

# Conceptualisations of deliberate self-harm as it occurs within the context of Pacific populations living in New Zealand

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This study explored Pasifika peoples' understandings of Deliberate Self-Harm (DSH) based on the perspective of Pacific health professionals in New Zealand. A total of 20 informants were interviewed using semi-structured Talanoa methods. Informants held professional roles in the mental health, social and addiction sectors in Auckland, (female,  $n = 10$ , male,  $n = 10$ ). DSH was defined as an intentional act of inflicting harm to the physical, mental or spiritual self, and served separate functions from suicidal intent. DSH was defined to include both direct self-harm, as well as indirect forms of self-harm over time including, alcohol and drug misuse, gambling, self-starvation and risk taking behaviours. Intentional harm to the spiritual or the mental self included deliberate disconnection from spiritual faith and holding adverse perspectives and worldviews.

Conclusion: Based on the findings it is recommended that a) DSH may be acknowledged as a behaviour that can be separated from suicide in terms of functionality, b) the present clinical DSH diagnosis criteria should include Pacific definitions of DSH, c) best-practice clinical treatment guidelines should accordingly be reviewed to incorporate treatment that encapsulate DSH behaviours relevant to Pacific people, and finally, d) researchers need to adopt operational definitions that reflects Pacific conceptualisations of DSH when conducting studies with Pacific communities in New Zealand.

Keywords: Deliberate Self Harm, DSH, Non-suicidal self-injury, Self-harm, Pacific peoples, Ethnic minorities, and Indigenous peoples

## Introduction

Deliberate self-harm (DSH) is the strongest predictor for eventual death by suicide with recent figures indicating that associated costs to the health system are approximately \$25 million (Ministry of Health, MOH: 2014). While the adverse impacts of DSH on Pacific populations are notable (MOH, 2014; Hatcher, Sharon, & Collins, 2009), clinical definitions of DSH do not consider Pacific perspectives. This reflects the wider gap in the existing body of knowledge around DSH in Pacific populations, pointing to the need to consider conceptualisations that more closely reflect their unique cultural perspectives. The inclusion of an official Pacific definition of DSH would better inform research, risk assessments, symptomatology documentation, clinical diagnosis and consistent communications between professionals, regarding Pacific clients (De Leo, Burgis, Bertolote, Kerkof, & Bille-Brahe, 2006; Muehrer, 1995). The aims of the present study were to a) explore Pacific mental health and addiction professionals' (working in New Zealand) understandings and perceptions of DSH, and b) to identify a Pacific- relevant definition of DSH based on these health professionals' perspectives and understandings.

## Literature definition(s) of DSH

The literature presents differing views on whether DSH and suicide are different levels of the same behavior continuum or are separate behaviours entirely (Farrelly & Francis, 2009; De

Leo et al., 2006). The two dominant DSH paradigms that are widely adopted by researchers and clinicians include:

- a) DSH irrespective of intent (commonly referred to as 'self-harm')
- b) DSH without suicidal intent (referred to as 'non-suicidal self-injury' or NSSI) (Latimer, Meade & Tennant, 2013).

Both paradigms consider DSH as a subtype of self-destructive behaviour(s) that are self-initiated, intentional, and causes direct or immediate injuries to the self, with non-fatal outcomes (Associate MOH, 2006; Latimer, Meade, & Tennant, 2013; Lundh, Karim, & Quilisch, 2007; Fortune, 2006). Both paradigms exclude self-destructive behaviours considered indirect, that cause physical harm over time such as, substance abuse or eating disorders; those associated with cognitive disability, episodes of psychosis, and acts of self-harm that are considered culturally or religiously sanctioned (Gratz, 2006; Fortune, Seymour, & Lambie, 2005; Lundh et al., 2007; De Leo et al., 2006).

## Diagnostic Statistical Manual of Mental Disorders and DSH

Efforts to promote more accurate comparisons across clinical diagnoses and between studies, had seen the inclusion of NSSI and suicidal behaviour in section III of the most recently released Diagnostic Statistical Manual of Mental Health Disorders-5 (DSM5) (Muehlenkamp et al., 2012). Previously, DSH (encompassing of NSSI and self-harm) was only

considered as a symptom of Borderline Personality Disorder (BPD) in earlier versions of the DSM and in the International Statistical Classification of Diseases and Related Health Problems Manual (Fox, 2004). Subsequently, the inclusion of NSSI and suicidal behaviour as proposed distinctive disorders in the DSM-5, therefore reflects an attempt to classify DSH as being either with or without the intent to die (Muehlenkamp et al., 2012).

The merit for the inclusion of DSH, more specifically, NSSI and suicidal behaviour in the DSM-5 was also in part based on recent evidence that suggests that the methods of DSH most associated with NSSI may form a distinct grouping of behaviour on a DSH continuum (Ougrin & Zundel, 2009, Latimer et al., 2013). Findings have shown that multiple incidents of NSSI were reported more frequently than attempted suicide or completed suicides indicating a need for a 'new' category (Muehlenkamp, 2005; Jacobson & Gould, 2007). For these reasons, the DSM-5 now includes NSSI and Suicidal behaviour in section III, 'Emerging Measures and Models of the DSM-5' manual under the heading 'Condition for Further Studies' among other disorders including internet gaming disorder (APA, 2013).

The inclusion of NSSI and Suicidal behaviour and other proposed disorders in section III and not in section II (diagnostic criteria and codes) acknowledges that at the point of publication there was insufficient evidence to warrant the inclusion of these disorders as official mental disorder diagnoses in Section II. It is for this reason that the proposed criteria are not to be used for making diagnosis in clinical practice, instead it is hoped it will encourage further research and to make available a shared language for researchers and clinicians investigating these disorders (APA, 2013). It is expected that future research would allow the field to better understand these conditions and will inform decisions about possible placement of these conditions in forthcoming editions of DSM (APA, 2013). The present study aims to contribute to this 'emergent' research by drawing on understandings of NSSI from the perspectives of clinicians working with the Pacific Island population in New Zealand.

According to the DSM-5, the diagnostic difference between NSSI from suicidal behaviour disorder is based on the stated goal to experience relief from tension, anxiety, and self-reproach (APA, 2013). To meet the DSM-5 criteria for NSSI disorders, an individual has to have deliberately inflicted injury to the surface of their body without suicidal intent, on five or more occasions within the past year (APA, 2013). This relatively recent movement in the field also reflects the growing body of empirical evidence that states that NSSI serves multiple non-suicidal functions, which are interrelated, and more than one may apply to a given person (Claes & Vandereyckan, 2007).

#### *DSH of Pacific people in New Zealand (NZ)*

According to the annual NZ Ministry of Health (MOH) Suicide Facts publication, 'Deaths and Intentional Self-harm Hospitalisations' (MOH, 2014) there were 2,647 intentional self-harm hospitalisations equating to a total of 61.1 hospitalisations per 100,000 population (age standardised) in 2011 (MOH, 2014). For Maori, there were a total of 463 intentional self-harm hospitalisations, a total of 92 for

Pacific, and a total of 2013 for non-Maori/non-PI (MOH, 2014). Official prevalence rates in New Zealand are however an underestimation as the official data accounts only for incidents when hospital admission was greater than two days (MOH, 2014; Hatcher et al., 2009). These rates exclude DSH presentations to general practices, private clinics, and those treated by traditional healers; or DSH presentations to school and tertiary counselling health centers, NGOs and other community based social services (Tiatia & Coggan, 2001; Hatcher et al., 2009).

Various community data further indicates that DSH among Pacific youth are relatively common. Approximately 29 percent of Pacific female students and 17 percent of Pacific male students reported having deliberately harmed themselves in the last 12 months (Helu et al., 2009). DSH is more common among youth with a mean age of onset varying between 10 years and 17 years old with the behaviour peaking in the 15 to 19 age group (MOH, 2014). Furthermore, rates are highest among the psychiatric patients. Community studies investigating adolescents suggests that rates of DSH for this cohort have been stable, and has not increased, although the rates are high (MOH, 2014).

#### *Western versus Non-Western paradigms of DSH*

Presently, there is no documented literature about DSH (NSSI & Self Harm) behaviours specific to the Pacific population living in NZ with literature being dominated by Western paradigms and/or a focus on attempted and completed suicide (Hatcher et al., 2009; Tiatia & Coggan, 2001; Tiatia, 2003). In relation however, suicide ideations and attempts are higher in Pacific peoples compared to all other ethnicities, with New Zealand-born Pacific people showing the highest rate (Brown et al., 2006). This gives a strong reasoning to investigate DSH from a Pacific perspective. Furthermore, there are some studies indicating that there are cultural nuances in defining what constitutes suicidal and self-harming behaviour, as well as cultural differences in attitudes toward suicide and self-harm (De Leo et al., 2006; Farrelly & Francis, 2009).

Studies outside of New Zealand and the Pacific Islands have found differences in what is considered as self-harming behaviour between indigenous and non-indigenous populations. In Australia for example, differences related to risk factors, beliefs and understandings of suicidal behavior, and responses to interventions were found to differ between Aboriginal and non-Aboriginal communities (Tatz, 1999; Tatz 2001; Farrelly, 2004; Farrelly & Francis, 2009). Some aspects of how Aboriginal communities defined DSH paralleled Western definitions, in that they similarly include behaviours that are self-initiated, intentional, and cause direct or immediate injuries to the self. Other aspects however included gradual methods of DSH including; hitting of the head with or on something, burning, cutting of hair, and self-destructive behaviours (Farrelly et al., 2009).

Further, Tatz (1999) and Hunter, Reser, Baird and Reser (2001) found that Aboriginal DSH behaviours included cases of self-tattooing and "slashing up" or cutting with broken bottles, knives, or razor blades. Aboriginal communities in Shoalhaven and Illawarra identified haircutting as self-harming behaviour, despite its integral part of traditional cultural rituals.

When the individual's intention was identified as wanting to achieve adverse alterations to their physical appearance it was viewed as a form of self-harming. Farrelly & Francis (2009) consequently recommended that mental health service provision and training institutions need to incorporate cultural aspects related to Aboriginal understanding of, and attitudes towards suicide and self-harm to minimise the risk of misdiagnoses (Farrelly et al., 2009). With relevance to the present study, these studies' findings give strong support for the need to also explore Pacific understandings of DSH which (when they have been identified as suicidal behaviour) have also shown unique differences compared to the non-Pacific perspectives (Farrelly et al., 2009).

Moreover, support for exploring the possibility that there are differing views on DSH between Pacific and non-Pacific peoples are suggested by the fact that there are fundamental paradigm differences between Pacific and non-Pacific people's views on health and wellbeing. Many Pacific people view mental health holistically as represented in the Fonofale model of health. This incorporates Pacific people's beliefs and values regarding family, culture and spirituality as components of health (Pulotu-Endemann, Annandale, & Instone, 2004; Pulotu-Endemann, 2001; MOH, 1995). Mental illness is perceived in a broader context, as an imbalance derived from key relationships between the individual, family, nature and spiritual realms (Pulotu-endemann et al., 2004). For many Pacific people, mental illness is understood as a manifestation of an external spiritual force or ancestral spirits who have taken possession of the person (MoH, 2008; Tamasese, Peteru, & Waldergrave, 2005). As such, the present study documents Pacific understandings of DSH that reflects the unique cultural perspectives of DSH as it occurs within a Pacific context in New Zealand. A Pacific definition of DSH will assist researchers and clinicians in reaching more accurate conceptualisation of issues that are affecting Pacific clients.

## **Methods**

Talanoa methods were applied given the sensitive nature of DSH and applicability to Pacific populations as a way to explore ideas. Talanoa is as face-to-face dialogue and the exchange of formal or informal truths that is rooted in the oral tradition of Pacific societies and is aligned with the inherent way of engaging in social conversations for Pacific people (Vaioleti, 2006). It is considered as a phenomenological approach in that its' processes are explorative, interpretive and centered on understanding the meaning and experiences of the phenomenon under investigation, and assigned to it by the participants (Vaioleti, 2006). Talanoa yields interrelated information that surfaces, while recognising the importance of people's experiences, within their cultural contexts. The concept is suited to all distinct nations that make up the Pacific Islands, although there may be some local variations (Vaioleti, 2006).

To extend Talanoa into a cultural research methodology, Vaioleti (2006) weaves into the research process Kakala. This is a Pacific learning and teaching concept (Helu-Thaman, 1997), together with Pacific research protocols, or ethics. The integration of Kakala within the research process is comparable to qualitative research approach of grounded theory. Talanoa

connects the researcher and the participants' theorisation of the research topic or issue. The knowledge derived from the process of Talanoa is what tui kakala will integrate and weave to make authentic knowledge, of which valid solutions for Pacific issues can be found (Vaioleti, 2006).

Tui kakala involves three different stages, Toli, Tui, and Luva. First, the researcher must toli (picking or collecting). During this stage the issue to be researched and the information that will be generated by Talanoa will determine the knowledge or solution sought and the community that the research is to benefit (Vaioleti, 2006). Tui is the second stage in the research process in which the stories, spirits and emotions from the deep Talanoa encounters are arranged and woven further. This is the point in which the knowledge yielded from Talanoa with participants, is integrated and synthesised. The cultural and technical skills of the researcher are important in determining the type and amount of information used. During Tui, the data is arranged in relation to each other and how they are presented will determine the authenticity, relevance and usefulness of the research findings (Vaioleti, 2006). Luva is the final stage of the research process where the knowledge is shared for the benefit of the community. The researcher and respective institutions are expected to pass on the knowledge so that others, particularly the participants and their respective Pacific communities, can benefit from it (Vaioleti, 2006).

Talanoa emphasises the importance of participants and researchers sharing their personal experiences and knowledge about the issue being explored. Through Talanoa, this develops and maintains ethical research relationships with Pacific participants which creates valid and authentic knowledge. Talanoa requires that the researchers reflect on personal, historical and cultural experiences which may shape the interpretation of the findings (Vaioleti, 2006). It is acknowledged that the principal investigator (and also first author's) personal experiences and awareness of theoretical understandings of DSH in the literature, may influence the way in which she collected and interpreted the data (Health Research Council, 2014, 2005; Vaioleti, 2006).

## *Participants*

Purposive sampling was employed to select suitable participants (Tongco, 2007). Participants were recruited specifically from Pacific services within the Waitemata and Counties Manukau District Health Boards, Pacific and Mainstream Mental Health, Alcohol and Drug Services, Non-Government Social Work and Addiction Treatment Services, Pacific Disability, and the Mental Health and Welfare to Work Charitable Organisations in the Auckland Region. The eligibility criteria were as follows, participants needed to be: 1) of Pacific descent, 2) have current or previous experience working in the mental health or related sector, 3) over the age of 18 years and 4), English-speaking (proficient enough to not require a translator), 5) have worked with Pacific clients and their families, within their respective roles.

Nineteen face to-face semi-structured *Talanoa* interviews (one was a combined interview with two key informants) were completed. Semi-structured interviews allowed for the exploration of predetermined subject areas, with the flexibility for any new areas to be followed if they arose (Buetow, 2007).

The sample size of twenty key informants (50% female) was deemed to have produced data saturation in that no new information emerged.

*Procedure*

The Toli Stage in which the Kakala process is extends the Talanoa process informed the data collection procedure for this study. In line with the Pacific research protocol of “Faka’apa’apa (respectful, humble and considerate)” (Vaioleti, 2006), Talanoa with key informants were undertaken at times and venues most suitable for participants. These included, meeting rooms and offices of key informant’s workplaces, home, cafes, and event centres. Before the Talanoa were carried out, the researcher and key informant took the time to connect through sharing and catching-up. This initial stage of the Talanoa process allowed the opportunity for the researcher and key informant to reconnect or get to know each-other, build trust and set the appropriate context for the Talanoa that is to follow (Vaioleti, 2006). Once the time felt right and the context was set, the research was explained to participants including their rights and how their confidentiality and privacy would be protected. Key informants completed and signed consent forms. The interviews were digitally recorded lasting

on average between 110 and 130 minutes.

The principle of reciprocity is an important component to incorporate within the data collection process when carrying out research with Pacific cultures. Accordingly, participants were compensated for their time and support of the research project with a \$20 petrol voucher plus a small gift valued at \$10 dollars at the end of the Talanoa. This protocol is considered an essential principle in developing and maintaining ethical research relationships with Pacific peoples when carrying out research studies with Pacific populations groups (Health Research Council, 2014, 2005; Tamasese, Sullivan & Waldergrave, 2010; Vaioleti, 2006). Light refreshments were also provided during the Talanoa. Additionally, ongoing demonstration of reciprocity by the researcher was shown in her sharing of general public and mental health information if asked by the informant. Where appropriate, the researcher supported participant’s work related projects, events and/or study endeavours, upon request and through initiation of participant’s and/or their organisation.

*Analysis*

An inductive approach was utilised for analysis of the interview information (Thomas, 2006). The computer

Table 1. Informants Demographics

ID	Designation	Ethnicity	Gender	Organisation
P1	Social Worker (School)	Samoan/Chinese	Male	NGO
P2	Youth Development Coordinator	Fijian/European	Female	NGO
P3	Psychotherapist	Pacific Island	Male	PMHS/DHB
P4	<i>Matua</i> Leader	Samoan	Male	PMHS/DHB
P5	Psychologist/ Social Worker	Samoan	Female	PMHS/NGO
P6	Service Co-coordinator	Tokelauan	Male	PMHS/NGO
P7	Youth Practitioner	Tokelauan/ Tuvaluan	Female	ADS/NGO
P8	Community Support Worker	Tongan	Female	PMHS/NGO
P9	Community Support Worker	Samoan	Male	PMHS/NGO
P10	Clinical Psychologist	Tongan	Female	Pacific/NGO
P11	Community Support Worker	Cook Island	Male	PMHS/NGO
P12	Alcohol & Other Drug (AOD) Clinician	Niuean/ Samoan	Male	PADS
P13	Mental Health Nurse	Niuean	Female	PMHS/DHB
P14	AOD Clinician	Fijian	Female	ADS
P15	AOD Clinician /Mental Health Nurse	Fijian	Female	ADS
P16	Community Support Worker	Tongan	Male	PMHS/DHB
P17	Counsellor/ Community Support Worker	Niuean	Female	PMHS/NGO
P18	Senior Practitioner	Tuvaluan	Male	PMHS/DHB
P19	Social Worker/Clinician	Cook Island	Female	PMHS/DHB
P20	Occupational Therapist	Niuean/Samoan	Male	CYMHS/DHB

software 'Nvivo' was used to store, code and analyse the data. Consistency checking of themes involved two additional independent coders who reviewed whether samples of the text were appropriately themed by the researcher. It was found that there was a consistent agreement of themes. Where there were minor differences in judgement, an agreement was made on the most appropriate allocation of data to themes.

### *Findings and discussion*

There was a general consensus by the informants that a definition of DSH based on experiences, ideologies, worldviews and beliefs specific to Pacific populations is needed. Existing dominant Western definitions were thought to not be fully representative of Pacific peoples' understandings of DSH. It was felt that this posed the risk of invalidating Pacific experiences and failed to accurately identify the service and support needs of Pacific clients and their families.

Based on the findings from the study, the following definition has emerged that incorporates the differences identified by informants in how Pacific health professionals understand DSH as well as the similarities also identified by informants from the Western perspective:

Deliberate Self-Harm (DSH) is an intentional act of inflicting harm to the physical, mental or spiritual self that serves separate functions from suicidal intent. DSH behaviours can include both direct and immediate self-injury as well as indirect forms of self-harm causing long-term negative consequences. These behaviours include alcohol and drug misuse, gambling, self-starvation and risk taking behaviours. Additionally, DSH includes intentional harm to the spiritual or the mental self, including deliberate disconnection from spiritual faith and holding negative self, cultural and life perspectives.

### *Informants' conceptualisations of DSH behaviours*

Conceptualisations were contingent upon personal and professional understandings of DSH behaviour. This included experiences with supporting Pacific clients, families and communities affected by DSH. All informants' identified DSH to comprise of physical, non-physical and indirect forms. DSH included all deliberate infliction of physical injury to the self, resulting in superficial injuries and non-fatal outcomes. Cutting was the most common DSH method described. Cutting was predominantly superficial and commonly inflicted on certain areas of the body. Other examples of DSH methods that emerged from informants' definition of physical DSH behaviours included; overdosing, scratching, excessive biting of the nails, punching the wall, pulling out your own hair and tattooing to harm and alter one's appearance.

Most DSH methods that appeared from informants' responses, were aligned with methods framed by Pattison and Kahan (1983); Simeon and Favazza (2001) and the DSM-5 (APA, 2013). The physical dimension of DSH that emerged largely aligned with the category of superficial moderate, low lethality, multiple episodes and direct forms of self-destructive behaviours, as outlined in Pattison and Kahan's (1983) system for the classification of self-destructive behaviours. This system categorises DSH behaviours based on the directness of the methods used, frequency of episodes and level of lethality of the behaviour (Pattison & Kahan, 1983; Favazza & Conterio,

1998). Informants' definition of the physical dimension of DSH, also aligned with Favazza & Rosenthal's (1993) category of 'Impulsive Self-Mutilation Behaviours'. This category is characterised by skin cutting, burning, severe scratching, needle sticking, and interference with wound healing (Simeon & Favazza, 2011).

Informant's noted that some DSH methods that were used by Pacific clients reflected behaviours defined in existing Western-based DSH literature, while other DSH methods were behaviours suggested as unique to Pacific cultures. These behaviours included; punching of the wall and overdosing. Favazza (2001) argues that overdosing and swallowing of objects are excluded from the category of 'superficial moderate impulsive self-mutilation' as these types of DSH behaviours do not necessarily involve direct methods of effecting body tissues. Klonsky (2007), indicates on the other hand, that the parameters of DSH categorisation are not clear-cut because behaviours that usually fall-outside the boundaries of self-injury may in fact represent self-injury, if it is carried out with the conscious and explicit intent to cause tissue damage.

One participant identified self-tattooing for the purpose of changing one's appearance as DSH. Tattooing is not typically considered self-injury because it is generally seen as culturally sanctioned forms of behaviour (Favazza, 1993, Simeon & Favazza, 2001). While tattooing holds a traditional place in Pacific cultures, when performed for self-injury or to change one's appearance, without the traditional protocols or permissions, then it also may be considered as DSH. This form of DSH needs to be explored in future studies to ascertain how common it may be.

### *Emotional and Spiritual DSH behaviours*

A number of informants felt that unlike existing Western-based literature, DSH extended beyond merely inflicting intentional harm to the physical self, but also comprised of harm to the mental or spiritual self. Examples included, deliberate disconnection from spiritual faith, feeling spiritually dead or useless, feeling hopeless, being teary, having a negative perspective of everything, and "the thoughts of doing it" (self-harming). This finding specifically reflected the concept of 'holistic health' which embodies Pacific Island people's understandings of health, whereby the mental, spiritual and the physical are seen as all interrelated and interdependent, rather than separate and distinct entities (MOH, 2014; Mental Health Commission, 2001). The wider literature however does not include this cultural perspective and instead identifies such behaviours as atypical symptoms of mental disorders, more specifically, affect disorders. The DSM-5 criteria for major depressive disorder and depressive episodes for example, includes, loss of interest or pleasure in daily activities, feels sad or empty, appears tearful and feelings of worthlessness (APA, 2013). At the same time, affect disorders such as depression were connected to DSH as it was commonly reported in research findings as major psychological features that are strongly associated with increased risk of engaging in DSH behaviours (Brunner, Kaess, Parzer, Fischer, Carli, Hoven, & Apter, 2014; McCarthy-Hoffbauer, 2006).

### *Indirect DSH Behaviours*

Typically, informants' accounts of the motives or function of DSH behaviours identified DSH as non-suicidal in intent, and aligned with those presented in the NSSI literature and the DSM-5. DSH was commonly viewed by informants as a means for individuals to express, cope and relieve overwhelming emotional distress. Responses also suggested that DSH served other non-suicidal functions, including; to seek attention or influence others, as a cry for help, to feel alive, to stop suicidal thoughts and plans, they were influenced by others, to punish the self, and to stop oneself from hurting another person. These perceptions are consistent with the NSSI Paradigm of DSH, which is largely adopted by researchers and clinicians in North America and Canada. This paradigm defines DSH as the direct, deliberate destruction of one's own body tissue without conscious suicidal intent but performed for emotion regulation functions or other non-suicidal motivations (Favazza, 1998; Gratz, 2001; Skegg, 2005; Martin, Swannell, Hazell, Harrison, Taylor, 2010; Halstead, Pavkov, Hecker, & Seliner, 2012).

#### *A Cry for Help or to Seek Attention*

Many participants expressed DSH may be a signal for help without being overt, or driven by attention seeking motivations to get attention. Informants indicated that some Pacific families believed their family member was motivated to use self-harming "as bait" to obtain sympathy or material possessions.

#### *To feel "alive"*

DSH was perceived by some informants as a way for the individual "to feel alive" or to "feel reality" or "something". These sensations were sought to diminish other feelings of emotional numbness. This functional explanation echoes the 'sensation seeking model' of DSH presented in the literature (Klonsky, 2007; Himber, 1994). DSH is said to stimulate a sense of reality from a state of emotional and experiential numbness (Himber, 1994) or to generate feelings of acceleration or excitement (Klonsky, 2007). One participant theorised that this function could result in a reinforcement cycle, whereby the individual becomes dependent on the perceived benefits. Consequently, the DSH behaviour could increase and be maintained in such a manner. This theory can be explained by way of the 'environmental model' which posits that NSSI creates environmental responses that are reinforcing to the individual, while simultaneously serving the needs of the environment, by sublimating and expressing inexpressible and threatening conflicts and taking responsibilities for them (Suyemoto, 1998).

#### *To stop suicidal thoughts and plan*

One participant indicated that DSH sometimes served to manage suicidal ideations and plans. The informant explained that some of her clients would talk about how they would cut themselves to find relief from the suicidal thoughts they were having to stop themselves from following through with the plan. Klonsky (2007) and Suyemoto (1998) identifies this function of DSH behaviour as the 'anti-suicide' model. According to this model, DSH serves a function of inhibiting suicidal thoughts and planning, it serves to replace, compromise with, or avoid the impulse to commit suicide.

The DSH act represents a suicide replacement, and, as a compromise between life and death drives.

#### *DSH influenced by others*

According to the informants, DSH may be due to the influence of others. It was reported that some Pacific clients shared that they copied, or were encouraged by their friends to engage in DSH behaviours to "get rid of the pain". This function of DSH is supported by findings from previous studies that examined the association of DSH and social, peer and media influence (Mendiola, 2011; Beautrais, 2000a; De Leo et al., 2004). Literature shows there may be a social clustering of NSSI due to genetic and/or social learning factors, whereby the self-harming individual may have learnt poor coping strategies from significant others (Fortune et al., 2005; Muehlenkamp, Claes, Havertape, & Plener, 2012). However, one participant in the present study was uncertain about the notion of DSH as a learnt behaviour or copycat behaviour. They felt that it was "not that simple" and decisions to engage in DSH may be more motivated by other underlying reasons.

#### *To Punish the Self*

Self-punishment was explained as the act of inflicting physical injury in attempt to punish themselves or hurt their appearance and alter depressive feelings, low self-image or low self-esteem. Self-punishment was a salient function of DSH identified in the literature. Klonsky (2007) theorises that for some individuals, DSH is performed as a way to express anger towards oneself. This function of DSH aligns with evidence from psychiatric patients whereby DSH was carried out as a form of punishment (Himber, 1994).

#### *To Stop Oneself from Hurting another Person and Domestic Violence*

Instances were described by one informant in which the victim or the perpetrator would engage in DSH behaviours as a result of family violence. For example' one Pacific male partner resorted to DSH (e.g. punching the wall) to prevent themselves from physically hurting their female partner or wife. It was reasoned that this was seen as an alternative to engaging in full-blown family violence, as they were aware it is considered a crime in New Zealand. This particular function of DSH was not identified in the literature, however there are studies that suggesting family violence is an associated risk and precipitating factor for DSH behaviours (Chowdhury, Brahma; Banerjee, & Biswas, 2009; Vivekananda, 2000; Faleafa et al., 2007). Relatedly, it emerged from several informants that for some Pacific women experiencing domestic violence, self-harm was a coping mechanism. This finding provides support for the association of DSH and experiences of domestic violence experienced by women in other countries (Chowdhury et al., 2009).

#### *Suicide vs. DSH*

The majority of the informants differentiated DSH from suicidal behaviour based on the perceived function or motive of the behaviour. DSH was understood as non-suicidal in intent, whereas suicidal behaviour was identified as the point whereby the individual contemplated, attempted or succeeded in ending their own life. While the two behaviours

serve different functions, they were perceived as intrinsically related on the same behaviour continuum. This finding reflects previous research that identified DSH and suicide behaviours as different levels of the same behaviour on a continuum (Gair & Camilleri, 2000; Winchel, Molcho, Simeon, & Standley, 1992).

#### *DSH a Precursor to Suicide Behaviour*

While informants recognised that DSH serves non-suicidal functions and should be distinguished from suicidal behaviour based on function, they concurrently referred to both behaviours to illustrate the issues surrounding DSH. It was acknowledged by informants that it was not always easy to determine with certainty the motivation of the DSH act (with intent or without intent to suicide). This ambiguity related to intention of some DSH incidents meant that all presentations were dealt with very seriously and most informants considered DSH behaviour as a potential precursor to suicidal behaviour. DSH was seen as a leading point on the continuum, the beginning of a behaviour repertoire that may lead to suicide if not addressed. The evidence supports health professionals caution that DSH is one of the strongest predictors and the most important risk factor for eventual death by suicide (Ougrin & Boege, 2013; Nock, Joiner, Gordon, Lloyd-Richardson, & Prinstein., 2006; Sornberger et al., 2012).

DSH may increase risk for suicide, because those who engage in DSH may habituate themselves to the pain and fear associated with DSH and therefore they attain the capability to attempt or complete suicide (Nock et al., 2006). On the other hand, some informants shared that the continuum did not always represent a linear pathway to suicide, as some people may self-harm for the rest of their lives and do not move onto suicidal behaviour, whereas others do not engage with DSH but go straight to attempting or completing suicide.

#### *Families and Communities' Understandings of DSH*

Accounts revealed an agreement by informants that self-harming behaviours were generally difficult for Pacific people to understand, particularly for the Island born older generations. This may have been due to their religious beliefs and values. A few informants explained that as Christians the body is perceived as a gift from God, something that is sacred and 'tapu' and therefore should not be subjected to such treatments. As a consequence DSH is generally seen as an unacceptable behaviour that goes against their Christian values and beliefs.

Despite this struggle by Pacific people to understand DSH behaviours, many of the informants reported that they have had Pacific families that, in a similar way they view other mental illnesses, have associated the DSH behaviour of their person as being cultural and spiritual. Families of some clients attribute the DSH of their young person to an intergenerational "curse" in the family, inherited or passed down through family bloodlines. This finding supports the holistic view of mental illness that is best represented by the Fonofale model of health previously discussed whereby mental illness is understood as an imbalance that may be occurring as a result of breaches of certain customs or sacred relationships between an individual and their family and the natural and spirit realms (Pulotu-

Endemann et al., 2004, Tamasese et al., 2005; MoH, 2008).

Further, a few of the informants spoke of how some Pacific families would view DSH behaviours as a form of attention seeking. It was thought that this perceived understanding may be a result of the way that Pacific people are socialised and brought up to tolerate and be resilient in the face of hardship. Thus, it was felt by these informants that the notion of resilience held by Pacific Island people contributed to the difficulty in understanding DSH behaviour by some of the older generation.

It was explained by many informants that Pacific people were more able to identify with completed suicide and suicide attempts rather than DSH. It was felt that this may be because such behaviours were not always possible to be concealed and thus most incidents of suicide and suicide attempt such as hanging and shooting oneself were widely known about and affects everyone. In contrast, it was felt that the struggle for Pacific people to understand DSH behaviour such as cutting and other superficial methods may be because incidents of DSH were not frequently known about as they are typically concealed. Moreover, one informant spoke of how DSH was understood by some of Pacific families as a way to prepare for suicide, as their child's lead up to attempting suicide.

These aforementioned findings supports claims that Pacific peoples' views of DSH or suicidal behaviour tended to be different to those of Western views, specifically, that this behaviour may be understood in relation to spiritual and cultural factors (Beautrais, 2005). This is supported by De Leo et al (2006) and Farrelly and Francis (2009) who found cultural differences in how DSH and suicidal behaviour is understood by indigenous populations.

#### *DSH in the Islands or a Western Influenced Behaviour*

Mixed opinions were shared on whether DSH was a Western-influenced behaviour, which has been indicated by some Pacific Island people, particularly, older cohorts. While some informants could not identify with DSH behaviours such as 'cutting' in respective motherlands, other informants felt that it was definitely a behaviour that does in fact happen in the Islands. Informants indicated that DSH behaviours of Pacific peoples in New Zealand were thought of to be determined to an extent by Western influences, it was noted that other factors also contributed such as, media influences, relationship issues and acculturation. Available Pacific Island-based research is limited in that it focuses on reports primarily on prevalence of completed suicide and non-fatal suicidal behaviour (NFSB: De Leo et al., 2013; Aghanwa, 2004; 2000; 2001). On the other hand, there is evidence to suggest that the stresses of acculturation are associated with increased risk for DSH behaviours for migrants (Escobar, Constanza, Hoyos, Nervi, & Gara, 2000).

#### *DSH and demography (age and gender)*

For informants that have supported older Pacific clients with DSH behaviours, these clients' ages were estimated to range between 30 and 50. One participant shared that the number of young people presenting with DSH at their Pacific mental health service has stabilised. Conversely, informants observed that it was the older age cohort that were showing

an increase in presenting with self-harming behaviours.

According to informants' DSH behaviours among Pacific occurred across genders. One participant on the other hand felt that DSH was increasing among Pacific young girls here in NZ compared to those in the Islands. She also indicated that official rates may not be as high as were occurring in NZ-European girls, but she believed that the rate was climbing. In addition, a few participants spoke of a gender and age difference in the methods of DSH that their Pacific clients were presenting with. For instance, it was reported that it was the young girls that were mostly presenting with cutting behaviours. The Pacific boys on the other hand were mostly engaging in indirect types of self-harming behaviours such as substance misuse and risk-taking behaviours. One participant suggested that Pacific boys were engaging in more subtle methods of self-harming with the intent to take their own life compared to girls.

### Study Limitations

Due to the sensitive nature of DSH it was decided that Pacific mental health, addiction and social service professionals were the most appropriate cohort to address the research objectives, thus informants were selected from a professional cohort of Pacific community in New Zealand. Therefore, it is acknowledged that informants' perspectives on how they may think Pacific clients, families and communities understand DSH, may or may not accurately reflect the views of Pacific people in New Zealand. Additionally, the informants in the present study may have only been restricted to treating a subset of clients. Specifically, those who are accessing support. This experience may exclude those who do not disclose their illness. The participants may mainly be treating those clients whose self-injuring may be severe, or long term, compared to a wider scope of individuals who may engage in DSH less frequently. This may have affected participants' conceptualisations of DSH. Another limitation is that, while the informants were all of Pacific descent and identified strongly with their Pacific culture, they were all based in the Auckland region. Therefore, some findings may be subject to regional differences, such as the informants' perception on prevalence of DSH and associated risk factors. Finally, this study was not informed by Pacific clients and their families, thus it may not provide a true insight into clients and families actual experiences of DSH.

### Recommendations

The present study indicates that overarching, existing mainstream mental health, addiction, social clinicians and researchers, need to incorporate more inclusive definitions into clinical practice, research, and prevention programmes. Inclusion criteria specific to Pacific, for the behaviours and functionality of DSH, were identified in the present study that can be utilised for this purpose. Professionals and researchers are therefore recommended to consider behaviours that may incorporate cultural understandings of what it means to have overall health and wellbeing in Pacific cultures that could be viewed from the Fonofale model of health perspective. These behaviours include those that adversely impacted an individual's family and social relationships, as well as affecting spiritual, physical and emotional balance. While

some physical factors of DSH such as cutting and overdosing parallel Western concepts, others such as attempting to alter physical appearance, drinking, drug taking, smoking and putting oneself in harm's way were outside of this. Harm to the emotional and spiritual self were identified in the present study as non-compliance with important family events, rejecting the church and negative self-talk. Engaging in these self-destructive physical, emotional and spiritual forms of DSH would most likely lead to upsetting of the valued state of relational harmony as is integral to traditional Pacific identity.

An important finding from this study was that clients often engaged in DSH behaviours without any suicidal intention (NSSI). The inclusion of NSSI in a large epidemiological DSH community study in NZ is recommended to capture an accurate prevalence of NSSI in non-clinical populations. This would gather vital information on the scope, motivation and maintenance of the issues among Pacific people and inform the planning and development of successful intervention and prevention.

In terms of recommendations for prevention, the supporting of continued development of community and church-based initiatives that promote the cohesion of families, culture and spirituality of Pacific people was identified by informants. It further highlights *Aiga*, or family as a core part of wellbeing for Pacific, as demonstrated in the Fonofale model. This would entail investment in the development of more Pacific tailored psychoeducation, DSH and suicide awareness programmes, and media campaigns across the diverse Pacific ethnic communities. Importantly, consultation, engagement and collaboration with respective elders, church ministers, youth leaders, community spokesperson, parents, and young people is needed to identify and inform these programmes and to ensure that they are culturally appropriate, relevant and safe for Pacific communities.

The participants in this study advocated the need to increase Pacific NGO mental health, addiction and social services, and other resources. These included increased clinical supervision for peer support, community support workers in NGO services, Pacific respite care, rehabilitation services, follow-up services for discharged self-harm clients, and Pacific after-hours support services and networks. Furthermore, the need to address the socioeconomic and acculturation factors associated with increased risk of Pacific people engaging in DSH was suggested. This would require specialised immigration support services for Pacific people migrating to New Zealand from the Pacific Islands, and the establishment of more, and continued, funding of existing youth development and social development programmes.

### Conclusion

Based on the findings from the study, a definition was synthesised that incorporates the differences identified by informants in how Pacific health professionals understand DSH as well as the similarities also identified by informants from the Western perspective: Deliberate Self-Harm (DSH) is an intentional act of inflicting harm to the physical, mental or spiritual self that serves separate functions from suicidal intent. DSH behaviours can include both direct and immediate



self-injury as well as indirect forms of self-harm causing long-term negative consequences. These behaviours include alcohol and drug misuse, gambling, self-starvation and risk taking behaviours. Additionally, DSH includes intentional harm to the spiritual or the mental self, including deliberate disconnection from spiritual faith and holding negative self, cultural and life perspectives. The availability of this revised definition of DSH that is inclusive of Pacific conceptualisations of culture, health and wellbeing will assist best-practice clinical treatment guidelines to accordingly develop relevant treatment for concepts of DSH behaviours relevant to Pacific people. It will enable more accurate data collection in the healthcare context, and finally, it will give researchers a culturally appropriate definition to refer to when conducting studies with Pacific communities in New Zealand.

## References

- American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders – 5th edition*. Washington, DC: American Psychiatric Publishing.
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52(1), 1-26.
- Bathgate, M., & Pulotu-Endemann, F. (1997). Pacific people in New Zealand. *Mental Health in New Zealand from a Public Health Perspective*. Wellington, NZ: Ministry of Health.
- Beautrais, A., Collings, S., Ehrhardt, P., & Henare, K. (2005). *Suicide prevention: A review of evidence of risk and protective factors, and points of effective intervention*. Wellington, NZ: Ministry of Health.
- Bhugra, D., Bhui, K., Desai, M., Singh, J., & Baldwin, D. (1999). The Asian cultural identity schedule: An investigation of culture and deliberate self-harm. *International Journal of Methods in Psychiatric Research*, 8(4), 212-218.
- Claes, L., & Vandereycken, W. (2007). Self-injurious behavior: Differential diagnosis and functional differentiation. *Comprehensive Psychiatry*, 48(2), 137-144.
- Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage.
- De Leo, D., Burgis, S., Bertolote, J. M., Kerkhof, A. J., & Bille-Brahe, U. (2006). Definitions of suicidal behavior: Lessons learned from the WHO/EURO multicenter study. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*, 27(1), 4.
- De Leo, D., & Heller, T. S. (2004). Who are the kids who self-harm? An Australian self-report school survey. *Medical Journal of Australia*, 181(3), 140-144.
- Faleafa, M., Lui, D., Afaaso, B., Tuipulotu, M., & Skipps-Patterson, S. (2007). *Paolo" O O'u paolo ou te malu ai" it is my people that give me shelter": Embracing our samoan communities: Suicide prevention information for people working with Samoans in niu sila*. Auckland, NZ: Mental Health Foundation of New Zealand.
- Farberow, N. L. (1980). *The many faces of suicide: Indirect self-destructive behavior*. New York: McGraw-Hill Companies.
- Farrelly, T., & Francis, K. (2009). Definitions of suicide and self-harm behavior in an Australian aboriginal community. *Suicide & Life-Threatening Behavior*, 39(2), 182-189.
- Favazza, A. R. (1989). Why patients mutilate themselves. *Hospital and Community Psychiatry*, 40(2), 137-145.
- Favazza, A. R. (1998). The coming of age of self-mutilation. *The Journal of Nervous and Mental Disease*, 186(5), 259-268.
- Favazza, A. R. (2011). *Bodies under siege: Self-mutilation, nonsuicidal self-injury, and body modification in culture and psychiatry*. Baltimore, MD: JHU Press.
- Favazza, A. R., & Conterio, K. (1988). The plight of chronic self-mutilators. *Community Mental Health Journal*, 24(1), 22-30.
- Fleming, T. M., Merry, S. N., Robinson, E. M., Denny, S. J., & Watson, P. D. (2007). Self-reported suicide attempts and associated risk and protective factors among secondary school students in New Zealand. *Australasian Psychiatry*, 41(3), 213-221.
- Fliege, H., Lee, J., Grimm, A., & Klapp, B. F. (2009). Risk factors and correlates of deliberate self-harm behavior: A systematic review. *Journal of Psychosomatic Research*, 66(6), 477-493.
- Fortune, S. (2006). An examination of cutting and other methods of DSH among children and adolescents presenting to an outpatient psychiatric clinic in New Zealand. *Clinical Child Psychology and Psychiatry*, 11(3), 407-416.
- Fortune, S., Seymour, F., & Lambie, I. (2005). Suicide behaviour in a clinical sample of children and adolescents in New Zealand. *New Zealand Journal of Psychology*, 34(3), 164-170.
- Fortune, S. A., & Hawton, K. (2005). Deliberate self-harm in children and adolescents: A research update. *Current Opinion in Psychiatry*, 18(4), 401-406.
- Gair, S., & Camilleri, P. (2000). Attempted suicide: Listening to and learning from young people. *Queensland Journal of Educational Research*, 16(2), 183-206.
- Gratz, K. L. (2001). Measurement of deliberate self-harm: Preliminary data on the deliberate self-harm inventory. *Journal of Psychopathology and Behavioral Assessment*, 23(4), 253-263.
- Greydanus, D. E., & Shek, D. (2009). Deliberate self-harm and suicide in adolescents. *Keio Journal of Medicine*, 58(3), 144 - 151.
- Halstead, R. O., Pavkov, T. W., Hecker, L. L., & Seliner, M. M. (2012). Family dynamics and self-injury behaviors: A correlation analysis. *Journal of Marital and Family Therapy*, 40(2), 246-259.
- Hatcher, S., Sharon, C., & Collins, N. (2009). Epidemiology of intentional self-harm presenting to four district health boards in New Zealand over 12 months, and comparison with official data. *Australian & New Zealand Journal of Psychiatry*, 43(7), 659-665.
- Hawton, K., & Harriss, L. (2007). Deliberate self-harm in young people: Characteristics and subsequent mortality in a 20-year cohort of patients presenting to hospital. *Journal of Clinical Psychiatry*, 68(10), 1574.
- Hawton, K., Harriss, L., Hall, S., Simkin, S., Bale, E., & Bond, A. (2003). Deliberate self-harm in Oxford, 1990-2000: A time of change in patient characteristics. *Psychological Medicine*, 33(6), 987-995.
- Hawton, K., Harriss, L., Hodder, K., Simkin, S., & Gunnell, D. (2001). The influence of the economic and social environment on deliberate self-harm and suicide: An ecological and person-based study. *Psychological Medicine*, 31(05), 827-836.
- Hawton, K., Saunders, K. E., & O'Connor, R. C. (2012). Self-harm and suicide in adolescents. *The Lancet*, 379(9834), 2373-2382.
- Helu, S., Robinson, E., Grant, S., Herd, R., & Denny, S. (2009). *Youth'07: The health and wellbeing of secondary school students in New Zealand: Results for pacific young people*. Auckland, NZ: University of Auckland.
- Himber, J. (1994). Blood rituals: Self-cutting in female psychiatric patients. *Psychotherapy*. *Psychotherapy*, (SI), 620 - 631.
- Hunter, E., Reser, J., Baird, M. & Reser, P. (2001). *An Analysis of Suicide in Indigenous Communities of Queensland: The Historical, Cultural and Symbolic Landscape*. Canberra, Australia: Commonwealth Department of Health and Aged Care.
- Klonsky, E. D., & Olino, T. M. (2008). Identifying clinically distinct subgroups of self-injurers among young adults: A latent class analysis. *Journal of Consulting and Clinical Psychology*, 76(1), 22.

- Latimer, S., Meade, T., & Tennant, A. (2013). Measuring engagement in deliberate self-harm behaviours: Psychometric evaluation of six scales. *BMC Psychiatry, 13*(1), 4.
- Linehan, M. (1993). *Cognitive-behavioral treatment of borderline personality disorder*. New York: Guilford Press.
- Lloyd-Richardson, E. E., Perrine, N., Dierker, L., & Kelley, M. L. (2007). Characteristics and functions of non-suicidal self-injury in a community sample of adolescents. *Psychological Medicine, 37*(08), 1183-1192.
- Lo, H. T., & Funf, K. P. (2003). Culturally competent psychotherapy. *Canadian Journal of Psychiatry, 48*(3), 161-170.
- Lundh, L., Karim, J., & Quilisch, E. (2007). Deliberate self-harm in 15-year-old adolescents: A pilot study with a modified version of the Deliberate Self-Harm Inventory. *Scandinavian Journal of Psychology, 48*(1), 33-41.
- McAuliffe, C., Arensman, E., Keeley, H. S., Corcoran, P., & Fitzgerald, A. P. (2007). Motives and suicide intent underlying hospital treated deliberate self-harm and their association with repetition. *Suicide and Life-Threatening Behavior, 37*(4), 397-408.
- Mendiola, C. A. (2011). *He Koha Aroha Ki Te Whanau: Deliberate Self Harm and Maori Whanau*. Doctoral thesis, University of Auckland.
- Mental Health Commission (2001). *Pacific mental health services and workforce: Moving on from the blueprint*. Wellington, NZ: Mental Health Commission.
- Mila-Schaaf, K., Robinson, E., Schaaf, D., Denny, S., & Watson, P. (2000). A health profile of pacific youth. *Australian and New Zealand Journal of Psychiatry, 39*, 136-140.
- Ministry of Business and Innovation and Employment (2013). *Pasifika labor market factsheet – March 2013*.
- Ministry of Health. (1995). *Pacific islands peoples' understanding of mental health strategic: directions for the mental health services for pacific islands people*. Wellington, NZ: Ministry of Health.
- Ministry of Health. (2013). *New Zealand health survey: Annual update of key findings 2012/13*. Wellington, NZ: Ministry of Health.
- Ministry of Health. (2014). *Suicide facts: Deaths and intentional self-harm hospitalisations 2011*. Wellington, NZ: Ministry of Health.
- Ministry of Health. (2008). *PI peoples and mental health: A paper for the pacific health and disability action plan review*. Wellington, NZ: Ministry of Health.
- Ministry of Health. (2014). *Suicide facts: Deaths and intentional self-harm hospitalisations 2011*. Wellington, NZ: Ministry of Health.
- Morey, C., Corcoran, P., Arensman, E., & Perry, I. J. (2008). The prevalence of self-reported deliberate self-harm in Irish adolescents. *BMC Public Health, 8*, 79-2458-8-79.
- Morgan, H. (1979). *Death wishes? The understanding and management of deliberate self-harm*. Chichester, UK: Wiley.
- Muehlenkamp, J. J., Claes, L., Havertape, L., & Plener, P. L. (2012). International prevalence of adolescent non-suicidal self-injury and deliberate self-harm. *Child and Adolescent Psychiatry and Mental Health, 6*(10), 1-9.
- Muehrer, P. (1995). Suicide and sexual orientation: A critical summary of recent research and directions for future research. *Suicide and Life-Threatening Behavior, 25*(s1), 72-81.
- Nafisi, N., & Stanley, B. (2007). Developing and maintaining the therapeutic alliance with self-injuring patients. *Journal of Clinical Psychology, 63*(11), 1069-1079.
- Nock, M. K. (2009). Why do people hurt themselves? New insights into the nature and functions of self-injury. *Current Directions in Psychological Science, 18*(2), 78-83.
- Nock, M. K., Joiner Jr, T. E., Gordon, K. H., Lloyd-Richardson, E., & Prinstein, M. J. (2006). Non-suicidal self-injury among adolescents: Diagnostic correlates and relation to suicide attempts. *Psychiatry Research, 144*(1), 65-72.
- Oakley Browne M, Wells J, Scott K (eds). 2006. *Te Rau Hinengaro: The New Zealand Mental Health Survey*. Wellington, NZ: Ministry of Health.
- O'Carroll, P. W., Berman, A. L., Maris, R. W., Moscicki, E. K., Tanney, B. L., & Silverman, M. M. (1996). Beyond the tower of babel: A nomenclature for suicidology. *Suicide and Life Threatening Behavior, 26*(3), 237-252.
- Ougrin, D., & Boege, I. (2013). Brief report: The self-harm questionnaire: A new tool designed to improve identification of self-harm in adolescents. *Journal of Adolescence, 36*, 221-225.
- Pattison, E. M., & Kahan, J. (1983). The deliberate self-harm syndrome. *American Journal of Psychiatry, 140*(7), 867-872.
- Patton, G. C., Hemphill, S. A., Beyers, J. M., Bond, L., Toumbourou, J. W., McMorris, B. J., & Catalano, R. F. (2007). Pubertal stage and deliberate self-harm in adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry, 46*(4), 508-514.
- Polit, D. F., & Beck, C. T. (2013). *Essentials of Nursing Research*. Baltimore, MD: Lippincott Williams & Wilkins.
- Pulotu-Endemann, F. K. (2001). *The fonofale model of health*. Unpublished manuscript.
- Pulotu-Endemann, K., Annandale, M., & Instone, A. (2004). *A pacific perspective on the NZ mental health classification and outcomes study (CAOS)*. Wellington, NZ: Mental Health Commission.
- Schmidtke, A., Weinacker, B., Apter, A., Batt, A., Berman, A., Billebrahe, U., & Goldney, R. (1999). Suicide rates in the world: Update. *Archives of Suicide Research, 5*(1), 81-89.
- Simeon, D., & Favazza, A. R. (2001). Self-injurious behaviors: Phenomenology and assessment. In D. Simeon, & E. Hollander (Eds.), *Self-injurious behaviors: Assessment and treatment* (pp. 1 - 28). Washington, DC: American Psychiatric Press.
- Skegg, K. (2005). Self-harm. *The Lancet, 366*(9495), 1471-1483.
- Skegg, K., Nada-Raja, S., Dickson, N., Paul, C., & Williams, S. (2003). Sexual orientation and self-harm in men and women. *American Journal of Psychiatry, 160*(3), 541-546.
- Stanley, B., Gameraoff, M. J., Michalson, V., & Mann, J. J. (2001). Are suicide attempters who self-mutilate a unique population? *American Journal of Psychiatry, 158*, 427 - 432.
- Stanley, B., Winchel, R., Molcho, A., Simeon, D., & Stanley, M. (1992). Suicide and the self-harm continuum: Phenomenological and biochemical evidence. *International Review of Psychiatry, 4*(2), 149-155.
- Stengel, E. (1952). Enquiries into attempted suicide. *Proceedings of the Royal Society of Medicine, 45*(9), 613-620.
- Suyemoto, K. L. (1998). The functions of self-mutilation. *Clinical Psychology Review, 18*(5), 531-554.
- Thaman, K. H. (1997). Reclaiming a place: Towards a pacific concept of education for cultural development. *The Journal of the Polynesian Society, 106*(2), 119-130.
- Tamasese, K., Peteru, C., Waldegrave, C., & Bush, A. (2005). Ole taeao afua, the new morning: A qualitative investigation into Samoan perspectives on mental health and culturally appropriate services. *Australian and New Zealand Journal of Psychiatry, 39*(4), 300-309.
- Tamasese, T. K., Parsons, T. L., Sullivan, G., & Waldegrave, C. (2010). A qualitative study into pacific perspectives on cultural obligations and volunteering. *Pacific Section and the Family Centre Social Policy Research Unit*. URL: [www.google.co.nz/#q=A+Qualitative+Study+into+Pacific+Perspectives+on+Cultural+Obligation+and+Volunteering](http://www.google.co.nz/#q=A+Qualitative+Study+into+Pacific+Perspectives+on+Cultural+Obligation+and+Volunteering)

- Tatz, C. (1999). *Aboriginal Suicide is Different - Aboriginal Youth Suicide in New South Wales, the Australian Capital Territory and New Zealand: Towards a Model of Explanation and Alleviation*. Criminology Research Council CRC Project 25/96-7.
- Tiatia, J., & Coggan, C. (2001). Young Pacifican suicide attempts: A review of emergency department medical records, Auckland, New Zealand. *Pacific Health Dialog*, 8, 124.
- Tiatia, J. (2003). *Reasons to live: N.Z. born Samoan young people's responses to suicidal behaviours*. Doctoral thesis, University of Auckland.
- Tongco, (2007). Purposive Sampling as a Tool for Informant Selection. *Ethnobotany Research and Applications*, 5, 147-158.
- Turia, H. T. (2014). Pathways to pacific health and wellbeing 2014–2018.
- Vaiioleti, T. M. (2006). Talanoa research methodology: A developing position on pacific research. *Waikato Journal of Education*, 12(1).
- Van der Kolk, Bessel A. (1996). *The complexity of adaptation to trauma: Self-regulation, stimulus discrimination, and characterological development*.
- Virkkunen, M. (1976). Self--mutilation in antisocial personality (disorder). *Acta Psychiatrica Scandinavica*, 54(5), 347-352.
- Waring, J. C. (1995). *Problem solving appraisal, hopeless and coping resources: A test of a suicide ideation model*. NOVA - the University of Newcastle's digital repository.
- Webb, L. (2002). Deliberate self--harm in adolescence: A systematic review of psychological and psychosocial factors. *Journal of Advanced Nursing*, 38(3), 235-244.
- World Health Organization (2015). The determinants of health. Retrieved from <http://www.who.int/hia/evidence/doh/en/>

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