuine outliers, and 97% of genuine non-outliers (sensitivity=.346, specificity=.971). $\alpha = .005$ led to 31.3% detection of true outliers, and 97.7% of true non-outliers (sensitivity=.313, specificity=.977). The portion of the ROC curve for the alpha range .0005 to .05 is presented in Fig. 3.

Fig. 3 ROC curve for range of alpha cutoff values (dotted line for reference)



Discussion – Study 2

The concept of gravity applied in jackknifed analysis of even modest sets of twenty studies has shown, through simulation, that deviant effect sizes that differ by .5 are detectable through the use of gravity when a single outlier is present in the dataset. However, more complex situations are likely to exist, which suggests that extending the study of gravity to study sets that may contain high-gravity studies that may oppose one another, for instance, is necessary. To accomplish this will require a generalisation of the jackknife method as described below.

Conclusions and Future Directions: More Complex Cases

A conceptual basis for a programme of research into jackknife and other developments combinatorial methods in meta-analysis has been put forward, with some demonstration of its utility in establishing 'gravitational' properties of studies, which has promise to become a useful tool in understanding the effects of studies on MA. The present simulation suggests that jackknifing can detect outliers in modest sets of data using the gravity method, and identifying as outliers those cases where effects of either sample size or effect size (or some combination thereof) may produce undue influence on a result. Refinement of the method is needed however, to reduce the false positive and false negative rates that are apparent at least in the present simulation.

The limitations to this are of course that more study is needed to identify the extent to which such deviations may be detectable in more complex datasets, and to examine the accuracy of prediction across ranges of the variables that were modelled (eg., sample size patterns, magnitude of deviation of outliers from the balance of studies, etc.). The jackknifing approach and generalisations of it may offer a door into these and other elements as well, as studies exist in a literature that has its own properties. For example, jackknifed estimates may behave differently, taking on particular distributions, when a literature contains many small studies and few large ones, as against literatures that contain many population-based surveys and few small-scale studies. Further modelling of such patterns is possible with the *jackmeta.sas* macro.

Another limitation is that models for binary responses have not been considered, nor for correlation coefficient data. The behaviour of these models under jackknifing conditions is an area that needs exploration. As these have been written into the original *meta.sas* macro, this research is in a position to proceed rapidly. However, there have been other ways of estimating effect size put forward by other writers (eg., Deeks, 1999) which are not yet coded into the macro, but which could easily be incorporated with some programming, so that alternative methods can be compared in terms of their behaviour under combinatorial conditions. For instance, are clusters of low-gravity studies less likely to emerge when using Hedges' adjusted *g* (see Deeks, 1999), which corrects for small sample size?

The present demonstration was of course limited in scope, as this is an introductory article aimed only to point towards new directions in meta-analysis. It is not, for example, always the case that there is a single outlying study in a set of studies subjected to MA. Indeed, it does not make sense to assume that this would be the case. The more modern random-intercepts model of MA assumes that a variety of treatment effects may be present, particularly in studies with multiple followup times,

and sets of studies where heterogeneous followups were used to measure effects (eg., some followup at three weeks, others at 10). However, there are a couple of generalisations that are obvious based on the preceding development, which bear mentioning here as they are currently being researched by the present author.

Future Direction #1: Exact Combinatorial Meta-Analysis

In view of the preceding, it makes sense that this simple illustration of the case of a single outlier be followed up in future research with a method that allows gravitational effects to be studied when random effects may be present, and outliers of varying sizes and directions may affect the results. To extend the idea, consider that in the present method, we may regard the jackknifed estimates to be a case of k studies taken $k-1$ at a time. This is a special case, and we are not limited to that approach. With the power of modern computers, it is possible for small-to-modest-sized sets of studies to run what might be termed a 'combinatorial meta-analysis,' which is the set of all possible meta-analyses of k studies taken r at a time, for $r=1$ to k . The behaviour of all possible subsets of studies can then provide a background against which to identify subgroups of studies of size r against other size- r clusters that may or may not share common features.

For example, pairs of high-gravity studies that are opposite in sign would be expected to retain relatively high-gravity properties when analysed together, while pairs of high-gravity studies that are similar in sign and magnitude will decrease markedly in overall gravity when studied together, as both will approximate their mean ES with a good deal of 'force' that is attributable to the sample size component of gravity. Identification of local minima and maxima is therefore theoretically a possible basis on which clustering of studies could be performed, thereby 'quantifying sources of heterogeneity,' as pointed out by Sidik and Jonkman (2005).

Such a method also helps resolve conceptual problems in the debates that often surround meta-analysis over whether some subset of studies should or should not be included. By computing all possible meta-analyses, the effect of inclusion/exclusion of certain studies or combinations of studies can be placed into a context, and indeed, the net gravity of the disputed subset can be computed directly and referred to a jackknifed normal distribution to test the significance of the argument that there is something indeed special about them that skews the results. "In/out" arguments that are but tempests in teapots can thus be placed into context, and where there is a full cyclone in the teapot, our meta-analytic meteorology stands a better chance of detecting it against a background of relative 'calm.'

Future Direction #2: Approximate Combinatorial Meta-Analysis

Naturally, there are computational limits to what can be performed. The foreseeable future of such combinatorial methods in meta-analysis must allow for the huge range of possible combinations when the number of studies available for analysis becomes large. When exact methods of computing indices become unwieldy (ie., when the number of combinations is prohibitively large), approximate methods may be used, in which random samples of the studies are meta-analysed, and the various properties of the combinations could be studied empirically. For example, where varying followup times are used across studies (eg., 1 week, 2 weeks or 3 weeks), the effect of the treatment at the different times could be considered as a function of the number of

studies using 1, 2 or 3 week followups that are included in a given MA. The obvious case is to examine the 1-week vs. the 2-week vs. the 3-week studies.

The more subtle approach, however, is to study how the 1-week group behaves as 'impurities' are added from the other two groups. Thus, where specific subsets of studies are at issue, these could be compared against a generated comparison distribution that excludes them, and again, gravitational effects of sub-clusters may be referred to a simulated distribution based on all other studies. This can be applied to differential follow-up times, groups of studies that share methodological characteristics, groups of studies that share certain measures but differ from other studies on that feature, and so forth.

Summary

Both the exact and approximate methods proposed to extend jackknifing seem, on the face of it, to be susceptible to Glass' criticism, that "the population [of studies] is nothing but the sample write large and we really know nothing more than what the sample tells us in spite of the fact that we have attached misleadingly precise probability numbers to the result" (Glass, 2000). Surely, we must keep in mind that p-values for simulation studies are meaningless, as runs can be made arbitrarily large. However, where we study the inner workings of a set of studies, we merely echo, in a systematic and unarguable way, that some studies can be 'in' and others 'out' with identifiable effects. Furthermore, by studying the *range* of combinations, we allow the relative merit of specific 'in/out' arguments to be evaluated against all others.

The proposed methods also afford researchers the opportunity to study the behaviour of research result sets that have particular characteristics. Literatures that have a large number of small studies, for instance, may plausibly differ from literatures that have a small number of large studies, and the problems may be different. The present method has the potential to allow researchers to explore how patterns of sample size may affect meta-analyses. Extensions of the method may allow estimation of dispersion of ES estimates, for instance, by permuting the sample size/effect size combinations to find exact distributions that emerge from those perturbations of the raw data.

In summary, jackknifing is a special case of a more general method which holds promise to extend the present findings to larger datasets with more complex properties. Software to perform exact and approximate combinatorial meta-analyses is currently being written to extend the present findings. However, even in the current state of development, it is clear that simple jackknifing provides, through the notion of 'gravity,' a window into the less-complicated cases of outliers that may exist in meta-analyses of small to moderate size.

Gee, T. (2005) Capturing study influence: The concept of 'gravity' in meta-analysis, *Counselling, Psychotherapy, and Health*, 1(1), 52-75, July 2005.

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APPENDIX A: JACKMETA.SAS

```

/*****
/* NAME: jackmeta.sas
/* TITLE: Calculates meta-analytic indices
/*         according to the Rosenthal & Rubin method
/*
/* AUTHOR: Ioannis C. Dimakos
/* ORIGINAL: 24SEP95 - Presented at SUGI 21, p938-942
/* MODIFIED BY: Michael Friendly (macrified) 28 Oct 1997 18:05
/* Revised: 31 Jul 2002 16:04:53
/* - Fixed bug with select
/* Revised: 5 Mar 2005 by T. Gee to do jackknifing
*****/
/*=
=Description:

The meta macro calculates several meta-analytic indices from
summary statistics (F, t, r, z, p, chisq) for two or more
studies, each testing one or more hypotheses. For each hypothesis,
the program calculates an equivalent value of a z-statistic,
a correlation (r), and Fisher Z transformation of r (zf). These
are summarized by unweighted and weighted means to give overall
results.

=Usage:

Prepare a data set containing one observation for each study-
hypothesis
to be included in the meta analysis. The following information must
be recorded:

the sample size (n) per hypothesis,
the type of statistic (F, t, r, z, p, chisq),
the observed value of statistic,
degrees of freedom (df),
and p-value for each hypothesis in the meta-analysis.

==Parameters:

data=_last_, Name of the input data set
id=, Names of one or more variable(s) which
identify study & hypothesis
n=n, Name of the variable giving the Sample size
for the hypothesis test
stat=stat, Name of test statistic (f, t, r, z, p, chisq)
value=value, Name of the variable giving the value of the
test statistic
df=df, degrees of freedom for the test statistic
p=p, p-value
out=metanal Name of the output data set

=References:
Rosenthal, R. (1991). Meta-analytic procedures for social
research.
Newbury Park, CA: Sage.
Mullen, B. (1989). Advanced BASIC meta-analysis. Hillsdale, NJ:
Lawrence Erlbaum Associates.
```

=Example:

```
%include goptions;

data studies;
    length authors $12;
    input study hyp stat $ value n df p authors &$;;
    label n='Sample size'
           hyp  ='Hypothesis'
           stat ='Statistic used'
           value='value of statistic'
           df   ='degrees of freedom'
           p    ='p-value';

cards;
  1 1 t   3.13   20  18 .0001   Bar & Foo 86
  1 2 t   2.03   10   8  .078   Bar & Foo 86
  2 1 r    .60   10   8  .067   Foo & Bar 89
  3 1 z   3.14   23   .   .     Foo 90
;

option spool;
%meta(data=studies, id=study hyp);
=*/

%global numrecds;
%macro numobs ( _sasdsn_ );
  data _null_;
  set &_sasdsn_ point=nobs nobs=nobs;
  call symput( 'numrecds', put( nobs, best.) );
  stop ;
  run ;
%mend numobs;

%macro jackmeta(
  data=_last_,
  id=study_id, /* Variable(s) which identify study &
hypothesis */
  n=n,          /* Sample size for the hypothesis test
*/
  stat=stat,    /* Name of test statistic (f, t, r, z, p,
chisq) */
  value=value, /* Value of the test statistic
*/
  df=df,        /* degrees of freedom for the test statistic
*/
  p=p,          /* p-value */
  out=metanal, /*output file, overwritten regularly*/
  display=N,    /*display results? Y to display*/
  alpha=1,      /*alpha for finding outliers*/
  studynum=studynum /*sequence of study in dataset*/
);

*proc printto log='NUL';

/*create dataset to link studynum with id*/
data tolink; set &data; keep studynum &id; run;
proc sort; by studynum;run;

data &out;
  set &data;
  /* transform initial criteria to meta-analytic criteria. Use z
```

```

    * for significance level and r (and Fisher's z) for effect size
    */
&studynum=_n_;
label &studynum = 'sequence of study in dataset';

select; * (&stat);
when (&stat='t')
do;
  z=sqrt(&df*(log(1+(&value**2/&df))))*sqrt(1-(1/(2*&df)));
  r=sqrt(&value**2 /(&value**2 + &df));
  if &p=. then &p = 1 - probt(&value,&df);
end;

when (&stat in ('f', 'F'))
do;
  z=sqrt(&df*(log(1+(&value/&df))))*sqrt(1-(1/(2*&df)));
  r=sqrt(&value/(&value+&df));
end;

when (&stat='chisq')
do;
  z=sqrt(&value);
  r=sqrt(&value/&n);
  if &p=. then &p = 1 - probchi(&value,&df);
end;

when (&stat in ('z', 'Z'))
do;
  z=&value;
  r=sqrt(&value**2/&n);
end;

when (&stat='r')
do;
  t=(&value*sqrt(&n-2))/sqrt(1-&value**2);
  z=sqrt(&df*(log(1+(t**2/&df))))*sqrt(1-(1/(2*&df)));
  r=&value;
end;

otherwise
do;
  z=abs(probit(&value));
  r=sqrt(z**2/&n);
end;

end;
zf=.5*(log((1+r)/(1-r)));

label
  &p='p-value'
  z='z-value'
  zf='Fisher Z transformation of r'
  r='Pearson r';

/*
Calculate:
1) product of Sample Size n (the weight) and Z-score,
2) squared sample size (w=n**2), to be used
   in estimating the combined significance level.
3) Weight for Diffuse Comparison of Effect Sizes.
*/

```

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```
nz=&n*z;
w=&n**2;
wzf=&n-3;
run;

/* Calculations of Combinations of Effect Sizes and Significance
 * Levels. Calculations of Diffuse Comparisons of E.Ss and S.Ls
 * Use separate PROC MEANS to calculate the various meta-analytic
 * indices.

Step 1. Mean Effect Size Unweighted and
        Weighted By Sample Size
*/

proc means noprint data=&out;
  var zf;
  output out=combzf1 mean=meanzf1;
run;

proc means noprint data=&out;
  var zf;
  weight &n;
  output out=combzf2 mean=meanzf2;
run;

/* Step 2. Calculate chi^2 for Diffuse Comparison of Effect Sizes.
 * Chi^2 has k-1 degrees of freedom.
 */

proc means css noprint data=&out;
  var zf;
  weight wzf;
  output out=diffzf css=cssf;
run;

/* Step 3. Combinations and Diffuse Comparisons of S.L Calculate
 * sums of N*Z and Squared Weights to be used for Combination of
 * S.L, chi^2(df=k-1) for Diffuse Comparison of S.L.
 */

proc means noprint data=&out;
  var nz w;
  output out=sigcomb sum=sumnz sumw;
run;

proc means noprint data=&out;
  var z;
  output out=sigdiff css=cssf;
run;

/*
Step 4. Final Calculations for
        Combined Significance Level,
        Probability of Significance Level, and
        Probability of chi^2 for Diffuse Comparison
        of Effect Sizes.
*/
data final;
  merge combzf1 combzf2 diffzf sigcomb sigdiff;
  zcomb=sumnz/sqrt(sumw);
  probcomb=1-probnorm(zcomb);
```

```
    probz=1-probchi(cssz,_FREQ_-1);
    dfz=_FREQ_-1;
    probzf=1-probchi(csszf,_FREQ_-1);
    dfzf=_FREQ_-1;
    keep meanzf1 meanzf2 zcomb cssz csszf
        dfz dfzf probcomb probz probzf;
    label meanzf1='Mean Effect Size, Unweighted'
        meanzf2  ="Mean Effect Size, Weighted by &n"
        zcomb    ='Z, Combination of Significance Levels'
        probcomb ='Probability for Z'
        cssz     ='x2, Diffuse Comparison of Sig. Levels'
        probz    ='Probability of x2'
        dfz      ='degrees of Freedom'
        csszf    ='x2, Diffuse Comparison of Effect Sizes'
        probzf   ='Probability of x2'
        dfzf     ='degrees of Freedom';
run;

%if &display=Y %then %do;
/*
  Presentation Step 1.
  Print Primary Statistics of Individual Studies
*/
proc print data=&out label uniform;
  %if %length(&id) %then
    %str(id &id;) ;
  var &n &stat &value &df &p z r zf;
  title 'Meta-Analysis: Initial Statistics and Transformations';
run;

/*
  Presentation Step 2.
  Print Meta-Analytic Statistics obtained with SAS
*/
proc print data=final label uniform noobs;
  var meanzf1 meanzf2 zcomb probcomb cssz
      dfz probz csszf dfzf probzf;
  title2 'Combinations and Diffuse Comparisons';
  title3 'of Effect Sizes and Significance Levels';
  footnote;
run;

/*
  Presentation Step 3.
  Chart of Effect Sizes.
  Use PROC CHART if PROC GCHART unsupported.
*/
proc gchart data=&out;
  vbar zf / midpoints=0 to 1 by .2 raxis=axis1;
  axis1 label=(a=90 r=0);
  title 'Frequency Distribution of Effect Sizes';
run;

/*
  Presentation Step 4.
  Plot Effect Sizes against Sample Sizes (aka the funnel plot)
  Use PROC PLOT if PROC GPLOT unsupported
*/

proc gplot data=&out;
```

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```
plot &n*zf/ haxis = 0 to 1 by .1 hminor=1
      vaxis = axis1;
axis1 label=(a=90 r=0);
title 'Plot of Fisher Zf and Sample Size';
run; quit
%end;

/*assign overall result to macro variable to carry forward*/

data final; set final;
call symput( 'overall_es_unw', put( meanzf1, best.) );
call symput( 'overall_es_wtd', put( meanzf2, best.) );
run;

/****end of main meta-analysis module****/

/****begin jackknifing modules****/

data jackresults; delete; *kill off any old results files;

data jackdata; set &out; run;*count number of studies;
%numobs(jackdata);

/*loop for j studies, excluding one at a time*/

%do j=1 %to &numrecds;
title "Jackknife run # &j";
data jack; set jackdata;*jackknife excluding study j;
if &studynum ne &j then output; else delete;
run;
/*
Step 1. Mean Effect Size Unweighted and
Weighted By Sample Size
*/

proc means noprint data=jack;
var zf;
output out=combzf1 mean=meanzf1;
run;

proc means noprint data=jack;
var zf;
weight &n;
output out=combzf2 mean=meanzf2;
run;

/* Step 2. Calculate chi^2 for Diffuse Comparison of Effect Sizes.
* Chi^2 has k-1 degrees of freedom.
*/

proc means css noprint data=jack;
var zf;
weight wzf;
output out=diffzf css=cssf;
run;

/* Step 3. Combinations and Diffuse Comparisons of S.L Calculate
* sums of N*Z and Squared Weights to be used for Combination of
* S.L, chi^2(df=k-1) for Diffuse Comparison of S.L.
```



```
*/

proc means noprint data=jack;
  var nz w;
  output out=sigcomb sum=sumnz sumw;
run;

proc means noprint data=jack;
  var z;
  output out=sigdiff css=cssz;
run;

/*
Step 4. Final Calculations for
        Combined Significance Level,
        Probability of Significance Level, and
        Probability of chi^2 for Diffuse Comparison
        of Effect Sizes.
*/
data final;
  merge combzf1 combzf2 diffzf sigcomb sigdiff;
  zcomb=sumnz/sqrt(sumw);
  probcomb=1-probnorm(zcomb);
  probbz=1-probchi(cssz,_FREQ_-1);
  dfz=_FREQ_-1;
  probz=1-probchi(csszf,_FREQ_-1);
  dfzf=_FREQ_-1;
  keep meanzf1 meanzf2 zcomb cssz csszf
        dfz dfzf probcomb probz probzf;
  label meanzf1='Mean Effect Size, Unweighted'
        meanzf2  ="Mean Effect Size, Weighted by &n"
        zcomb    ='Z, Combination of Significance Levels'
        probcomb ='Probability for Z'
        cssz     ='x2, Diffuse Comparison of Sig. Levels'
        probz    ='Probability of x2'
        dfz      ='degrees of Freedom'
        csszf    ='x2, Diffuse Comparison of Effect Sizes'
        probzf   ='Probability of x2'
        dfzf     ='degrees of Freedom';
run;

data jackresults; set jackresults final(in=inb);
  if inb then studynum=&j;
run;

%end;*end jackknifing loop;

/*get the overall jackknifed means & sds*/

title 'Overall Jackknife Results';

proc means noprint data=jackresults;
  var meanzf1;
  output out=jrzf1 mean=jack_mean_all_unw std=jack_std_all_unw;
run;

proc means noprint data=jackresults;
  var meanzf2;
  output out=jrzf2 mean=jack_mean_all_wtd std=jack_std_all_wtd;
run;
```

```
data jackstats; merge jrzf1 jrzf2;
label jack_mean_all_unw= 'ES estimate, unw.';
label jack_mean_all_wtd= 'ES estimate, wtd.';
label jack_std_all_unw = 'ES SD, unw.';
label jack_std_all_wtd = 'ES SD, wtd.';
/*set values into macro variables*/
call symput( 'jack_mean_all_unw', put( jack_mean_all_unw, best.) );
call symput( 'jack_mean_all_wtd', put( jack_mean_all_wtd, best.) );
call symput( 'jack_std_all_unw', put( jack_std_all_unw, best.) );
call symput( 'jack_std_all_wtd', put( jack_std_all_wtd, best.) );
run;

/*link results with stats files*/

data jackresults; set jackresults;

/*assign values from macro to live variables*/
jack_mean_all_unw=&jack_mean_all_unw;
jack_mean_all_wtd=&jack_mean_all_wtd;
jack_std_all_unw=&jack_std_all_unw;
jack_std_all_wtd=&jack_std_all_wtd;
label jack_mean_all_unw= 'ES estimate, unw.';
label jack_mean_all_wtd = 'ES estimate, wtd.';
label jack_std_all_unw = 'ES SD, unw.';
label jack_std_all_wtd = 'ES SD, wtd.';

/*compute gravity for unweighted results*/
unw_gravity=meanzf1-jack_mean_all_unw;
zunw_gravity=unw_gravity/jack_std_all_unw;

/*compute gravity for weighted results*/
wtd_gravity=meanzf2-jack_mean_all_wtd;
zwt_d_gravity=wtd_gravity/jack_std_all_wtd;

/*****look for outliers*****/

/*Define zones of significance*/
%let siglevel=%sysevalf(&alpha/100);
%let siglower=%sysevalf(&siglevel/&numrecds);*Bonferroni correction;
%let sigupper=%sysevalf(1-&siglower);
%put siglower=&siglower sigupper=&sigupper;

pstd_grav_u=probnorm(zunw_gravity);
pstd_grav_w=probnorm(zwt_d_gravity);
if &siglower < pstd_grav_u and &sigupper > pstd_grav_u then
unw_outlier=0; else unw_outlier=1;
if &siglower < pstd_grav_w and &sigupper > pstd_grav_w then
wtd_outlier=0; else wtd_outlier=1;
if %eval(&alpha/100) < pstd_grav_u <%eval(1-&alpha/100) then
unw_nobon_outlier=0; else unw_nobon_outlier=1;
if %eval(&alpha/100) < pstd_grav_w <%eval(1-&alpha/100) then
wtd_nobon_outlier=0; else wtd_nobon_outlier=1;
label zf='r->Z ES estimate';
alpha=%eval(&alpha/100);
drop _type_ _freq;
run;

%if &display=Y %then %do;
proc gchart; vbar unw_gravity -- pstd_grav_w;
title 'Gravity Results';run;
```

```

%end;

*attach ID variables;
proc sort data=jackresults; by studynum;
data jackresults; merge METANAL jackresults tolink; by studynum;
run;

*PRINT RESULTS;
proc sort; by zwtd_gravity;run;

proc print noobs;
var &id zf wtd_gravity zwtd_gravity pstd_grav_w n diff treat_mean
ctrl_mean treat_sd ctrl_sd;
title 'Studies sorted by influence';
run;

PROC GPGLOT; plot pstd_grav_w*(diff treat_mean ctrl_mean treat_sd
ctrl_sd);
run;

proc g3d; scatter n*zf=zwtd_gravity;run;
%mend;
proc gchart data=metanal; vbar zf;run;

proc printto log=LOG;

data hylangf20;
studynum=_n_;
length weeks $ 6;
length study_id $ 22;
input weeks $ Study_ID $ treat_tota treat_mean treat_sd
      ctrl_total ctrl_mean ctrl_sd;
      stat="t";
      n=treat_tota+ctrl_total;
      df=n-2;
      diff=treat_mean-ctrl_mean;
      poolvar=((ctrl_total-1)*ctrl_sd**2+(treat_tota-
1)*treat_sd**2)/df;
      poolsd=sqrt(poolvar);
      se=poolsd*sqrt(1/ctrl_total+1/treat_tota);
      value=(treat_mean-ctrl_mean)/se;
      format p z7.6;
      p= 1-probt(value,df);
cards;
1-4      Karlsson2002b(SvP)      86      45      25.67      33      44      30.39
1-4      Moreland1993      46      47      27.13      48      51      27.71
1-4      Scale1994a(2inj)      23      32      23.98      24      47      24.5
1-4      Scale1994b(3_inj)      15      22      19.36      15      44      19.36
1-4      Wobig1999c(NEhyl)      38      40      24.66      36      53      24
1-4      Wobig1998      57      31      22.65      60      53      23.24
5-13     Karlsson2002b(SvP)      86      41      31.53      33      46      34.9
5-13     Scale1994a(2_inj)      23      27      23.98      24      53      24.5
5-13     Scale1994b(3_inj)      15      11      19.36      15      43      19.36
5-13     Wobig1999c(NEhyl)      37      32      24.33      35      43      23.66
5-13     Wobig1998      57      23      22.65      60      60      23.24
14-26    Karlsson2002b(SvP)      86      43      33.78      33      44      33.78
14-26    Scale1994a(2_inj)      15      18      23.24      21      57      22.91
14-26    Scale1994b(3_inj)      15      22      23.24      15      45      23.24
14-26    Wobig1998      56      35      29.93      60      56      30.98
;
run;

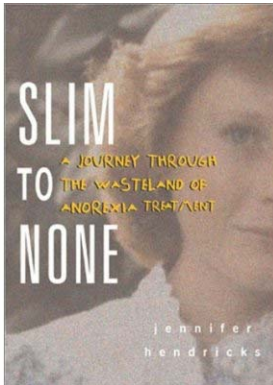
```

Gee, T. (2005) Capturing study influence: The concept of 'gravity' in meta-analysis, *Counselling, Psychotherapy, and Health*, 1(1), 52-75, July 2005.

```
%jackmeta(data=hylangf20,id=study_id weeks, display=Y);  
  
proc varcomp data=jackresults method=reml;  
class study_id weeks;  
model zwtd_gravity=study_id weeks;  
run;  
proc gplot data=jackresults;  
plot zunw_gravity*zwtd_gravity=study_id;run;  
  
proc plot data=jackresults;  
plot zwtd_gravity*zf $study_id;run;
```

Book Review

Slim to None: A Journey Through the Wasteland of Anorexia Treatment, by “Jennifer Hendricks”, McGraw-Hill, 2003.



Slim to None, attributed to “Jennifer Hendricks,” was in fact put together by the father of the girl whose diaries form the basis of it, Graydon “Dee” Hubbard. There are numerous other tales told by sufferers who have recovered from anorexia, but what is striking about it is that it appears to be the first publication of the diaries of an anorexia sufferer who did *not* survive the disorder, which kills 10-15% of its victims. Even more striking is the sceptical viewpoint that is taken towards the hodgepodge of treatments provided to our erstwhile diarist by mental health professionals. Names have been changed to protect both innocent and guilty, however, one wonders at whether or not a very public lawsuit might one day come to light based on some of the descriptions of malpractice in those pages.

While some therapists focus heavily on dealing with the present, the key psychiatrist in the saga pushes to find the childhood causes of her anorexia, and helps her come to the conclusion that it is because she was sexually abused as a child. With help, she “recovers” memories that fit what is expected of her, seemingly to avoid further restriction of privileges and verbal abuse from the psychiatrist. She initially recognises what psychologists term the “confirmatory bias” (i.e., searching for – or even *inventing* - evidence to confirm something and ignoring things that disconfirm it), as well as interpreting ambiguous things to be consistent with a pre-selected hypothesis:

“I’m still not convinced my problem is with Dad. Do I really see questionable things in our relationship or do I contrive them because Dr. Weintraub insists there are abnormal encounters between him and me?”

However, as she goes on, she appears to become engrossed in the swirl of emotion and loses sight of the distinction between fact and fantasy, aided by exercises like scanning old family photos for “indications of abuse.” As happens all too easily, the distinction between historical truth (where something is true because it happened) and narrative truth (where something is regarded as true because it fits a particular storyline and “makes sense”) is lost (Spence, 1984). A session of group therapy where praise is heaped on those who “recover” memories is enough to prompt her to claim “survivor” status as well. Jenny was allegedly molested – not in the past, but in the present, by a

Gee, T. and Pillinger, K. (2005), *Slim to none: A journey through the wasteland of anorexia treatment by "Jennifer Hendricks"*, McGraw Hill, 2003, A book review, *Counselling, Psychotherapy, and Health*, 1(1), 76-77.

lesbian nurse (later sacked) who was involved in her treatment. This nurse insists that she is self-harming by cutting her vagina. These 'cuts' seem strangely to coincide with her monthly period, and therefore "needed to be checked." Digitally. Repeatedly.

Jenny is further horrified to find that the psychiatrist has breached confidentiality in discussing her case with the owners of a ranch where her family used to vacation. The humiliation thus experienced merely makes matters worse, and so we watch as Jenny spirals downwards towards her demise. We see nothing at all resembling a treatment that acknowledges her inner thoughts and feelings, save for the Recovered Memory Therapy noted above which seems to create an imaginary scapegoat rather than deal with them realistically. Worse, all treatments seem to focus solely on weight, and define success as restoring a healthy weight without ever addressing the negativity towards herself that precipitates the anorexic behaviours. Discharge, as Jenny points out, occurs irrespective of whether the underlying problem has been solved, i.e., the uncontrollable anorexic thoughts and feelings that lead to further restriction of diet the moment that she steps out of the hospital doors.

Hubbard confesses to some gentle editing of the 707 pages of diary material that his late daughter left behind when she passed away some ten years ago, and uses some literary license to reconstruct scenes from her life. However, the diary material itself, written by Jennifer, is explosive material, and anyone familiar with the problems of so-called "repressed memories," and the "therapy" used to recover them, will find in this book a detailed example of such a construction. It is compelling reading, and should be *required* reading for anyone involved in treating eating disorders. It is an important mirror to the profession, reflecting back perspectives on treatments from the all-too-often disregarded patient's point of view.

Reviewers

Dr. Travis Gee

Director, SigmaX Consulting Pty Ltd.

Clinical Director, *Future Road Eating Disorders Centre*, Brisbane, Australia.

Research Fellow, School of Medicine, University of Queensland.

Kelly Pillinger

Founding Director, *Future Road Eating Disorders Centre*, Brisbane Australia.

Facilitator, *No Weigh! Anorexia & Bulimia Sufferers' Support Group*, Shailer Park, Australia.

Reference

Spence, D. (1984) *Narrative truth and historical truth*, Norton, NY.

Pelling, N., (2005) Counsellors in Australia: Profiling the membership of the Australian Counselling Association, *Counselling, Psychotherapy, and Health*, 1(1), 1-18, July 2005.



Counsellors in Australia: Profiling the Membership of the Australian Counselling Association

Nadine Pelling, Ph.D.

Centre for Applied Psychological Research: Counselling Group
School of Psychology
University of South Australia
Adelaide, Australia

Address all enquiries to Nadine Pelling, Ph.D.
Senior Lecturer in Psychology and Counselling
C/O School of Psychology
University of South Australia
Adelaide, SA
5000 Australia
nadine_pelling@yahoo.com.au

Abstract

This survey research aimed to describe Australian counsellors associated with the Australian Counselling Association (ACA). Data was collected using both a postal and an electronic mail survey. The counsellors' (a) demographic characteristics, (b) counselling training and development, (c) provision of counselling services, (d) professional involvement and interest in counselling, and (e) competence level regarding six specific counselling areas were assessed. Australian counsellors associated with the ACA are thus described and specific recommendations for ACA activities are provided.

Key words: counselling - counseling – description – counsellor – Australia

Acknowledgment

The questionnaire used in this research was based on a questionnaire used by Nadine Pelling, Pamela Brear, and Margaret Lau in a survey of advertised Australian counsellors (Pelling, Brear, & Lau, in press). In addition, some of the content and structure of the current article is based upon the material written by Nadine Pelling for the advertised Australian counsellors article. Nadine Pelling would like to thank Paul Whetham, Pamela Brear, and Margaret Lau for their literature review recommendations regarding Australian statistics, specifically for providing two Australian Bureau of Statistics references. The current Australian Counselling Association survey is one in a series of independent surveys of Australian counsellors and psychologists being conducted by Nadine Pelling.

Pelling, N., (2005) Counsellors in Australia: Profiling the membership of the Australian Counselling Association, *Counselling, Psychotherapy, and Health*, 1(1), 1-18, July 2005.

Counselling is a relatively new and developing profession in Australia. As a result, few articles examining counselling and counsellors specifically within the Australian context have been published. In early 2004 the Australian Counselling Association (ACA) indicated that it would like to engage in a review of the counsellors associated with its organisation and their basic activities, thus describing an important and influential group of counsellors and their work in Australia.

Who actually are the counsellors associated with the ACA and what are their activities? The present research was designed to explore the following: (a) ACA associated counsellor demographic and (b) training characteristics, (c) how and to whom ACA associated counsellors provide counselling services, (d) with what additional professional organisations are ACA associated counsellors involved and what was the basis of their initial interest in counselling, and (e) what are ACA associated counsellors' comfort level in six areas important to the provision of counselling in Australia.

In order to place the current descriptive findings in context, what is known about counsellors in Australia from the Australian Bureau of Statistics (2003b) will be briefly reviewed. This review is presented in conjunction with what the literature has to say about six specific areas important to the provision of counselling in Australia. Let us now look at what Australian statistics and the literature have to say about these specific areas studied in the current survey. Unless otherwise stated, statistics reported in the following review sections are taken from the Australian Bureau of Statistics (2003b).

Demographic characteristics

Counsellors in Australia appear to be a mature group, with the majority of counsellors being between 45 and 54 years of age (29.4%). Very few counsellors are aged under 25 (4.7%). The majority of counsellors are female (69%) with only 31% male. The majority of counsellors reside in New South Wales (31%), Victoria (30%), and Queensland (18%). Counsellor and general Australian resident information regarding rural/remote or urban location was not found in the sources examined.

Information regarding counsellor relationship status, family status, ethnic and cultural background, and sexual orientation was not found. However, general Australian statistics indicate that Australians tend to live in a couple family (82.7%) and tend to be parents (62.5%) in a couple family or as a single parent (Australian Bureau of Statistics, 2003a). Specifically, 50.7% of Australians are married, 3.4% separated, 7.4% divorced, 6.2% widowed, and 31.6% had never been married (Australian Bureau of Statistics, 2003a).

Regarding ethnic and cultural status, 2.2% of Australians identify as being of Indigenous origin and 20% indicated that English was not the only language spoken at home (Australian Bureau of Statistics, 2003a). Moreover, the seminal source on sexual orientation indicates that 10-15% of the population is same sex attracted (Kinsey, Pomeroy, & Martin, 1948). Counsellor and general Australian resident information regarding spiritual beliefs was not provided in the sources examined.

Pelling, N., (2005) Counsellors in Australia: Profiling the membership of the Australian Counselling Association, *Counselling, Psychotherapy, and Health*, 1(1), 1-18, July 2005.

Counselling training and development

In Australia a number of tertiary level educational qualifications are available. Details regarding what counselling specific tertiary educational qualifications counsellors hold on average is not available. Nevertheless, as counselling is not a regulated profession in Australia one can have many different or no official qualifications and engage in counselling. Generally, Australians tend not to hold tertiary level educational qualifications (65.3%) with only a moderate number having advanced diplomas, diplomas, or certificates (21.8%) and a minimum holding bachelor or postgraduate degrees (9.7% and 3.2%, respectively) (Australian Bureau of Statistics, 2003a).

Information regarding average counsellor participation in counselling supervision and the ratio of counselling to supervision hours maintained is not readily available. Missing also is Australian Bureau of Statistics information regarding average years of counselling and counselling supervision experience, professional development activities, and interest regarding further counselling education and personal development activities. Professional stress, or burnout, as an issue confronting Australian counsellors has also not been widely examined.

Provision of counselling services

Counsellors are evenly split into groups that work full-time and part-time. According to Australian statistics, almost half (46.9%) work 35 hours or more per week. Those working 34 hours or less per week totalled 53.1% of counsellors. Specifics regarding counselling practice, such as individual as opposed to group work involvement, are not available. Similarly, information on theoretical orientation and generalist or specialist practice orientation was not available.

The majority of counsellors are employed in health and community services as well as educational environments, 39.6% and 29.5% respectively. Average fees charged per hour for counselling and supervision service were not noted. However, for counsellors \$942 was indicated as the average weekly earnings before tax . This translates to \$49,504 gross per year, based on a 52 week year.

Professional involvement and interest in counselling

There are a number of counselling organisations in Australia. Some of these are generalist in orientation and others are specialist groups. An umbrella organisation also exists. Some of the more active counselling organisations in Australia include the Australian Association of Career Counsellors (AACC), the ACA, the Australian Guidance and Counselling Association (AGCA), the Australian Psychological Society's (APS) College of Counselling Psychology, and the Psychotherapy and Counselling Federation of Australia (PACFA) (Pelling, 2003a; Pelling, Gillies, & Sullivan, 2003, August; Pelling, Sullivan, & Gillies, 2003, October; Sullivan, 2003). Counsellors may belong to more than one organisation, as membership in various counselling organisations is not mutually exclusive.

Pelling, N., (2005) Counsellors in Australia: Profiling the membership of the Australian Counselling Association, *Counselling, Psychotherapy, and Health*, 1(1), 1-18, July 2005.

Currently, the extent to which counsellors follow established ethical codes and are covered by professional indemnity insurance is unclear. This is despite the fact that many counselling organisations have developed ethical codes and provide access to professional indemnity insurance at a reduced rate.

Individuals choose counselling as a professional activity for a number of reasons. One recent qualitative study examined why counsellors enter the profession of counselling within the Australian context. It found that men described a history of helping while women were aware of family disadvantage and indicated a capacity for empathy as reasons for choosing counselling and psychotherapy as a career (Lewis, 2004).

Competence level in specific counselling areas

Counselling as a profession helps individuals cope with problems of everyday life (Whetham & Pelling, 2003). Common problems include depression, anxiety, and substance abuse and dependence (Court, Ireland, Proeve, Pelling, & Cescato, 2003; Pelling, 2003b). As a result, it is important that counsellors be able to competently address these three common and widespread problems. As depression, anxiety, and substance abuse issues are frequent problems clients bring to counselling, counsellors are likely to have experience in working with such difficulties and thus view themselves as being sufficiently competent regarding them.

In addition to competently addressing the three issues identified above, it is important that Australian counsellors are able to competently address the unique needs of various multicultural groups prominent in Australia. Those from Non English Speaking Backgrounds (NESB), Indigenous and Torres Strait Islander (TSI) individuals, and those who are same sex attracted (gay, lesbian, and bisexual individuals) may present in counselling with special needs.

NESB clients have special needs that may not be addressed in general counselling training programs (Pelling, 2004c). Similarly, Australia has a meaningful proportion of Indigenous and TSI individuals in its population who may bring into counselling special issues relating to the '*stolen generation*' and other difficulties relating to cultural marginalisation (Armstrong, 2002, October; Pelling, 2004b; Petchkovsky & San Roque, 2002). Once again, while the ability to provide competent services for Indigenous clients is important, Australian counsellors are more likely to receive generalist training and not information specifically relating to Indigenous populations. Moreover, a significant proportion of the Australian population is likely to be same sex attracted. As a result counsellors need to be familiar with basic knowledge, awareness, and skill areas in order to work competently with same sex attracted populations (Kocarek & Pelling, 2003; Pelling, 2004a). Due to the heterosexist nature of our society, it would be expected that many counsellors would have limited competence in working with same sex attracted clients.

Pelling, N., (2005) Counsellors in Australia: Profiling the membership of the Australian Counselling Association, *Counselling, Psychotherapy, and Health*, 1(1), 1-18, July 2005.

Finally, electronic mail (email) and instant messages (IM) via mobile phones are now permanent features in the lives of many Australians. Some counsellors see such electronic means of communication as a way to provide service to isolated individuals and those hesitant about receiving services in traditional settings. This is despite the known difficulties associated with providing counselling through typed email and IM (Goss, Robson, Pelling, & Renard, 1999; Goss, Robson, Pelling, & Renard, 2001; Pelling & Renard, 2000; Pelling, 2004d). Training in the provision of counselling via email and other electronic means of communication has been presented at conferences and workshops. However, this training has not been widely integrated into more general counselling training (Pelling, 2004d). Thus, competence in counselling via electronic means is probably limited.

Method

Measure

A questionnaire predominantly based on a previous questionnaire created specifically for measuring advertised Australian counsellor characteristics (Pelling, Brear, & Lau, in press) was used in this survey research. Questions were designed to assess counsellor demographics, training and development, counselling service provision, professional involvement and interest in counselling, and comfort level regarding six specific Australian relevant counselling areas. Counsellor comfort relating to the six topics presented was assessed on a five point Likert scale: 1 being uncomfortable; 3 being neutral; and 5 being comfort regarding counselling in the specific area identified. The specific topic areas examined included: using email or IM to provide counselling services; providing counselling to individuals regarding sexual orientation issues; providing counselling to NESB and Indigenous and TSI individuals; and engaging in counselling about substance use issues, depression, and anxiety difficulties. The questionnaire was purposely designed to fit on one double-sided piece of paper and include a majority of 'fill in the blank' questions. The questionnaire was designed in this way so as to make it easy to complete in a practical amount of time.

Sample and procedures

Two different populations of counsellors associated with the ACA were surveyed using two different procedures. Firstly, a paper version of the questionnaire, including a stamped self addressed return envelope directing responses to the ACA, was sent to 1000 individuals via the April 2004 edition of the ACA journal *Counselling Australia*. The journal, which included encouraging statements requesting readers to complete and return the questionnaire, is provided routinely to ACA members as a membership benefit, as well as to other subscribers. Secondly, an electronic version of the questionnaire was sent by the ACA to 2000 members of the ACA Electronic Mail of the Month Club (EOM). Responses were electronically sent to the ACA main email address and/or printed out and sent by mail to the ACA by individuals. In order to encourage individuals of the EOM to return their completed questionnaire, the ACA provided the first 45 returns with a free counselling book.

Pelling, N., (2005) Counsellors in Australia: Profiling the membership of the Australian Counselling Association, *Counselling, Psychotherapy, and Health*, 1(1), 1-18, July 2005.

It should be noted that both ACA members and non-members receive *Counselling Australia* and belong to the EOM. One mailing occurred for each sample in each procedure. Data was collected during a one month period starting in April 2004. Questionnaire dissemination and collection was conducted solely by the ACA, although two individual respondents purposely sent their completed questionnaires to the author indicating that they wished to provide their data directly to the author. All survey materials were immediately removed from their return envelopes and electronic mail attachments, thus protecting participants' anonymity and privacy. Survey procedures were the responsibility of the ACA and conformed to standard research protocols and ACA ethical standards. Once the completed surveys were collected they were provided to the author for data entry, analysis, and write-up. All original survey materials have subsequently been returned to the ACA for storage along with the electronic database containing the entered results.

Results

Response rate

Two hundred and forty one paper surveys were received in response to the 1000 surveys distributed via the April 2004 edition of *Counselling Australia*, resulting in a return rate of 24.1%. In contrast, only 48 out of 2000 surveys distributed to the EOM were returned, culminating in a response rate of 2.4%. Together 289 out of 3000 surveys were returned resulting in a total response rate of 9.6%. Due to the low return rate of the email survey it was decided that the paper survey responses would exclusively be reported in this article. Thus, the results reported are from a sample representative of counsellors associated with the ACA via readership of *Counselling Australia*.

Demographic characteristics

The majority of the sample was female (75.5%) while males constituted only 19.5%. A small percentage indicated being intersexed (0.8%). The average age of the group was 48.9 years with a standard deviation of 10.1. Ages in the sample ranged from 24-69 years with a mode age of 51 and a median age of 50.

The majority of the sample was partnered or married (66.8%). A small percentage was single (17.8%) and divorced or separated (10.4%), with a minority widowed (2.1%). The majority indicated being heterosexual in sexual orientation (93.4%). Homosexual and bisexual orientations were also indicated, 2.1 and 0.4% respectively. Only a minority of the sample indicated having no children (16.6%). The average number of children was 2.3 with a standard deviation of 1.4. The maximum number of children reported was 8. The mode number of children was 1 with a median of 2. The majority of counsellors reported having children who were over 20 years of age (53.5%).

The majority of the sample lived in an urban environment (69.3%) versus a rural or remote area (26.6%). New South Wales (28.2%) and Victoria (24.1) were the states most represented in the sample. The rest of the sample lived in Queensland (20.3%), Western Australia (10.4%), South Australia (7.9%), Tasmania (3.3%), and the Northern Territory (0.4%).

The majority of the sample was Caucasian or indicated being Anglo or European in background (14.9%). However, counsellors from an Asian (1.7%) and an Indigenous or TSI (0.8%) background were also present. Christian beliefs were held by a number in the sample (7.5%). Buddhist (0.4%), Muslim (0.8%), and Jewish (1.2%) beliefs were also indicated. Other backgrounds and beliefs were represented as well (40%), such as hearing-impaired individuals and Samoan individuals, and those who associate with Wicca as a belief system.

Counselling training and development

Baccalaureate, master's, doctorate, diploma, and certificate level training was reported in 34.4%, 18.3%, 4.6%, 21.6%, and 21.6% of the sample respectively. The sample reported receiving their counselling training from Tertiary and Further Education institutions (5.8%), universities (41.5%), and private providers (41.9%). A minority were self trained or mentored, 2.9% and 2.1% respectively.

Supervision was received by 69.7% of respondents (58.5% individually and 32.4% in a group) and provided by 22.8% (19.8% individually and 5.1% in a group) of respondents. The average ratio of counselling to supervision services maintained was 35.7 hours of counselling for every 2.8 hours of supervision, with standard deviations of 115.9 and 6.6 respectively.

Counsellors indicated supporting their professional development by reading books and journals (88.8%), structured training attendance (71%), conference attendance (64.7%), providing conference presentations or structured training (28.6%), and creating scholarship (3.7%). The most popular journals were *Counselling Australia* (94.6%), *Professional Counsellor* (34.8%), and *Psychotherapy in Australia* (24.9%). The journal *Australian Psychologist* was also read by 12.8% of the sample. Other journals were read by 23.6% of the sample and included various newsletters and journals including those from counselling, psychotherapy, social work, and psychological organisations in Australia. Working with adolescents, children, and child abuse victims along with family and relationship counselling, including domestic violence, were areas indicated as needing further education. Other further education areas that were noted include trauma and grief and loss. A majority of the sample (66.4%) engaged in personal counselling to support one's counsellor development. The sample generally did not indicate burnout was an issue, with only 26.1% indicating experiencing burnout or professional stress.

Provision of counselling services

Counsellors indicated providing counselling services for an average of 8.6 years with a standard deviation of 10.1. The provision of counselling services was mostly on a part-time basis (62.7%) while 22.4% provided services on a full-time basis. On average supervision was received for 5.5 years, with a standard deviation of 5.7, and provided for 4.9 years, with a standard deviation of 6.1.

The majority of counsellors indicated that they provided individual counselling (80.5%). Couple and family counselling was also reported by a slight majority of counsellors (50.6%). Group counselling was reported by 26.1% of counsellors as a substantial proportion of their work. The majority of clients seeking counselling were adults (65.1%), although children and adolescents were also seen (38.2%). The majority of the sample indicated being generalists in their work (60.6%) with only 22.8% indicating specialising in their practice. Various specialty areas were reported. These included addiction related counselling, couple and family counselling, and workplace or trauma issues.

A great variety of theoretical orientations were reported as providing structure for the counsellors' counselling activity. The most popular listed theoretical orientation was eclectic (31.1%), with cognitive behaviour therapy being listed as the main influence upon one's eclectic orientation. Other eclectic influences were narrative therapy, psychodynamic, and person-centred approaches. Following eclectic, cognitive behaviour therapy, the most popular counselling theoretical orientations were narrative therapy, psychodynamic, person-centred approaches, and solution-focused therapy. Similarly, counsellors indicated using a number of theories to structure their supervisory interactions. Once again the most popular theoretical orientation was reported as eclectic (13.7%), with the most consistent influence being cognitive behaviour therapy. Cognitive behaviour therapy and solution-focused theoretical approaches were also popular orientations used to structure supervisory interactions.

Of the counsellors surveyed 62.7% indicated working in a solo practice, with 18.7% working in a group practice. The most common work setting of those surveyed was private practice (52.3%). A number of counsellors in the sample also indicated working in a community group (12.9%) or government agency (8.3%).

Of the sample, 48.4% indicated that they made \$40,000 or less gross income per year from counselling activities. Specifically, 29.8%, 12.4%, 6.2%, 12%, 7.5%, and 2.5% indicated earning less than \$10,000, \$10-20,000, \$20-30,000, \$30-40,000, \$40-50,000, and over \$50,000 per year respectively. Almost half of the sample supplemented their income with non-counselling activities (46.9%). The average fee for an hour of counselling was \$57.6 with a standard deviation of \$31.11. The average fee charged for a supervision hour was \$63.05 with a standard deviation of \$41.28. The average number of hours counselling and supervision provided per week were 15.5 and 2.6 with standard deviations of 29.6 and 3.9, respectively.

Professional involvement and interest in counselling

Counsellors were asked to indicate in which counselling organisations they have memberships and in the case of the ACA what level of membership they maintain. A small portion of the sample indicated being registered as a psychologist (4.1%) and belonging to the APS (4.1%). Almost a quarter of counsellors reported being members of an organisation represented by PACFA (23.7%). The AGCA was also represented with 0.4% of the sample holding membership. ACA membership was indicated by 97.5% of

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the sample. This included clinical (27.4%), professional (17%), qualified (29%), student (16.2%), volunteer (1.2%), and member by association (6.6%) memberships.

The majority of counsellors indicated following an officially published ethical code (76.3%). However, some counsellors did indicate not following an ethical code (8.7%). A majority of counsellors in the sample (58.9%) indicated obtaining professional indemnity insurance but a sizable portion did not maintain professional indemnity insurance (27.8%).

A history of helping people influenced respondents' interest in counselling, and this accounted for 72.2 percent of the sample. Only 8.7% indicated that a personal experience of disadvantage influenced their interest in counselling. Another large influence on one's counselling interest involved having a general interest in people.

Competence level and specific counselling areas

Counsellors indicated being uncomfortable (mean 2.1 and standard deviation 1.3) with providing counselling via email or IM. Counsellors indicated feeling neutral about counselling NESB, Indigenous, and TSI individuals (mean 2.96 and standard deviation 1.4). The sample indicated that they felt moderately comfortable about counselling on substance use issues (mean 3.6 and standard deviation 1.3) and counselling concerning sexual orientation issues (mean 3.8 and standard deviation 1.2). Counsellors indicated a fairly high comfort level with counselling involving depression (mean 4.5 and standard deviation 0.8) and anxiety issues (mean 4.5 and standard deviation 0.7).

Discussion of specific results

Response Rate

A low to moderate response rate was achieved with the paper version of the questionnaire sent to individuals via *Counselling Australia*. As a result, the data collected can guardedly be viewed as an accurate representation of ACA associated counsellors, associated via their reading of this particular journal. The low response rate obtained in reaction to the EOM email survey made these responses unrepresentative and not statistically useful for descriptive purposes. Consequently, the current article focuses on the postal responses received and calls into question the response rate and resultant utility of email surveys. It is interesting to note that the number of responses achieved via the EOM was only slightly higher than the number of free books offered by the ACA for responding to the electronic version of the survey. It is possible that response rates to future electronic, and paper, surveys might be increased with either payment for all responses or, more economically, a prize lottery in which all respondents are entered.

Demographic characteristics

The average ACA associated counsellor is female, mature in age, in a marital or partnered relationship, heterosexual, and has one or more adult children. Most ACA associated counsellors are Caucasian. Furthermore, ACA associated counsellors are most likely to reside in New South Wales or Victoria and in an urban environment.

These characteristics are similar to those reported by the Australian Bureau of Statistics (2003a; 2003b) for counsellors and the general Australian public previously described. These characteristics, however, raise some concerns. If the majority of counsellors in Australia are female and mature aged, are we meeting the needs of male and younger clients? Similarly, special attention may need to be paid to multicultural and sexual diversity issues given the Caucasian and heterosexual nature of ACA associated counsellors. Indeed, significantly fewer ACA associated counsellors indicated being same sex attracted than would be expected. The ACA should examine how they might increase diversity in their membership base. Similarly, as few counsellors reside in rural or remote areas the adequate provision of counselling services in those areas may need to be examined along with how rural counsellors can be supported in their work.

Counselling training and development

Counsellors associated with the ACA come from a number of different training backgrounds, including self-trained or mentored individuals and those who have earned a doctorate degree. Counsellors are more likely than the general Australian population to hold tertiary qualifications. This shows that counsellors are taking their professional development seriously.

Engaging in supervision as a supervisor was less popular than gaining supervision for counselling activities. A respectable ratio of counselling to supervision hours was also reported, despite having great variation in the ratios reported. This shows a keen interest in ongoing supervision and professional development. The latter was highlighted by counsellors indicating their practice of reading journals, engaging in training, and attending conferences. Not many ACA associated counsellors indicated providing training or writing for journals, possibly reflecting a small number of doctoral and research trained counsellors (academics) in the sample. The journals read were almost exclusively practitioner accessible journals. There is room for further counsellor research and scholarly involvement.

Counsellors were able to identify their further education needs and these included work with adolescents, children, and family-related items. Counsellors reported that burnout or professional stress, was not a significant issue. This illustrates that the ACA associated counsellors could be said to be a resilient group of professionals. Personal counselling is a popular activity for many counsellors, indicating that self care and the power of counselling are taken seriously by the survey respondents.

Provision of counselling services

Counsellors indicated a moderate level of experience providing counselling. Supervision was reportedly received for the majority of this experience, a positive finding as researchers recommend the use of ongoing supervision to help develop counsellor competence (McNeill, Stoltenberg, & Pierce, 1985; Schofield & Pelling, 2002; Wiley & Ray, 1986). Counsellors reported providing supervision for less time, a situation that appeared likely after the counsellors themselves had gained experience. This is also a positive finding as counselling experience is an important basis, although not sufficient,

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for the provision of supervision (Clarkson & Gilbert, 1991; Dye & Borders, 1990; Farrell, 1996; Hillman, McPherson, Swank, & Watkins, 1998; Leddick & Dye, 1987; Schofield & Pelling, 2002; Stoltenberg, McNeill, & Delworth, 1998; Styczynski, 1980).

The most popular counselling activity was individual counselling with adult populations. Counselling for families and couples was also a popular activity. Adolescents and children too were provided with counselling services. Additionally, group counselling was a moderately popular mode of service delivery. Most ACA-related counsellors indicated being generalists in their work. Thus, ACA related counsellors are providing a variety of services to a variety of Australian clients.

ACA associated counsellors worked mostly in private practice with less than a quarter working in community groups or government agencies. This is in contrast with the majority of counsellors reported to be working in health and community services by the Australian Bureau of Statistics (2003b). The ACA associated counsellors may thus appreciate private practice related support from their counselling organisation; including the ACA counsellor register, Yellow Pages group advertisements, regular *Counselling Australia* publications, and professional indemnity insurance availability.

The majority of counsellors worked alone and did so in a part-time manner. Indeed more of the ACA associated counsellors worked on a part-time basis than indicated by the Australian statistics previously cited. This, of course, would have an impact on the average income from counselling activity reported. The majority of ACA associated counsellors are making \$40,000 or less each year before tax. This is less than the average income listed for counsellors by the Australian Bureau of Statistics (2003b).

The average fee for a counselling hour was \$57.60. This is significantly less than the recommended fee for psychological services, which is \$176.00 per hour as of 1 July 2004 (Australian Psychological Society, 2004). If service is to be individually paid for, this is likely to make counselling, an unregulated profession, more accessible to the general Australian public than psychological service, a regulated profession. As a result, ACA associated counsellors may be providing much needed support to those who might otherwise be unable to afford applied service.

Professional Involvement And Interest in Counselling

ACA associated counsellors are not generally psychologists. However, a sizable portion of ACA associated counsellors are also involved with PACFA. Thus, cooperation between the two organisations (ACA and PACFA) is recommended, as it appears they share a number of members. Similarly, communication among the ACA and other organisations in Australia can be encouraged, despite the fact that fewer ACA associated counsellors were members of other organisations.

It is a concern that a number of ACA associated counsellors indicated not following an ethical code in their counselling work and also not obtaining professional indemnity insurance, especially given that the ACA has an established ethical code and access to discounted professional indemnity insurance as well as a preponderance of private

practitioners. It is suggested that the ACA engage in a structured campaign to remind its members and *Counselling Australia* readers of the availability of its ethical code and insurance coverage. Such reminders could overview the long known liability areas associated with counselling practice reported by Hendrickson (1982): negligence, intentional interference, battery, infliction of mental distress, defamation, invasion of property, misrepresentation, and liability areas associated with third party harm. Counsellors indicated engaging in counselling as a professional activity mainly due to a history of helping others. This history of helping may be a continuing influence of the volunteer foundation of counselling in Australia.

Competence Level And Specific Counselling Areas

The mature women counsellors in the sample indicated being uncomfortable with providing counselling via email or IM. This may be evidence of technophobia as traditionally, or stereotypically, women and older individuals tend to be more reticent regarding the general use of technology, and more specifically technology in the provision of counselling services.

Counsellors indicated feeling neutral regarding counselling NESB and Indigenous and TSI individuals. Mild comfort was reported regarding counselling individuals regarding sexual orientation and substance abuse issues. Given that counsellors are not likely to have been trained to help these populations and their unique needs, the relatively low level of comfort indicated may reflect an awareness of one's competence limits and need to refer specific cases to others with specialist training and experience in such areas. Indeed, the majority of ACA associated counsellors indicated that they were generalist in orientation and this may be reflected in their comfort level regarding various counselling topics. Given the widespread prevalence of substance use difficulties it might be prudent for the ACA to engage in some targeted education efforts regarding addiction in an effort to help its membership better serve those experiencing substance use problems. Similarly, information regarding multicultural counselling could be disseminated to ACA associated counsellors.

As expected, counsellors indicated they were comfortable when their counselling involved depression and anxiety problems. This is a positive finding as depression and anxiety issues bring many into counselling and thus ACA associated counsellors are likely to be experienced and thus show comfort in addressing such issues.

Limitations of study

In the present article counsellors associated with the ACA, via reading *Counselling Australia*, were described. This sample contained a majority of ACA members, a large and influential group of counsellors in Australia. The responses gained via the email survey distributed via the EOM were not included, due to the low response rate obtained. The ability of the present survey's results to be generalised to EOM counsellors would have been strengthened had a greater response rate been achieved from the EOM.

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The descriptions of ACA associated counsellors obtained may not be applicable to other groups of counsellors in Australia, for example, school-based counsellors or those who hold membership with the AGCA. Similarly, the descriptions of ACA associated counsellors obtained may not relate to counsellors who belong to the AACCC or those who are not involved with a counselling organisation.

Suggestions for future research

The current survey aimed to describe ACA associated counsellors. Future survey research could employ a multiple mailing technique designed to increase the response rate achieved and thus the ability of results to be generalised to the population of interest. Similarly, other survey techniques could be employed to increase response rates.

The present survey was also designed to merely describe ACA associated counsellors. An examination of ACA associated counsellor competence levels when working with specific counselling areas and multicultural populations, as well as the use of email and IM in counselling, could prove interesting. Investigating what helped the ACA associated counsellors avoid professional stress, burnout, could also be informative. Indeed, study regarding various aspects of stamina as presented by Osborn (2004) could help identify ways to increase resilience and reduce professional stress. Finally, an understanding of why various individuals choose counselling as a professional activity and become, or not, involved with professional counselling organisations could help the ACA develop a more diverse membership by better addressing the professional needs of prospective members.

Specific recommendations

The ACA is encouraged to engage in activities designed to increase the diversity of its membership, which could be achieved by increasing the number of men, Indigenous/TSI individuals, and sexual minorities. Such activities could include sending membership information to targeted groups of counsellors and the counsellors employed by various specialty government agencies working with specific target groups. Similarly, the ACA might be able to increase the number of younger and less experienced counsellors in its complement by engaging in membership drives via the various counselling training organisations in Australia. Relatively new counsellors, younger and less experienced, can bring new ideas and energy into an organisation who can then be mentored by the more mature and experienced members. Widespread advertising regarding the availability of student membership in the ACA could help increase the age and experience diversity of ACA associated counsellors. These individuals are the future of counselling in Australia.

The ACA is also encouraged to provide its membership with continuing education on the subjects of counselling adolescents, children, and families as these are areas of interest regarding further education outlined by ACA associated counsellors. Additionally, the ACA is encouraged to provide continuing education regarding substance use issues mainly because this is a common client problem with which ACA associated counsellors indicated little comfort. Continuing education can be provided to local communities or via the annual national ACA conference. Similar continuing education can address the specific counselling needs of various multicultural populations as well.

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Not all of the ACA associated counsellors indicated following a code of ethics and holding professional indemnity insurance. It is therefore recommended that the ACA remind its members of the availability of their ethical code and professional indemnity insurance. This reminder could take the form of an annual informative mailing to members or a regular discussion regarding liability and ethical issues in the ACA journal *Counselling Australia*.

Few counsellors indicated living in and serving rural or remote populations. The ACA could explore ways to support counsellors working in rural areas and also ensure that counselling services are readily available to populations living in remote areas. Given the difficulties involved with email and IM counselling and the low level of competence counsellors see themselves having in the use of technology of counselling, this might best involve the use of the telephone and nurturing other rural face-to-face counselling contacts.

The majority of counsellors associated with the ACA read practitioner-related journals and do not engage in scholarship development or research. The ACA could be encouraged to support the development of an Australian counselling research culture. This may involve encouraging counselling research by publishing it in *Counselling Australia* or advertising available funding possibilities for research projects in the journal. Academics involved with counselling scholarship could be targeted in a membership drive campaign detailing the advantages of membership in the ACA. Such a campaign could also have an impact on student memberships as well.

Finally, the ACA is encouraged to continue its examination of the counsellors whom it represents directly and by association. Such continuing examination is likely to help the ACA determine who they represent as counsellors in Australia and better meet the needs of these counsellors. It will thus enable them to respond to the needs of the Australian public.

Conclusion

ACA associated counsellors tend to be female, mature, Caucasian, married or partnered, heterosexual, and have families. ACA associated counsellors are educated professionals who hold a variety of qualifications and are experienced service providers. ACA associated counsellors are involved in professional development activities, including supervision, and indicate an awareness of the limits of their competence areas. They are mostly generalists working part-time in private practice and serve a variety of clients.

Who will the ACA represent in five or ten years? Possibly ACA associated counsellors will become a further diversified group of individuals, representing more fully the diverse characteristics of Australian society. Hopefully, this group of counsellors will stay involved in professional development activities and continue to serve a broad section of Australian clients. It is also hoped that this group can increase its scholarly involvement, thus helping to develop a counselling research culture in Australia.

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