Critical Review of Loneliness & Promising Interventions

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WHAT IS LONELINESS?

Understandings of the concept of loneliness have significantly evolved over time. Loneliness is broadly defined as the negative emotional state that arises from dissatisfaction with the number or quality of social relationships (Cacioppo, Grippo, London, Goossens, & Cacioppo, 2015). However, perceptions of the construct have changed since the early 20th century, when it was believed to be a socially determined, observable state of solitary separation from society that was often chosen or preferred, mostly temporary and superficially experienced (Cornwell & Waite, 2009).

Fromm-Reichmann (1959) drew attention to how the construct of loneliness related to the human psyche, at a time when it was understood as a unidimensional, sociological construct with largely unacknowledged emotional features. A seminal paper by Fromm-Reichmann (1959) describing loneliness as an "uncommunicable, private emotional experience" that leaves the person feeling "emotionally paralyzed and helpless" (p. 1), called attention to the need to better understand its intrapersonal features. This initiated a substantial research following that has grown enormously over time, dedicated not only to understanding the personalised experience of loneliness, but also its links to human evolution, and how it manifests and is maintained through cognitive processes.

Evolution of Loneliness

The manifestation of loneliness and the mechanisms involved are thought to be instinctual behaviours originating from human evolution. The social nature of human beings is believed to be an evolutionary imperative, a consequence of an innate need to maintain proximity to those with whom one can plan and communicate, sharing mutual assistance and protection from safety threats (Cacioppo, Grippo, et al., 2015). In prehistoric times, individuals who isolated themselves greatly risked their lives and, as a consequence, their genetic legacy. Therefore, early humans developed a longing for social connection stemming from an instinctual need for support to prosper and survive (Cacioppo, Cacioppo, & Boomsma, 2014).

These observations are the foundation of the Signalling Theory of Loneliness, which suggests that the unpleasant emotional consequences arising from a state of undesired solitude act as warning to the individual that their social network is dangerously thin (Miller, 2012). The emotional pain that results creates a need likened to hunger and thirst, that is thought to prompt

the person to renew weakening social relationships or seek out new connections (Cacioppo, et al., 2014; Hawkley & Cacioppo, 2010).

Social Isolation and Loneliness

> I used to think the worst thing in life was to end up all alone. It's not. The worst thing in life is to end up with people who make you feel all alone.
>
> *—Robin Williams, Actor, 1951—2015*

The terms social isolation and loneliness are often used interchangeably, both in society and throughout the scientific literature. However, it is suggested that they are distinct concepts that do not correlate enough with each other to make them synonymous (Coyle & Dugan, 2012). Whilst both have the potential to adversely affect wellbeing, the two concepts have demonstrably separate features, and very unique influences on physical and psychological wellbeing (Coyle & Dugan, 2012).

Social isolation is generally understood as social disconnectedness. Its existence is observable, seen in individuals that deliberately isolate themselves or avoid opportunities for social contact (Cornwell & Waite, 2009). Consequently, it is not necessarily accompanied by negative emotional consequences, instead arising from a personal or pragmatic need or preference for solitude. Some suggest that social isolation is better understood as a socially constructed concept, being the result of assumptions of what society determines to be an adequate number of social contacts or relationships (Coyle & Dugan, 2012). In fact, many people prefer to maintain only a very small number of high-quality social relationships (Luanaigh & Lawlor, 2008). Therefore, whilst negative emotions or other consequences can co-occur with social isolation, it is not always the case (Coyle & Dugan, 2012).

In contrast, loneliness causes significant emotional distress, and has been shown to initiate a constellation of associated negative affective states, such as social anxiety, anger, reduced optimism and low self-esteem (Cacioppo, Hawkley et al., 2006). Unlike social isolation, loneliness is distinct due to its internalised features. It is often conceptualised as a subjective state of perceived isolation, stemming from concerns that existing relationships do not fulfil inherent needs for intimacy, attachment and belonging (Cornwell & Waite, 2009; Floyd et al., 2017; Masi, Chen, Hawkley, & Cacioppo, 2011). Consequently, perceptions of loneliness are often reported by individuals that seem well integrated socially, such as those in long-term relationships or marriages, with an apparent abundance of social connections or individuals with numerous peer-group

memberships (Cacioppo, Hawkley, & Thisted, 2010; Hawkley & Cacioppo, 2010; Holt-Lunstad, Smith, Baker, Harris, & Stephenson, 2015)

Dimensions of Loneliness

There has been significant research interest in conceptualising the complexities of loneliness and the extent of its impact on affected individuals, from close intimate and emotional effects to broader affiliative and social consequences (Knight, Chisholm, Marsh, & Godfrey, 1988; McWhirter, 1990). A salient theoretical understanding is that loneliness is multidimensional and, as a consequence, can be experienced in a number of relational domains (Hawkley, Browne, & Cacioppo, 2005; Cacioppo, et al., 2015). This theory is based on conceptual understandings of the mental organisation of the self in relation to others, which suggests that individuals experience relatedness in three distinct but equally important ways. Consequently, feelings of loneliness can result from deficiencies in either intimate, relational or collective social networks (Hawkley et al., 2005).

Intimate loneliness results when a person feels they lack a close confidant—a person to which they can relate personally and emotionally—such as a best friend or spouse (Cacioppo, Grippo, et al., 2015). In contrast, relational loneliness is said to result from a lack of instrumental support, such as information sharing and collaboration that is often obtained through friendship circles or extended families (Cacioppo, Grippo, et al., 2015). The final dimension—collective loneliness—is experienced when an individual feels they lack membership to a larger peer or cultural group from which they derive parts of their personal identity and feel a sense of belonging (Cacioppo, Grippo, et al., 2015). This multidimensional model has been shown to generalise well across genders, ages and ethnic backgrounds (Hawkley, et al., 2005; Hawkley, Gu, Luo, & Cacioppo, 2012) mapping well onto understandings attentional space (Hall, 1963) and mental organisations of social space (Dunbar, 2014).

Acute versus Chronic Loneliness

Loneliness is a common, often temporary experience, believed to be experienced by everyone at some point in life. For most people, these feelings are situational, generally stemming from life experiences that instigate feelings of aloneness, such as the end of a significant relationship (Mullins, Elston, & Gutkowski, 1996). The resulting negative emotional states are said to initiate corrective mechanisms, which encourage either the strengthening of existing connections or the forming new ones (Masi et al., 2011).

However, for 30 per cent of individuals, their experience of loneliness will be chronic and unremitting, persisting for many months or years (Hawkley & Cacioppo, 2010; Qualter et al., 2015). Chronic loneliness is believed to result from an interruption to the sensitive corrective mechanisms meant to motivate a person to strengthen their social network. Research shows that lonely people tend to suffer from biased processing of social information and tend to be hypervigilant to signals of social threat (Cacioppo et al., 2014; Hawkley & Cacioppo, 2010). This can result in a tendency to perceive the world as overly threatening, which causes the expectation of further negative social interactions and stronger memories for aversive social encounters (Hawkley & Cacioppo, 2010). Consequently, chronically lonely individuals will often perceive others to be the cause of their misery and distance themselves as a means of personal protection. These maladaptive thoughts and behaviours are then maintained through a self-reinforcing cycle that perpetuates the continued experience and perception of loneliness (Hawkley & Cacioppo, 2010).

Consequences of Chronic Loneliness

Loneliness is shown to have significant consequences for physical and mental wellbeing. Social connections are seen as the scaffolding of the self, therefore, it is suggested that the self-concept suffers the most from prolonged feelings of loneliness (Hawkley & Cacioppo, 2010). A study by Cacioppo et al. (2006) that hypnotically induced self-perceptions of loneliness found that participants began to exhibit an entire constellation of negative emotional states that included negative mood, anxiety, anger, reduced optimism and self-esteem as well as the feeling of reduced social support. Loneliness also has the power to conflate inherent tendencies towards social anxiety and depression to clinically significant levels (Cacioppo, Grippo, et al., 2015). Consequently, loneliness is shown to predict the onset of many psychological disorders, particularly phobias, social anxiety (Meltzer et al., 2013) major depressive and substance use disorders (Cacioppo et al., 2010).

The physiological consequences of loneliness in particular have attracted significant research attention. Animal studies have shown that chronic loneliness often results in continuous arousal of the sympathetic nervous system, which taxes a process designed for only period activation. This initiates a cascade of long-term consequences on a genetic and cellular level, including decreased immunity and inflammatory control as well as the reduced expression of adaptive genes (for review, see Cacioppo et al., 2014).

The physiological consequences of loneliness have been demonstrated as independent of its effect on health-related behaviours, suggesting it is distinct risk factor on its own (Cacioppo, Capitanio, & Cacioppo, 2014; Shankar, McMunn, Banks, & Steptoe, 2011). Studies have shown that

a lack of perceived social support can be as detrimental to physical health as both smoking and lack of exercise (Miller, 2012; Holt-Lunstad, Smith, & Layton, 2010), with the resulting effects on long-term health to be twice as detrimental as obesity and four times that of air pollution (Holt-Lunstad, Smith, & Layton, 2010). Not only has loneliness been shown to accelerate physical ageing (Hawkley & Cacioppo, 2010) but it increases the risk of both heart disease and stroke by up to 32 per cent (Valtorta, Kanaan, Gilbody, Ronzi, & Hanratty, 2016).

Loneliness has also been found to impact cognitive functioning in a number of ways. By disrupting the restorative neurological processes of sleep, it can lead to poor concentration and coordination as well as deficiencies in active coping (Caspi, Harrington, Moffitt, Milne, & Poulton, 2006). A longitudinal study by Gow, Pattie, Whiteman, Whalley, and Deary, (2007) found that, holding all other variables constant, loneliness was the only significant predictor of declines in IQ in study participants between the ages 11 and 79.

Prolonged loneliness has serious and potentially deadly consequences for psychological wellbeing. Once thought to be a mere symptom of psychological distress, loneliness is now considered to be a separate syndrome, distinguished in its clinical aetiology, symptomatology and course from both depression and stress (Miller, 2012; Weeks, Michela, Peplau, & Bragg, 1980). The key differences are apparent in the affected individual's focus on aspects of the social world—where depression tends to result in negative perceptions of life in general, loneliness results distinctly from negative feelings in regard to relationships (Cacioppo et al., 2010). As a result, whilst depression generally does not predict loneliness, loneliness can very often progress to clinically significant depression (Cacioppo, Hughes, Waite, Hawkley, & Thisted, 2006b; Cacioppo et al., 2010). Loneliness is also a known precipitant of suicidal ideation—particularly in teenagers—and is shown to mediate the relationship between suicidal ideation and both social anxiety and depression (Gallagher, Prinstein, Simon, & Spirito, 2014; Vanderhorst & McLaren, 2005; Van Orden et al., 2010). Other studies have demonstrated how the prevalence of suicidal ideation increases consistently with increasing degrees of loneliness (Stravynski & Boyer, 2001).

Who Gets Lonely?

The prevalence of loneliness has been observed to correlate with certain developmental shifts, peaking during adolescence and young adulthood, and again in older adulthood (Qualter et al., 2015). Studies suggest that between 21 and 70 per cent of adolescents in Western countries admit to feeling lonely sometimes or often (Rönkä, Rautio, Koiranen, Sunnari, & Taanila, 2014; Hawkley & Cacioppo, 2010). The disparity in prevalence estimates in this age group is thought to

relate to the individual's success in mastering the important developmental task of shifting their primary social network from one of family to friends and intimate partners (Qualter et al., 2015; Maes, Vanhalst, Spithoven, Van den Noortgate, & Goossens, 2016).

Loneliness tends to be at its lowest levels during most of middle adulthood. During this time, it is generally situational, occurring alongside major relational changes such as separation, divorce and relocation (Steed, Boldy, Grenade, & Iredell, 2007). The prevalence of loneliness in older adulthood is much more pronounced and distinct, said to affect between 40 and 50 per cent of individuals (Qualter et al., 2015). A number of causes have been identified, many of which are characteristic of this developmental period, including the passing of a spouse and close friends, growing perceptions of frailty in the self and significant others (Qualter et al., 2015), as well as increases in illness and disability resulting in a loss of independence, mobility issues and the move to assisted living (Masi et al., 2011).

In addition to developmental shifts, loneliness is observed in increasing levels amongst stigmatised individual often perceived as being on the fringes of society, such as those with chronic mental health issues and intellectual disabilities (Meltzer et al., 2013). Loneliness is also prevalent in those with mobility and communication impairments, as well as those with long term physical health issues (Cacioppo, Cacioppo, et al., 2015; Gilmore & Cuskelly, 2014).

Loneliness and Population Density

There has been substantial interest in describing the relationship between population density and the prevalence of both social isolation and loneliness, as well has how geographic isolation might be of influence. Overall, the literature suggests that these are not significant predictors of loneliness, with multiple studies finding that it has a similar prevalence in urban, regional and remote areas throughout the majority of Western nations (Chipuer & Pretty, 2000; Mullins et al., 1996; Dugan & Kivett, 1994; Havens, Hall, Sylvestre, & Jivan, 2004). However this relationship is different in the case of social isolation. Surprisingly it tends to be less prevalent in less densely populated regions, particularly smaller rural communities (Houghton, Hattie, Carroll, Wood, & Baffour, 2016; Ziersch, Baum, Darmawan, Kavanagh, & Bentley, 2009). Several reasons have been identified for this disparity, including the suggestion that relationships tend to be more substantial in more geographically isolated areas (Houghton et al., 2016). The limited choice of services—such as supermarkets, schools and clubs—means that residents tend to have relationships in multiple contexts (Houghton et al., 2016). The social cohesion effects of smaller communities also contribute, pointing to a greater expectation for residents to participate in social activities,

which is said to be self-perpetuating, resulting in a tendency to feel a greater sense of community (Ziersch et al., 2009). Other research suggests that residents in isolated communities tend to place a greater emphasis on supporting each other, an effect that is becoming increasingly absent in urban areas (Gilbert, Karahalios, & Sandvig, 2010).

Despite its similar prevalence, it is suggested that loneliness is a much more significant problem in geographically isolated communities than in urban centres due to the risks arising when it remains unacknowledged and unaddressed for long periods of time (Masi et al., 2011). Several studies have shown that loneliness is often an antecedent of major depressive disorder—a condition which can be much more pervasive in regional and remote areas for several reasons (Cacioppo et al., 2010; Cacioppo, Hughes, et al., 2006). The stoicism that is often characteristic of rural dwellers can be a barrier to help-seeking, with many residents more inclined towards self-efficacy, particularly males (Judd et al., 2006). Rural dwellers also tend to be more inclined towards problem-focused coping in the aftermath of negative events such as economic downturn, droughts, floods and fires; often failing to identify and properly address the potential psychological consequences of such devastating personal circumstances (Fuller et al., 2000).

Smaller communities also suffer from significant service limitations, which can make timely mental health intervention difficult. They tend to rely heavily on general practitioners for mental health intervention, which is believed to be responsible for a reported overuse of medicinal interventions in these areas (Ziller, Anderson, & Coburn, 2010). Residents also often have to wait longer, travel further and often pay more than their urban counterparts for all health-related services (Rural Health Standing Committee, 2011). Those that are available are generally stretched to capacity (Bambling et al., 2007). Consequently, there can be a perception amongst residents of these regions that there is limited availability, and that access to services is reserved largely for those with severe psychiatric conditions, which often results in delayed help-seeking for milder complaints (Boyd et al., 2011; Fuller et al., 2000).

The persistent psychological distress accompanying loneliness can have significant power under these circumstances. Perhaps the most devastating consequence is its potential to increase suicidal ideation in affected individuals. Numerous Australian studies have demonstrated that rural and remote dwelling men are three times more likely than their urban counterparts to die by suicide (Alston, 2012; Cheung, Spittal, Pirkis, & Yip, 2012; Page, Morrell, Taylor, Dudley, Carter, 2007; Taylor, Page, Morrell, Harrison, & Carter, 2005). A combination of pressures are said to contribute to an increased risk in this cohort, including greater access to lethal means, the impermanence of

economic security and outward migration during economic downturn which, in turn, reduces social support networks (Alston, 2012; Judd et al., 2006).

Issues Evaluating Interventions

Despite the abundance of approaches that have been the focus of research and the numerous metanalyses of their effectiveness, there is a general consensus that the evidence base for loneliness interventions is weak (Beneito-Montagut, Cassián-Yde, & Begueria, 2018; Gardiner, Geldenhuys, & Gott, 2018; Petroutsou, Hassiotis, & Afia, 2018). A number of issues are suggested to contribute, the most salient being the inconsistent use and vague interpretation of the key concepts (Cattan, White, Bond, & Learmouth, 2005). Many studies assume that social isolation and loneliness are synonymous terms and are therefore, often used interchangeably (Dickens, Richards, Greaves, & Campbell, 2011; Franck, Molyneux, & Parkinson, 2016; Poscia et al., 2018). Whilst some studies state explicitly that their focus is social isolation, the methodology and measurement instruments employed tend to suggest it may instead be taping the construct of loneliness (Cattan et al., 2005). Other reviews have found consistently poor communication of methodologies and findings which is believed to contribute to varying conclusions of the efficacy of some of the major approaches, such as befriending programs (Cattan et al., 2005; Dickens et al., 2011; Forsman, Nordmyr, & Wahlbeck, 2011; Poscia et al., 2018).

Many studies fail to consider the unique individual nature of the experience of loneliness, and that the deeply personal narratives and psychic pain attached can result in wildly different constructions of meaning (Beneito-Montagut et al., 2018). Therefore, it can be impossible for the assessments used—particularly in quantitative analyses—to disentangle intervention from participation effects (Beneito-Montagut et al., 2018).

A salient issue that has made rigorous comparative review of research difficult is the lack of random assignment of participants in many efficacy studies. Whilst randomised control trials (RCTs) are the gold standard when it comes to efficacy assessment, the intrapersonal nature and subjective experience of loneliness makes random selection difficult (Masi et al., 2011). Not only is it impossible to identify and effectively categorise individuals without in-depth assessment, but the stigma and shame that often accompanies the problem make it sometimes resistant to self-report (Cohen-Mansfield & Perach, 2015). Also, assigning lonely people to a waitlist condition raises possible ethical dilemmas (Cohen-Mansfield & Perach, 2015). In addition, community-based intervention programs may be inherently resistant to rigorous, longitudinal evaluation due to the

necessity for flexibility, allowing room for adjustment throughout the course of implementation (Bartlett, Warburton, Lui, Peach, & Carroll, 2013).

Qualities of Effective Interventions

Many reviews agree that the most successful interventions are backed by robust consideration of evidence-based practice. These interventions make use of the science regarding the development and experience of loneliness, designing and implementing programs based on a robust theoretical framework and engage evidence-supported techniques (Beneito-Montagut et al., 2018; Dickens et al., 2011). They are also specifically tailored for evaluation of their efficacy, including built in process evaluation mechanisms (Cattan et al., 2005; Findlay, 2003) and utilising community resources to undertake the necessary assessments (Franck et al., 2016).

A key predictor of success is also the conditions under which an intervention is developed. Programs designed without consultation with the target population are not only less effective but described by recipients as patronising (Franck et al., 2016; Gardiner et al., 2018). In contrast, successful approaches consider the wishes and opinions of target groups, being developed and controlled within the population or community in which it is to be introduced (Cattan et al., 2005; Gardiner et al., 2018). Recipients should not only be actively involved in the design and implementation process, but also allowed some level of control over its ongoing trajectory (Gardiner et al., 2018). Consequently, the flexibility of an intervention is paramount.

Most reviews also agree that a top-down approach to intervention planning is most effective—first assessing the availability of pre-existing community services and resources and then utilising them in creative ways (Perese & Wolf, 2005). The most effective programs are implemented within current community services, making use of the strengths of pre-existing frameworks for support and funding structures (Poscia et al., 2018). They also include methods to assess and engage the individual and community's strengths in hopes of building on existing capacity (Findlay, 2003). The quality of support staff is also an important determinant of the effectiveness of interventions. The selection and training of facilitators for support groups and activities is described as being paramount to success (Findlay, 2003), with many endorsing their passion and skillset as a key factor in the effectiveness of group programs (Franck et al., 2016).

The most successful community wide approaches are holistic, considering the entire breadth of the issue. In doing so, they take into account observations of the different groups that are more prone to chronic loneliness, the underlying reasons why and included mechanisms for

seeking out those most in need of intervention (Cattan et al., 2005; Jopling & Vasileiou, 2015). Consequently, an important element in a successful campaign is increasing the visibility of programs and services to widen capture of the target population, whilst seeking out and approaching individuals who may be incapable of self-referral (Dickens et al., 2011; Forsman et al., 2011; Poscia et al., 2018). The most effective programs have built in mechanisms for assessing the goodness-of-fit between the person and the intervention, tapping existing social networks and contacts, whilst considering the individual's interests, abilities and any potential barriers to participation (Perese & Wolf, 2005). To ensure continued motivation, activities should be active rather than passive, be personally meaningful and challenge the participants in interesting ways (Dickens et al., 2011; Forsman et al., 2011; Gardiner et al., 2018).

Lastly, the duration of participation is also vital. Interventions should last for at least three months if they are to be effective in the long-term (Forsman et al., 2011). Shorter programs are largely unsuccessful, particularly group interventions, where not only the content of the program but the relationships formed with other group members is fundamental to its success (Hagan, Manktelow, Taylor, & Mallett, 2014). Early attrition from group programs often dismantles the success of the intervention for all participants (Findlay, 2003).

OVERVIEW OF LONELINESS INTERVENTIONS

Whilst a number of different intervention approaches have shown promise in reducing loneliness, they are generally categorised into one of two types: one-to-one or group-based interventions. Whilst a number of metanalytic reviews have suggested that group interventions are far superior at addressing the issue of loneliness (Cattan et al., 2005; Dickens et al., 2011), one-to-one approaches have many demonstrated advantages, particularly for certain types of individuals affected by loneliness, such as those with mobility issues or disabling health problems (Jopling & Vasileiou, 2015). The following paragraphs discuss some of these major intervention types in more detail.

PSYCHOLOGICAL THERAPIES

Psychological therapy has been indicated by several studies as the key to mitigating loneliness for the most chronically affected individuals (Creswell et al., 2012; Masi et al., 2011). This approach maps well onto theoretical models of loneliness, particularly its self-perpetuating mechanisms (Hawkley & Cacioppo, 2010). Interventions can be delivered one-on-one or in a group format, however, it is suggested that, in the case of loneliness, the group format is perhaps the most transformative. In a group setting, participants have the opportunity to benefit not only from

the therapy but also the presence of others who not only help to lessen the stigma and shame through understanding but allowing for guided facilitation of techniques (Dickins et al., 2011; Gardiner et al., 2016).

Some of the most effective interventions utilise cognitive behaviour therapy techniques, seeking to restructure maladaptive socio-cognitive processes and challenging the negative thoughts that perpetuate avoidance rather than approach of opportunities for social connection (Masi et al., 2011). Mindfulness-based stress relief has also shown promise in some interventions, by reduce the inhibitions fuelled by social anxiety (Goldin & Gross, 2010). Other psychological therapies that have demonstrated effectiveness for alleviating loneliness include humour and reminiscence therapy. Reminiscence therapy, which involves calling past events or experiences and sharing them within a group, is believed to be most useful for older adults, particularly those in assisted living facilities and with neurodegenerative disorders (Gardiner et al., 2007). The therapy is said to help participants to better adapt to the process of ageing and master the losses they've experienced that might be contributing to feelings of loneliness, depression and end-of-life despair (Chin, 2007).

Humour therapy has demonstrated benefits for physiological health, as such, it is a popular intervention employed in hospitals (Low et al., 2013; Ko & Youn, 2011; Walter et al., 2006). However, more recent studies have highlighted its numerous psychological benefits, including facilitating social communication and bonding and the relief of nervous tension (Low et al., 2013). It also gives individuals who suffer from pervasive negative emotional states the chance to experience positive emotions as well as allowing some distraction from causes of misery (Walter et al., 2006).

The United Kingdom (UK) Campaign to End Loneliness suggests that, despite their necessity and theoretical importance, loneliness-specific therapeutic interventions are particularly scarce (Jopling & Vasileiou, 2015). In Australia, some of the techniques discussed are generally only prescribed for those suffering clinical syndromes, being partially funded through the Medicare program in a limited number of sessions (Meadows, Enticott, Inder, Russell, & Gurr, 2015). However, it is suggested psychological therapies tailor-made for loneliness intervention—considering its distinct aetiology, symptomatology and social determinants—may be much more beneficial for affected individuals in the long-term (Franck et al., 2016).

BEFRIENDING

Befriending programs are an informal intervention that aims to provide companionship and social participation to individuals isolated for reasons such as physical or mental illness, injury or life circumstances (Siette, Cassidy, & Priebe, 2017). These programs are generally coordinated by a centralised organisation, usually a local or national charity, that matches individuals with trained volunteers on the basis of shared characteristics—for example, age, locale, culture or interests—in the hopes of facilitating effective connection (McCorkle, Dunn, Wan, & Gagne, 2009; Siette et al., 2017). Whilst programs can differ in their individual requirements, the parameters of the friendship are relatively flexible. Visiting usually occurs in the context of social or leisure activities as a means of supported socialisation—facilitating and supporting the person's integration in social and community activities (Davidson et al., 2004). However, mobility and geographic issues can mean contact takes place in the person's home, or by telephone, internet video or email (Mulvihill, 2011).

Related to befriending is supported access programs or mentoring as they are more popularly known. Whilst often used interchangeably with befriending, these programs have distinct differences (Dickens et al., 2011). Mentoring is distinguished by its goal-directed, time-limited nature, with the role of the mentor being less of a companion and more of a teacher, guiding the participant to learn skills and develop capacity, with the goal of gradual self-sufficiency (Mulvihill, 2011).

A number of benefits support the worth of befriending and mentoring schemes. Firstly, there is relatively minimal cost involved, making them largely sustainable in the long-term (McCorkle et al., 2009). Their lack of structure is essential, allowing flexibility for contact to be tailored to the needs of the individual, which helps to build capacity and confidence over time (Stephens et al., 2016). Consequently, these partnerships have shown to greatly improve the individual's self-esteem and self-worth, not only by means of connection with their friend but as a result of re-connection with their community (McCorkle et al., 2009). Another key benefit is the potential for preventative action, with volunteers being well placed to offer advice and identify issues in need of attention before they escalate to crisis situations (Mulvihill, 2011).

In Australia, the number of befriending and mentoring organisations remains unknown. Those that exist are often embedded within charitable organisations, existing primarily to target identified at-risk groups in need. One such program is Compeer, which is coordinated by the St Vincent De Paul Society (St Vincent De Paul Society, 2018). Compeer is an internationally recognised program, specifically tailored for individuals identified as being isolated by mental

illness. The program matches those in need with a trained volunteer for the purposes of companionship, for a minimum period of 12 months. Whilst the aim is to facilitate friendship and connection, the program has built-in mechanisms to encourage community participation (St Vincent De Paul Society, 2018).

Another program that is specifically aimed at older adults is the Community Visitors Scheme. This scheme is subsidised by the Australian government through residential and home aged care packages and aims to improve the social connectedness of isolated older adults (Department of Health, 2017). Visitors are community volunteers, who are tasked with becoming a friend and confidant, which is believed to lead to improvements in self-esteem and reductions in feelings of anxiety, isolation and loneliness (Department of Health, 2017).

WAYFINDERS

The primary aim of wayfinders—also known as community navigators—is to create a link between people and the community services from which they can benefit (Skingley, 2013). There can be significant variability in such programs due to their different underlying purposes, target populations, available community resources and funding arrangements (Windle, Francis, & Coomber, 2011). The wayfinders themselves are most often volunteers described as passionate locals, committed to the communities in which they live. They generally have unparalleled knowledge of available local groups and services which they tend to use in creative ways (Broad, 2012; Heenan, 2011). Access to wayfinders can occur in a number of ways, often they are approached by professionals, community members or the affected individuals themselves. However, they usually adopt a proactive style, utilising their local knowledge to seek out the individuals who might be within their target groups. This can involve distributing information flyers or frequenting places of interest with information stands (Bernard, 2013).

In Australia, the wayfinders model inspired the design of Local Coordination, a program designed to improve community participation for those isolated by disability (Bernard, 2013). Originating in 1988 as a part of Western Australia's disability support service, coordinators were tasked with reducing pressure on local government resources—particularly crisis care services—by supporting the ongoing independence of individuals and their families (Department of Communities Disability Services, n.d.). Due to its success in Western Australia, the Local Coordination program has been integrated more widely as a central component of National Disability Insurance Scheme (NDIS) support services (Department of Human Services, n.d). Coordinators assist individuals to understand their entitlements and develop a plan for progressive

access of supportive community services, gradually encouraging self-management and self-directedness. Coordinators also work with community services—both formal and informal—to help them become more accessible and inclusive. In this way, coordinators play an important role in community development (Department of Human Services, n.d).

The inherent flexibility of the wayfinders concept and its demonstrated success in a number of contexts has seen it implemented as a key part of many major loneliness intervention programs for seniors in the UK (Broad, 2012). These include the Village Agents scheme of the Gloucestershire Community Wellbeing Service, the Social Prescribing Program of the Halton Community Wellbeing Practice, the Volunteer and Community Sector Advisors of the Rotherham Social Prescribing Scheme and the Wokingham Community Navigators program (for review see Jopling & Vasileiou, 2015).

TECHNOLOGY AND INTERNET-BASED INTERVENTIONS

Technology-based interventions have been consistently endorsed as some of the most effective interventions for loneliness (Beneito-Montagut et al., 2018, Choi, Kong, & Jung, 2012, Cohen-Mansfield & Perach, 2015). Several metanalytic reviews have found very robust evidence of their efficacy, which has been attributed to their versatility and ability to introduce numerous creative, affordable and minimal impact methods for enabling connection and social engagement (Poscia et al., 2018, Hagan et al., 2014). A metanalytic review by Choi et al. (2012) suggested that the key to the success of technology-based loneliness interventions is in connection to the internet, encouraging isolated individuals to stay connect with society through news and social media. A study by Sum, Mathews, Hughes, and Campbell (2008) supports this suggestion, finding that internet use is negatively correlated with loneliness in Australians over the age of 55.

Videoconferencing is consistently endorsed as an effective means to reduce loneliness in high risk groups, by encouraging the maintenance of contact with family and friends. (Cohen-Mansfield & Perach, 2015; Tsai & Tsai, 2011). Studies have found it particularly useful for those that are geographically isolated (Cotten, Anderson, & McCullough, 2013), have reduced mobility or reside in assisted living facilities (Heenan, 2011). Internet-based social networking is also endorsed by efficacy research, particularly in Australia. A study by Ballantyne, Trenwith, Zubrinich and Corlis, (2010) revealed that teaching older Australians to use social networking websites significantly reduced feelings of loneliness and increased feelings of connectivity. Whilst a study by Raghavendra, Grace, Newman, Wood, and Connell (2013) found that supported social networking

site use increased the number of social connections for young people isolated by intellectual disability.

The UK Campaign to End Loneliness reconceptualises many technological interventions. Rather than being interventions on their own, the campaign considers many of them instead as *gateway services*, becoming a medium for increased social participation rather than being a specific intervention themselves. Consequently, this opens up thinking for creative ways in which technology can alleviate loneliness by making use of existing opportunities and structures for support. This concept is demonstrated in a study by Kahlbaugh, Sperandio, Carlson, and Hauselt (2011) who introduced competitive Nintendo Wii bowling games to aged care facility residents. The findings suggested that playing video games significantly reduced feelings of loneliness by way of group identification and facilitating opportunities for social connections between residents (Kahlbaugh et al., 2011).

GROUP INTERVENTIONS

Multiple metanalytic reviews recognise group interventions as being some of the most successful approaches for alleviating loneliness (Cattan et al., 2005; Cohen-Mansfield & Perach, 2015; Dickens et al., 2011, Hagan, et al., 2014). Certain types of group interventions—particularly education, shared interest and health and fitness groups—are believed to be more successful than others, due to the creative manner in which they incorporate mechanisms for reducing loneliness.

Education programs with psychosocial elements are said to reduce loneliness by building self-confidence through the learning of new skills and knowledge, which has been shown to increases social competence (Cattan et al., 2005; Cohen-Mansfield & Perach, 2015; Forsman et al., 2011). It is also suggested that the increased self-esteem that results from learning contributes to the long-term effectiveness of such interventions (Cattan et al., 2005).

One prolific example is the University of the Third Age (U3A), which is an education-based group initiative offering learning lectures and programs for older adults. The idea originated in France in 1970s, employing the concept of *university* in its medieval form, whereby groups of individuals would join together informally in the passionate pursuit of knowledge (Hebestreit, 2008). In light of increasing lifespans, the concept later spread throughout the world as a way to increase the quality of life of older people by keeping the mind active, empowering older learners through the natural effects of lifelong education. Consequently, participation has been shown to build confidence and enhance self-esteem, minus the costs and prohibitive entry and evaluation

requirements generally associated with education programs (Zielińska-Więczkowska, Kędziora-Kornatowska, & Ciemnoczołowski, 2011).

Evaluations have revealed that these groups enhance social participation by bringing together individuals with similar interests, therefore stimulating meaningful and interesting conversations and resulting friendships (Swindell, 2002). In Australia, the U3A was first introduced in Victoria in the 1980s but has since been established in more than 200 local communities with more than 60,000 participants (U3A Alliance Australia, 2018). Programs are quite informal making them both popular and sustainable. Local U3A groups are generally self-run by members who do much of the teaching as well as organising, with many sessions taking place within existing community centres, helping to keep operation costs low (Swindell, 2002). Online U3A groups have also become increasingly popular, by reducing barriers that can inhibit participation of some groups, such as those with reduced mobility and the culturally and linguistically diverse (Marcinkiewicz, 2011).

Shared interest groups, such as self-help and support groups, lunch clubs and day centre programs, are another intervention that has demonstrated success at alleviating loneliness (Cohen-Mansfield & Perach, 2015). Of particular benefit are those designed to attract specific sub-groups of lonely individuals, such as widows or certain gender groups, allowing them to be tailored to the individualised needs of attendees and incorporate mechanisms for addressing the frequently shared reasons for loneliness and social isolation (Cattan et al., 2005; Findlay, 2003). Consequently, these groups encourage companionship and comradery by way of the common meaning derived from activities and consequent identification with the experience of other group members (Findlay, 2003).

A prominent Australian example that encapsulates many of the benefits of shared interest group interventions is the Men's Shed movement. The idea was founded in regional New South Wales in 1978 as a response to the increasing social trend of high density living. Proponents attributed the increased prevalence of male mental health issues and social disconnectedness that were indicated by research at the time to be the result of the loss of the iconic backyard shed (Golding, 2008). Consequently, Men's Sheds recognise that males feel an inherent need for practical social engagement and gain enjoyment from passing on practical skills and knowledge (Smith, 2007). Therefore, many of the group activities on offer are practical projects such as wood and metal work, involving group members as both learners and teachers (Ballinger, Talbot &

Verrinder, 2009). Other activities are incorporated to enhance physical and social wellbeing, such as social outings and health promotion sessions (Wilson & Cordier, 2013).

Another popular shared interest approach is fitness groups. These groups focus on initiating social connection and friendship by way of keeping the mind and body active (Cohen-Mansfield & Perach, 2015). Consequently, they have built in mechanisms for enhancing self-esteem and personal control as a result of their inherent physical and psychosocial benefits, which also tends to motivate continued participation (Cattan et al., 2005). Some common examples include walking groups, Tai Chi and Yoga classes. Interestingly, a study by McAuley et al. (2000) found that the activity itself contributes very little to the psychosocial benefits, which are instead attributed to the sense of belonging often described by participants.

CASE STUDY: YOUNG AT HEART

Heenan (2010) undertook a qualitative analysis of 35 interviews with participants of a loneliness intervention implemented in a small rural community in Northern Ireland. In 2008, following the decay of rural industry in the area, locals were suffering as services and businesses began withdrawing one after the other from the town. At the time, the only place left locally for the purchase of groceries was a small convenience store attached to a garage. Transport services were poor with residents needing to rely largely on private vehicles. Throughout the community, several issues were identified, two of which gave rise to the need for intervention. Firstly, the population was ageing faster than expected, which was attributed to the outward migration of younger residents due to the end of the industrial boom. Another significant issue was that a large proportion of residents described feeling lonely some or most of the time, which was attributed to the decay of local groups and services.

In response to the loneliness problem, the local community were engaged in a meeting to discuss the problem. The overall message communicated by locals was that many preferred the region because of a desire for the quiet, small town life of the country and that, whilst many had a preference for solitude, it differed from loneliness, in which they felt solitude was forced upon them due to circumstances often outside of their control. It was also identified that interventions available from government organisations were not equipped to intervene, being paternalistic and crisis focused. Instead, the locals agreed that the domain of social wellbeing would be better addressed at a community level.

Start-up funds were provided by a local church, which were used to develop two local groups, one of which was the Young at Heart group aimed at addressing the problem of loneliness in older residents. The decision was made to engage local champions to take ownership of the group and chair a board designed as a caretaker for the intervention program. A local retired principal took the lead, with many of the other board members being local retired professionals.

The group put together a program of events that initially included tea dances, health and social security information sessions, talks of local history, storytelling, information technology courses and various outings. The events took various forms but were centred on two overarching themes. Firstly, shared interests, which made the process of socialising less daunting for the participants, giving them an opportunity to not only make new friends but reconnect with acquaintances that they had lost touch with over time. The other theme was knowledge building, with a focus on providing education and building meaningful skills. Some of the most popular sessions included farming practices and talks of local history. An introductory information technology program was perhaps the most popular, being delivered over 12 sessions by younger residents in the community. Mental and healthcare clinics and seminars were incorporated, being delivered by local service providers. These sessions provided an opportunity for preventative action, giving participants the opportunity to identify and respond to often ignored minor issues impacting on wellbeing.

The overall message of the thematic analysis was that the success of the intervention was attributed to several key inclusions. Firstly, the cohesive group approach adopted was vital, allowing the participants to take ownership and connect with it in a way that made them patriotic. Many participants referred to Young at Heart as *our club*. This was found to empower the participants, which in turn perpetuated the group through their ability to influence ongoing activities.

The intergenerational aspects of the intervention were repeatedly praised. Many participants felt that, by having younger residents involved in facilitating activities, providing talks, training sessions and transport, ageist stereotypes were able to be challenged. Many suggested it should be an ongoing compulsory aspect of the group. The appointment of local champions was also thought to be an important element of its success. These individuals not only had the passion but the knowledge and skills to take the idea forward. It was suggested that without the commitment of the program leaders who chaired the board, the intervention would have likely been dismantled. However, despite their autonomy, these leaders required sufficient support and

training from local agencies, to ensure the ongoing success of the intervention. A final key to the success of the program was seen it is preventative, proactive approach. Many admitted a tendency towards stoicism and felt a need to helping themselves. By incorporating preventative physical and psychosocial health aspects, accessing services was seen as less threatening, which dismantled the barriers preventing engagement.

CASE STUDY: LINKAGE BRISTOL

LinkAge Bristol (LinkAge Network, 2018) is a local charitable organisation in the Southwest region of the UK that originated in 2007 based on recommendations of the Bristol Older Person's Partnership Board. The board was formed in response to rising trends of social isolation and declining physical health of older residents in the region, dedicated to promoting their ongoing interests and wellbeing. Fuelled by the local city council in partnership with local trustees and community organisations, a number of community hubs were established, headed by an advisory group specific to the individual neighbourhoods. These advisors were tasked with undertaking an analysis of existing local activities and groups, establishing a list of what was available and popular. Through negotiation with local organisations and venues, their mission was to enhance the sustainability of existing activities and groups. In addition, advisors were also responsible for indicating what gaps exist that require further development. Consequently, these hubs became both a broker and catalyst of community development, helping not only to raise the profile of existing activities and assisting them to become more inclusive, sustainable and successful, but also creating an environment for new opportunities.

Today, LinkAge is funded by a combination of structures that includes fundraising, donations from trustees and corporate partners as well as membership dues. These dues are variable, meant to be manageable based on the member's personal circumstances whilst encouraging continued participation through financial investment. The initial hubs have encouraged the development of numerous projects specifically designed to target isolated individuals in multiple creative and diverse ways. These projects are staffed by local coordinators who are described as champions for the cause—being over 55 themselves and often have lived experience of the issues involved.

MACMILLAN PREVENTION AND RE-ENABLEMENT PROJECT

This project was designed to encourage and inspire older residents to readjust following cancer remission by reconnecting with society and participating in activities that will ensure their

continued welling. Participants are given a tailored information pack and are invited to sessions with guest lectures and wellbeing days. They are also given a number of free tokens meant to inspire participation in available local activity groups.

POST-RETIREMENT OPPORTUNITIES (PRO)

These sessions are described as fun and informative events for upcoming or existing retirees in the local area and include a range of workshops, taster sessions and guest lectures meant to showcase available opportunities. Some of the opportunities presented include financial advice, information on volunteering and available cultural and social activities.

TALKING TABLES

Talking Tables is a six-to-eight-week cooking program meant to encourage older residents to become confident and inspired to cook tasty and nutritious food. Sessions give participants the chance to meet and socialise, allowing them to form friendships with other group members whilst learning vital culinary skills. The classes are supported by and run at numerous local farms, proving fresh air and harvest produce. Some sessions are reserved specifically for minority groups such as those who identify as LGBTI.

ACTIVE, CONNECTED, ENGAGED (ACE) NEIGHBOURS

ACE Neighbours is a mentoring program targeting isolated residents over the age of 65. The isolated person is matched with a volunteer over the age of 60 who is specifically trained to support the person's ongoing re-engagement with the community. The volunteer meets with the person in their home, helping them to develop a list of activities that they enjoy doing which is used to identify available community groups and activities. The volunteer then accompanies the person to these events until they feel confident enough to attend on their own. Contact is maintained for a period of at least six months to support their continued motivation and active participation.

ACTIVE AGEING BRISTOL

This program was specifically designed to transform older people's attitudes towards sport and recreation, whilst increasing opportunities for participation. Therefore, this initiative assists with the ongoing development of existing activities whilst enabling the development of new programs. A number of focused physical activity programs are on offer, including walking groups (walking football, walking netball, walking for health), dementia-friendly swimming classes, cycling

for over 55s, strength and balance classes, as well as Golden Memories—a reminiscence group that integrates periods of light physical activity.

CONCLUSION

The problem of loneliness is a complex issue. Evidence of its increasing prevalence as well as its potential to cause significant emotional distress and long term physical and psychological issues is proof enough of the worthiness of attention to this issue. However, its foundations in human evolution, and ability to interfere with adaptive socio-cognitive processes suggests the need for a carefully considered solution. Whilst the evidence base for loneliness interventions is significant, it is vital to critically evaluate the trustworthiness of studies and accept conclusions with caution. A number of rigorous reviews offer invaluable recommendations for intervention design, including the need to consider the wishes of target populations, elicit local opinions as well as passionate facilitators of programs, and ensuring an adequate minimum duration. However, the overarching message derived from the evidence is the need or a holistic, community wide approach that carefully considers and aims to build on existing strengths and capacities. Whilst numerous types of interventions exist, it is evident that different approaches are successful for different individuals. For programs to be effective, they must first seek to understand the nature of the individual's loneliness and intervene accordingly. For this, a creative, multifaceted approach is necessary.

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SERVICES OFFERING LONELINESS SUPPORT AND/OR INTERVENTIONS AVAILABLE TO RESIDENTS IN ROCKHAMPTON AND SURROUNDS

Loneliness services available to residents in Rockhampton and surrounds with a web and/or social media presence @ 16/08/18

Location	Demographic	Organisation	Contact	Funding	URL	Program focus
Rockhampton	60>	Rockhampton 60 and Better	Manager: Anita Griffiths	Qld government	http://www.60andbetterrockhampton.com.au/about-us/	A healthy ageing program based on a philosophy of community development. **Staying connected in your community** Loneliness and social isolation can affect everyone, but older people are particularly vulnerable after the loss of friends and family, reduced mobility or reduced income. We fund a range of programs, available across Queensland, to help you reduce your risk of isolation, improve your health, and strengthen your links with your community.
Rockhampton	Parents and Friends of Lesbians and Gays	PFLAG Capricornia - parents & friends of lesbians & gays	0400 767 832		https://www.mycommunitydirectory.com.au/Queensland/Rockhampton/Information Counselling/General Support Services Counselling/15993/134476/PFLAG Capricornia - parents friends of lesbians gays	Pflag (Parents & friends of lesbians & gays) is a global organisation with groups across Australia. Pflag consists of parents & friends who assist families with LGBT (Lesbian, Gay, Bi-sexual, Transgender) members. Its aim is to bring understanding, and care where needed.
Rockhampton		BEYOND BLUE AUSTRALIA PTY LTD	1300 224 636		https://www.beyondblue.org.au/	provides information and support to help everyone in Australia achieve their best possible mental health, whatever their age and wherever they live
Rockhampton	18 to 64 years	Anglicare CQ Healthy Minds	(07) 4922 8648		http://www.anglicarecq.org.au/about-us/our-locations/	Health Minds Program – is for people living with severe and persistent mental illness. It provides one-on-one services, peer support and self-help groups, and group outings and activities. The program also supports families and carers of people with mental illness.
Rockhampton	Young Women up to the age of 25	Girls Time Out Young Womens Support Service (Young Mums Support program)	07 4922 7236		http://girlstimeout.com.au/services/ymsp/	The Young Mums Support program aims to support young mums in the Rockhampton region by building parenting and relationship skills, reducing isolation and by providing support to enhance social and emotional well-being.
Rockhampton		COMMUNITY SOLUTIONS	(07) 4932 8000		http://communitysolutions.org.au/	The Grandparents as Parents (GAP) Project supports grandparent carers through the provision of information and case management support for families. Funded through the Commonwealth Department of Social Services, the GAP Project is currently supporting grandparent carers with direct advocacy and support, group activities for grandparents and their grandchildren and a social program to bring grandparent carers together and address issues of social isolation.

						If the thought of an older person feeling isolated or lonely tugs at your heart strings and makes you want to do something about it, then we'd love to hear from you. We're a small not for profit aiming to do big things! It's our goal to try to eliminate the elderly feeling secluded whilst in residential care. To do this, we connect volunteers with the elderly so they can develop long lasting, meaningful friendships.
Head Office Rocklea, Queensland (Service extends to CQ)	Elderly people in Aged care	Queensland Community Care Network	**07 3040 0287**	Donations/Sponsors (Including Local/State/Commonwealth)	http://qccn.org.au/about-us/	The QCCN manages a number of programs that support the elderly in many ways. As well as the elderly, our programs also aim to help the disadvantaged and disabled. We develop and facilitate a comprehensive and integrated range of community and home care programs that assist older people to stay in their own homes longer and delay admission into aged care.