Health, Work, and Retirement Survey

Summary report for the 2006 data wave.

- Social Support, Social Networks, and Well-Being -

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CONTENTS

A considerable body of international evidence to date has consistently demonstrated the health benefits of social integration. Social support and social networks have been shown to exert significant effects on the health and general functioning of older persons (Unger et al., 1999). People who report more social ties have lower mortality risks, and increased social integration and social support have been related to better physical and mental health (Seeman et al., 2001). Poor social connections, fewer social activities and social disengagement in people over the age of 65 has been shown to predict greater risk of cognitive decline over four years of ageing (Zunzunegui et al., 2004). In general, it has become clear across decades of research that both perceived social support and engagement with social networks is related to better physical and mental health.

To systematically compare international findings with the HWR sample of young old New Zealanders this large body of research was considered across several important dimensions. First, across differences in the ways in which social relationships have been conceptualised: in terms of the objective measurement of social networks as numbers or types of social connections; in terms of subjective or perceived social support; or as social capital or the collective resources available through social connections. Second, across the different aspects of functioning that have been considered as indicators of health or the outcomes of support. These include physical, mental and cognitive functioning.

This body of research has also taken account of a number of different factors that may interact with the relationship between social integration and health. The most significant of these include differences in the relationships between social integration and health for men or women, differences with age or ethnicity, and differences for levels of socio-economic status (SES) as indicated by income, economic living standards (see Jenson, Spittal, & Krishnan, 2005), or education.

Accordingly, in this chapter we will consider the HWR findings for the importance of social networks, social support, and social capital in relation to physical and mental health. Interactions with gender, age, ethnicity, and SES will also be considered.[1]

Social Networks

Social support has been conceptualised in terms of both emotional and instrumental aspects of support. Wenger (1997) described instrumental support as providing access to the practical resources that help people to function well in older age. Berkman (2000) described this type of support as that which helps us to get things done. The instrumental aspects of support may be measured objectively as in marital status or the number of social ties that a person has. In applied areas of health or social welfare, social networks are seen as a useful way to understand the effects of instrumental support. In this area, the nature of a person's instrumental support is understood in terms of the type of social network in which they are embedded. The social networks of older people tend to vary in size and composition and research has shown that network type (rather than simply network size) assesses both support and social participation and is related to both physical and mental health outcomes. For example, Litwin & Shiovitz-Ezra (2006) explored the association between network type and mortality. They described the social networks of a sample of community dwelling older Israelis as either diverse, friend-focused, neighbour-focused, family-

[1] All results are based on weighted frequencies and means.

focused, community-clan, or restricted. Among the older members of their sample (aged over 70) network type was associated with mortality risk. People who had diverse, friend-focused and community-clan type networks showed lower risk of all cause mortality seven years after assessment.

Wenger (1997) used qualitative research to identify five different network types among older adults that are associated with different strengths and risks for particular health and health care problems. Wenger and Tucker (2002) described the development of an assessment instrument to categorise these five types of older adults' social networks as follows. The *Local Family Dependent* Support Network is focussed on close family ties with fewer neighbourhood and friend links. The *Locally Integrated* Support Network includes close relationships with local family, friends and neighbours. The *Local Self-contained* Support Network has primary reliance on neighbours. The *Wider Community Focused* Network is typified by a high salience of friends. The *Private Restricted* Support Network has no relatives, few nearby friends and low levels of community involvement. Questions from this scale were used to categorise respondents' network types in the HWR study. Figure 1 illustrates the distribution of the sample according to Wenger's network classifications. The largest group was classified as Locally Integrated (37%). Wenger (1997) also noted that this type of network is the most common and most robust in the UK. The smallest group (5%) are Local Family Dependent and Wenger noted that this group is at risk of family and carer stress and increasing isolation in older age.

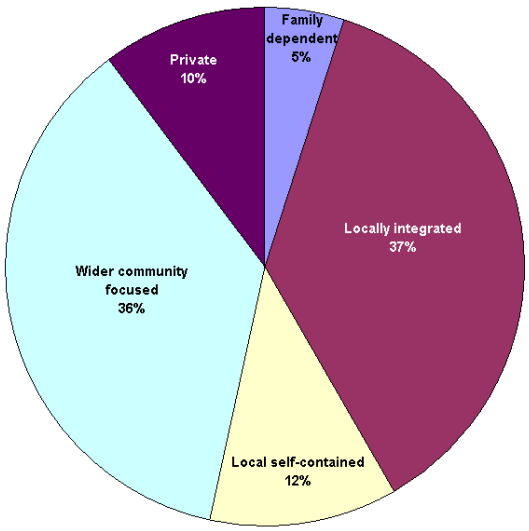

Figure 1. Distribution of Wenger network categories.

Health

In relation to physical health in the HWR sample, there were no significant differences based on network type. Figure 2 shows the distribution of mental health scores according to network type. Those classified as Private reported lower mean mental health scores (M=50.19, SD=9.63) compared to those classified as Locally Integrated (M=51.58, SD=8.76, p<.001, see Figure 2) Although respondents belonging to these groups represent only 10% of the total sample, it is of concern that they are already describing social participation patterns that are related to poorer mental health in old age. This pattern suggests that early poor health may contribute to restricted social participation. Wenger (1997) suggested that older people with this type of network are less likely to be in good health and face increasing isolation and problems. People who fall within the Private network type are most at risk in older age for increasing mental illness and poor adaptation to assistance. Furthermore, although (as in the New Zealand sample) it is the least numerous support network type in the UK, it is dominant in social work case loads. The increasing predominance of private networks among this younger group may be a cohort effect. That is, more private networks may be a growing characteristic of western society.

While this network type may not affect physical health in younger old age as shown in the HWR sample, researchers (e.g. Litwin & Shiovitz-Ezra, 2006; Wenger, 1997) have shown that this type of network is the least protective in later years.

Figure 2. Network Support categories by SF-36 physical health summary scores.

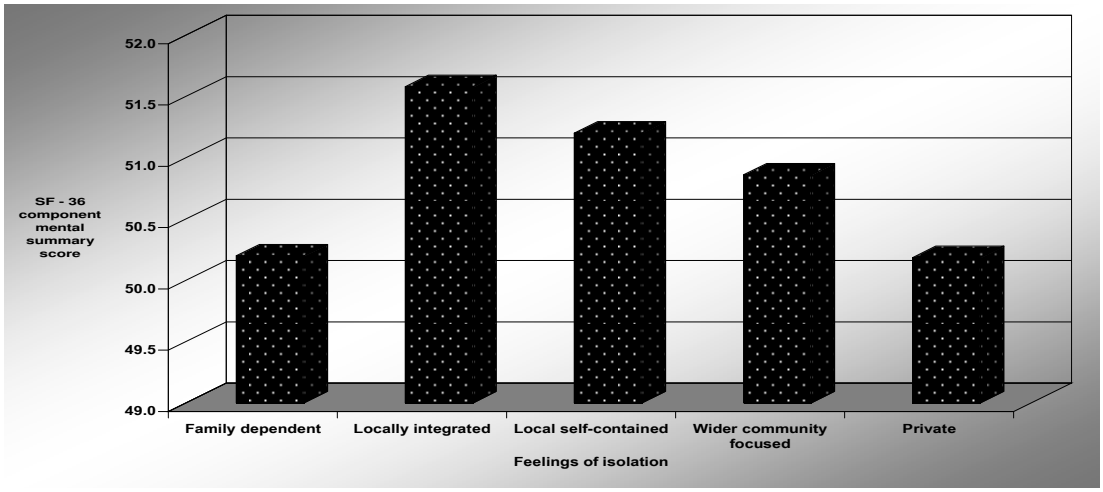

Figure 2. Network Support categories by SF-36 mental health summary scores.

Age

When network categorisation was examined across three age groups (54-59 ; 60-64; and 65-70 years) as seen in Figure 4, there were significant differences according to age (p<.001). Those aged 65 to 70 were more likely to be classified as locally integrated (38%) compared to those aged 54 to 59 (35.5%) and those aged 60 to 64 (36.9%). A similar pattern was evident for those classified as wider community focused. Conversely, those in the youngest age group were more likely to be classified as Family Dependent and Private. Decreases in these types of networks with increasing age, support the suggestion of a cohort effect for Family Dependent and Private networks. Ajrouch, Blandon and Antonucci (2005) also found that older groups reported older social networks, but fewer geographically proximal networks.

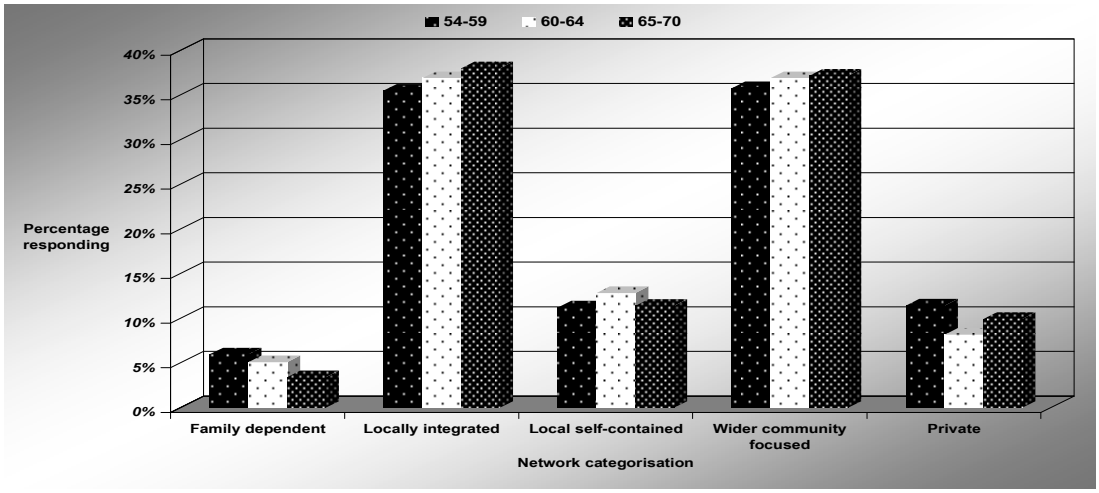

Figure 4. Network type by three age groups

Gender

Among older adults, different social network types have been shown to be related to decline in cognition and physical functioning and these effects are different for men and women (e.g. Unger et al., 1999; Zunzunegui, et al., 2003). Ajrouch et al., (2005) found differences in the size and type of men's and women's networks across age groups from young-old to elderly. Among the young-old of the HWR sample, the gender differences in network categorisation were small but statistically significant ($p<.001$). As seen in figure 5, women were more likely than men to be classified as family dependent (6.2% versus 4%) while men were more likely to be classified as private (10.9% versus 9.2%)

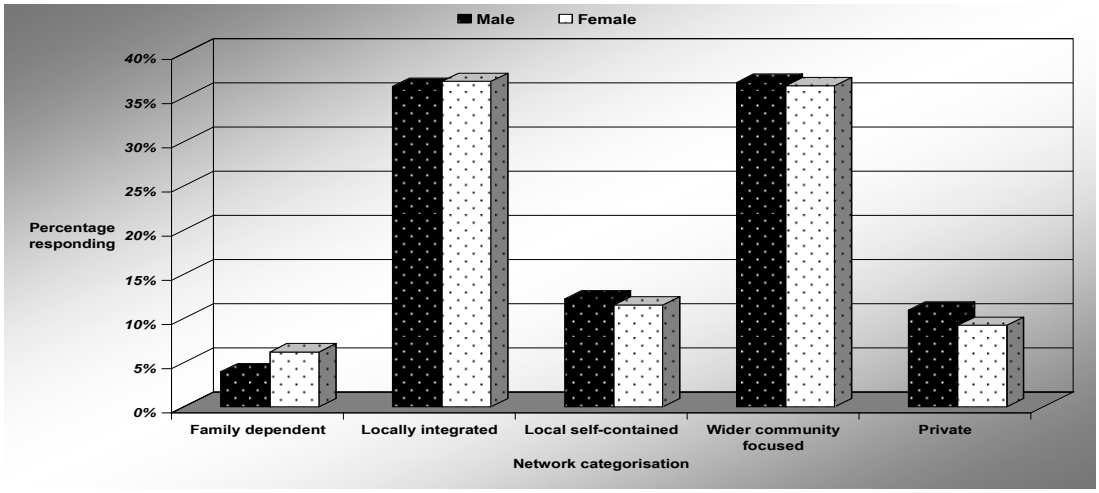

Figure 5. Network type according to gender.

Ethnicity

Litwin & Shiovitz-Ezra (2006) have also pointed to the relevance of culture when considering social networks. Figure 6 shows the differences for each ethnic group by percentages reporting different network types in the HWR data. An examination of the relationship between ethnic group and network type showed that there was a significant association between ethnicity and network categorisation (p<.001). Those identifying as Maori only were more likely to be categorised as Family Dependent (8.4%) compared to those identifying as European (4.5%), European and Māori (4.8%), and Pasifika peoples (6%)[2]. Pasifika peoples were also more likely to be classified as Locally Integrated (48%) compared to Europeans (37%), Māori (43.3%), and those identifying as Māori/European (43.1%). Finally those identifying as European or European/Māori were more likely to be classified as Wider Community-focused (37.8% and 30.8% respectively) compared to the other two groups. However, it is important to note that the highest proportion of each ethnic group was classified as Locally Integrated.

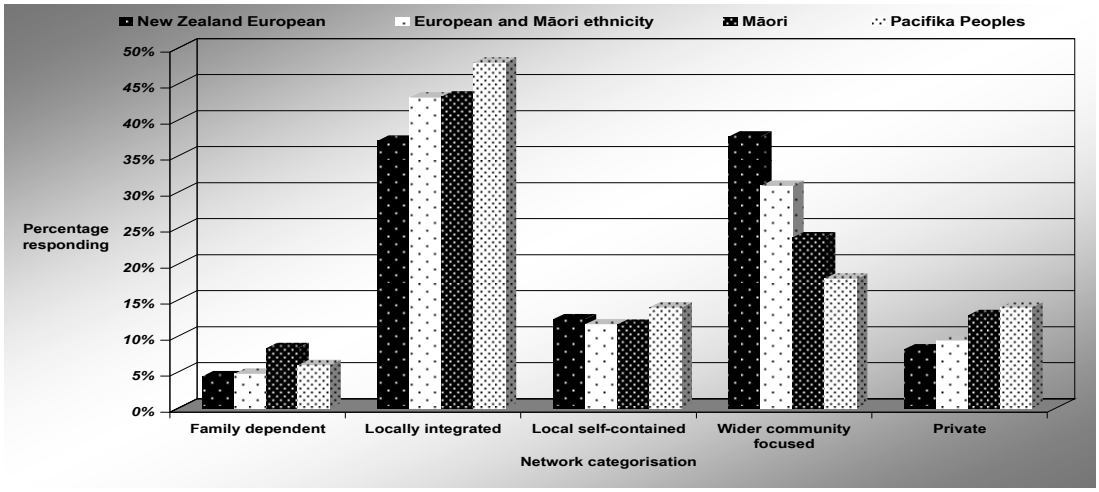

Figure 6. Differences for each ethnic group by network type

[2] Results for Pasifika peoples should be taken with caution due to their lack of statistical representation in the sample.

Socioeconomic Status

Berkman et al., (2000) present a conceptual model of social relationships and health in which social networks are understood as part of a wider social and cultural context including the structural effects of SES. Ajrouch et al., (2005) showed that across different age groups from 40 to 90-plus years, measures of SES have direct effects on personal networks, although these effects are different for measures of SES such as education and occupation. In the HWR data, there were also differential effects for different indicators of SES, in this case, educational qualifications and household income. Figure 7 shows the patterns of difference across the network types according to household income. These differences in household income were significantly associated with network categorisation (p<.001).

Figure 8 shows the differences in network type according to Educational Qualifications. Those with no secondary education were more likely to be classified as Locally Integrated (44.3%) compared to 37.6% of those with a secondary qualification and 30.4% of those with a post-secondary qualification. Conversely 40.3% of those with a post-secondary qualification were classified as Wider Community-focused compared to 34.5% of those with only a secondary qualification and 32.4% of those with no formal qualification. These differences in educational qualifications were significantly related to network categorisation (p<.001). Economic living standards were not associated with network type.

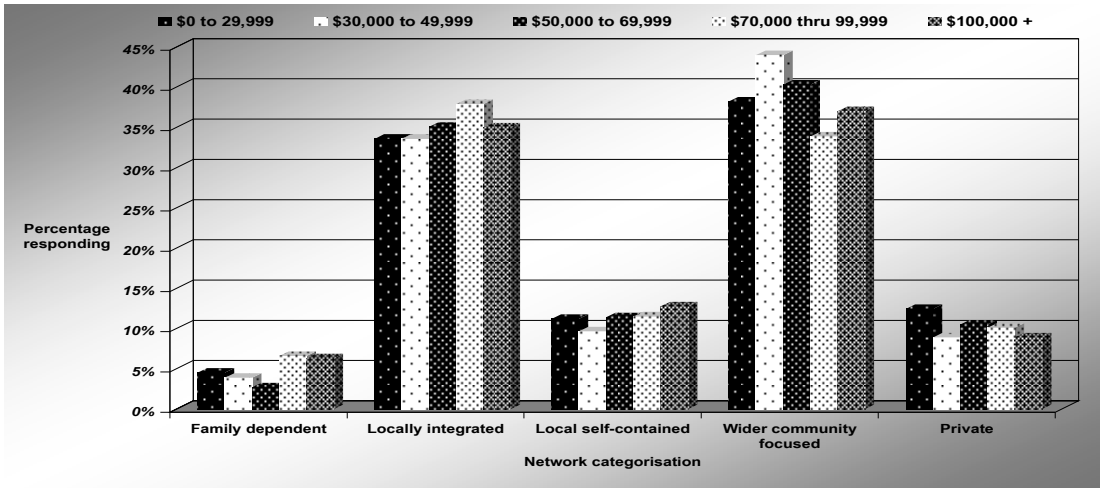

Figure 7. Level of household income by network type.

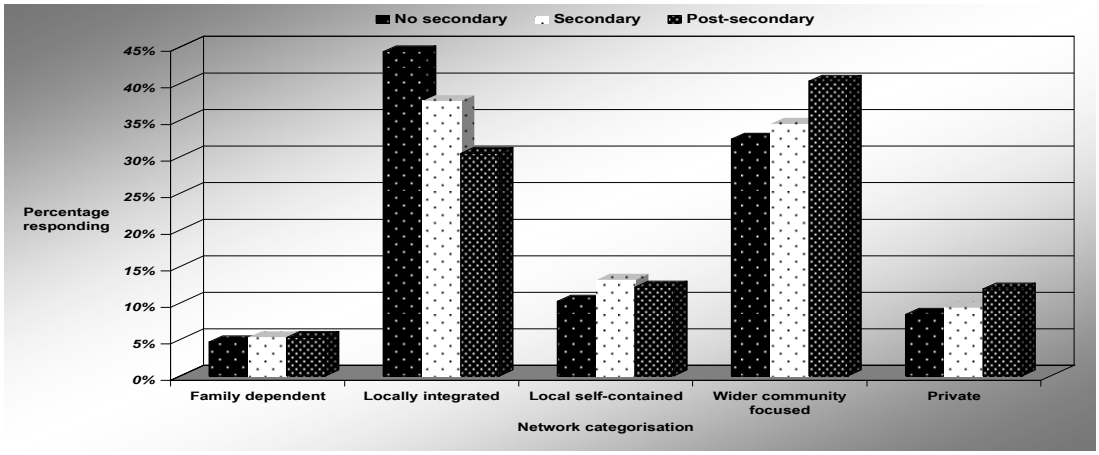

Figure 8. Level of educational qualification by network type.

Marital Status

Marriage is an important form of structural social support (e.g. Unger at al., 1999). When the different categories of marital status measured in the HWR were compared to health outcomes, mean physical and mental health scores differed significantly according to marital status ($p<.001$). In particular, those who were married or in a de facto relationship had significantly higher mean physical health and mental scores than those with no spouse or partner at the time (see Figure 9). People who have never been married or are now widowed or divorced are at greater risk for poor health.

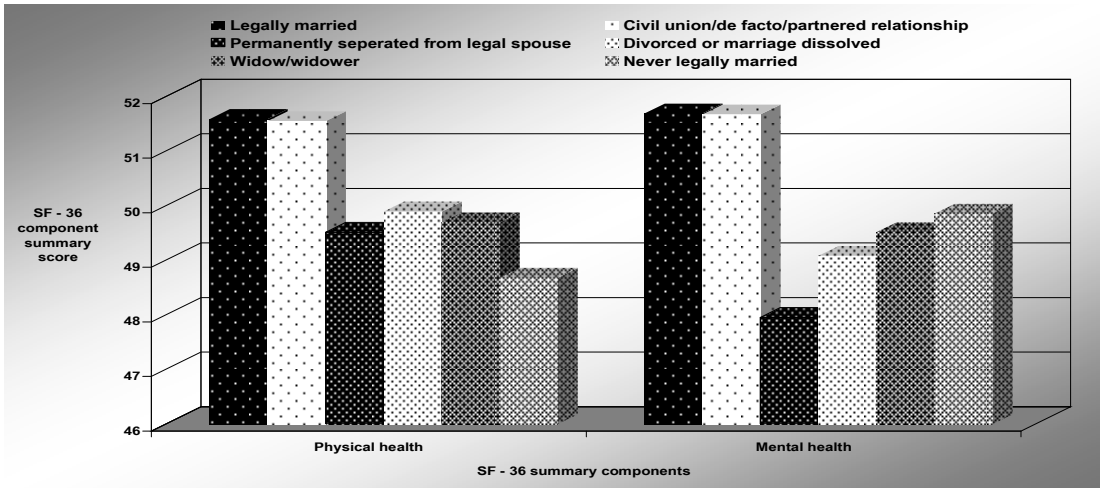

Figure 9. Physical and mental health by marital status.

Perceived Social Support

Although social networks are understood as a useful way to assess the effects of instrumental support, at a more intimate level, emotional support has also been shown to have powerful effects on health (Berkman, 2000; Seeman et al., 2001). Emotional support is best measured as subjective perceptions of support that takes account of whether a person perceives that the members of their network are actually supportive. The HWR used the Social Provisions Scale (Cutrona & Russell, 1987) to measure this type of social support. This measure has six sub-scales that measure separate but highly correlated perceptions of support. In the HWR sample scores on these sub-scales (see Table 1) showed high internal reliability ($\alpha = .87$) and were summed to form a total social support score. The distribution of these scores indicates that most people reported high levels of social support.

Table 1
Mean Scores for the HWR Sample on Each Subscale of the Social Provisions Measure of Perceived Social Support.

	Reliable alliance	Attachment	Guidance	Opportunity for nurturance	Social integration	Reassurance of worth
N	6462	6400	6476	6421	6431	6394
Mean	13.82	13.06	13.39	12.47	13.02	12.93
SD	1.96	2.26	2.17	2.21	1.99	1.93

Perceptions of social support were associated with network type. The mean social support scores for those classified as private were significantly lower than for the other four groups (p<.001).

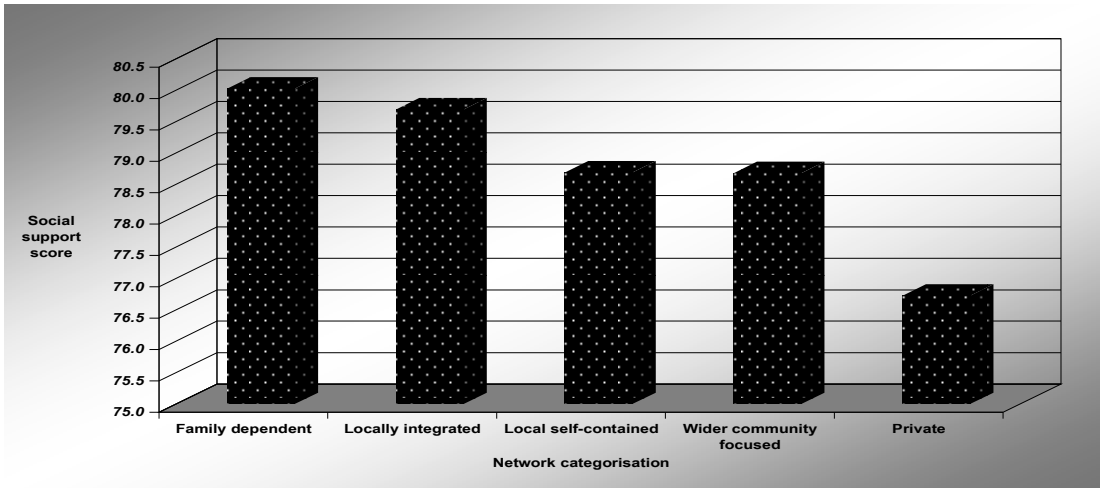

Figure 9. Mean social support scores reported for each network type.

Health, Individual and Structural Factors.

Social support was weakly related to physical health (r = .18) and slightly more strongly to reports of mental health (r = .33) in the HWR data. There were clear patterns in the relationship between social support scores and the individual and structural factors that are related to health. Figures 10 to 12 show that men report lower support than women (p<.001), and that perceptions of social support are lower as people age (p<.001) and according to retirement status (p<.001). Figures 13 to 16 show that Māori and Pasifika peoples report lower levels of support (p<.001), and that perceived support diminishes according to both household income (p<.001), Economic living standards (p<.001), and levels of educational qualifications (p<.001).

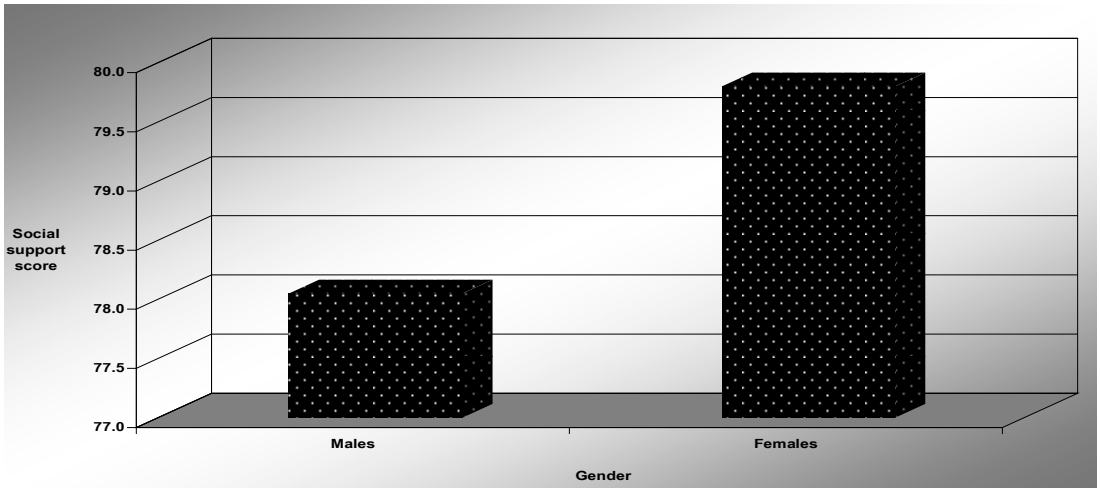

Figure 10. Mean social support scores reported by males and females.

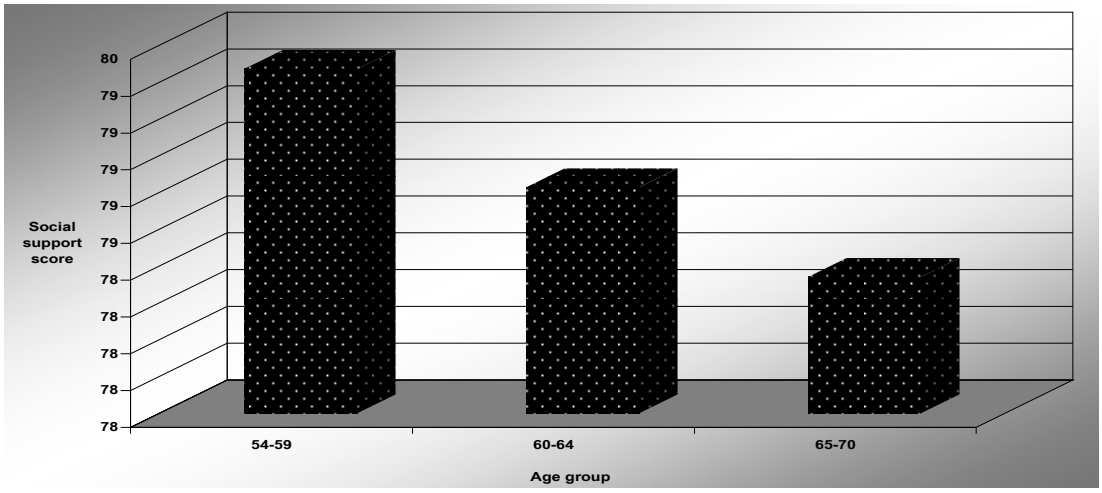

Figure 11. Mean social support scores reported for each age group.

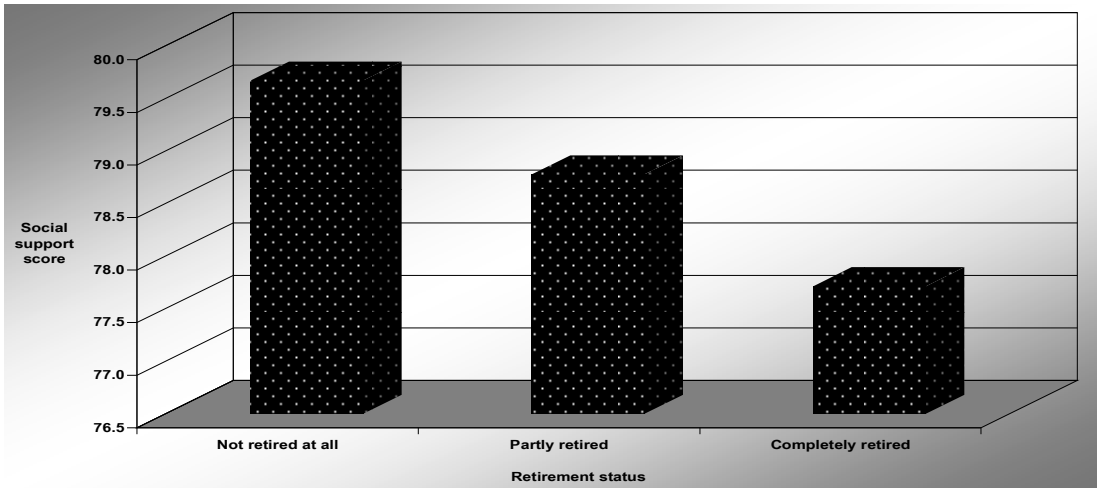

Figure 12. Mean social support scores reported by retirement status.

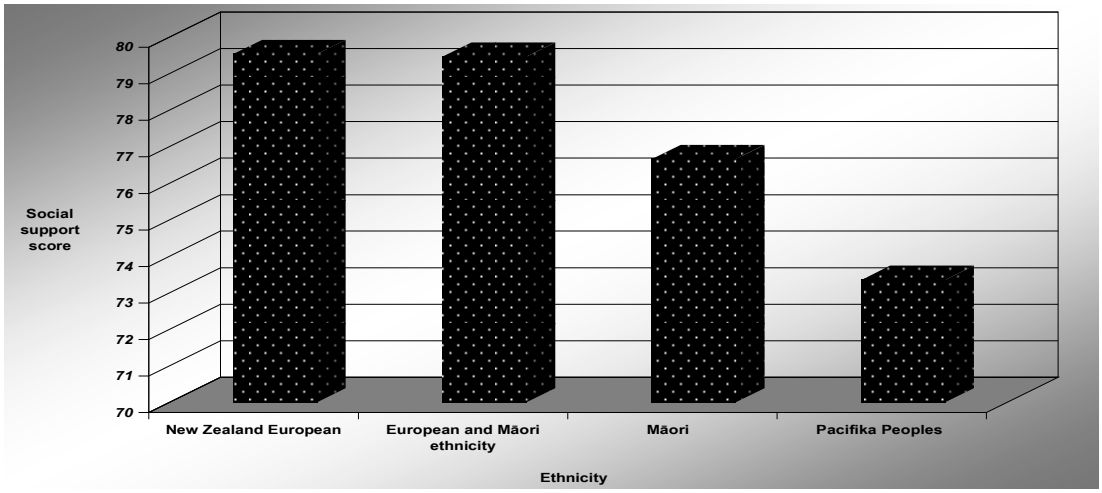

Figure 13. Mean social support scores reported for each ethnic group.

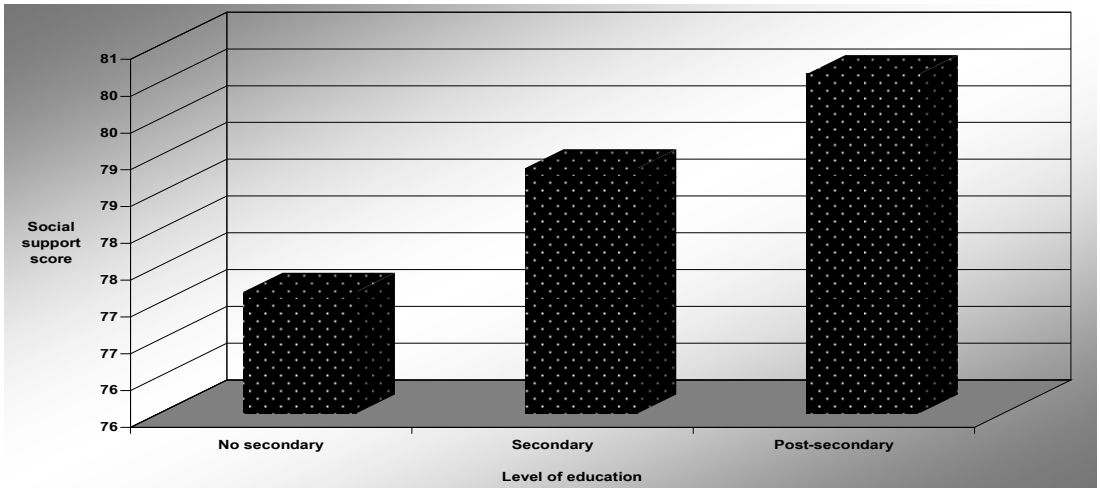

Figure 14. Mean social support scores reported for each level of educational qualifications.

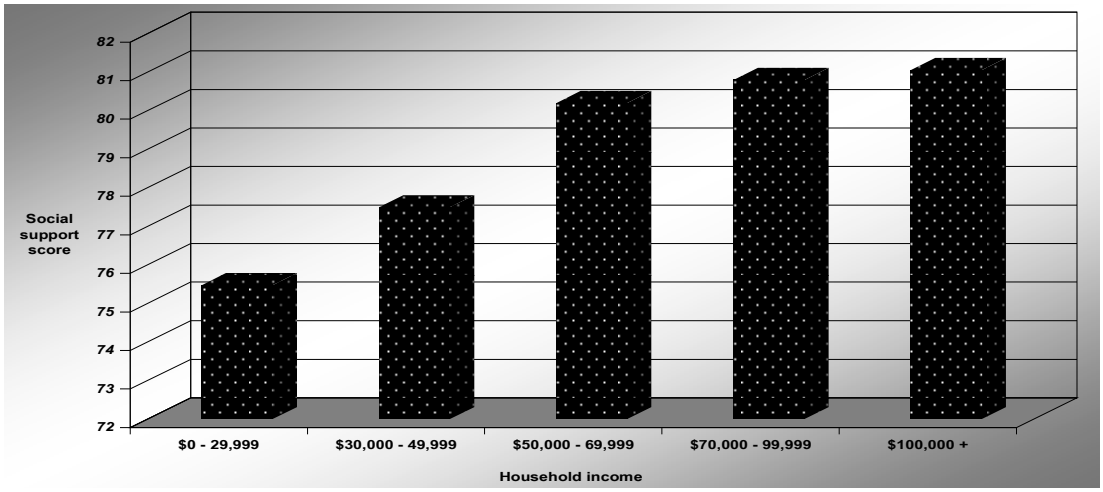

Figure 15. Mean social support scores reported according to levels of household income.

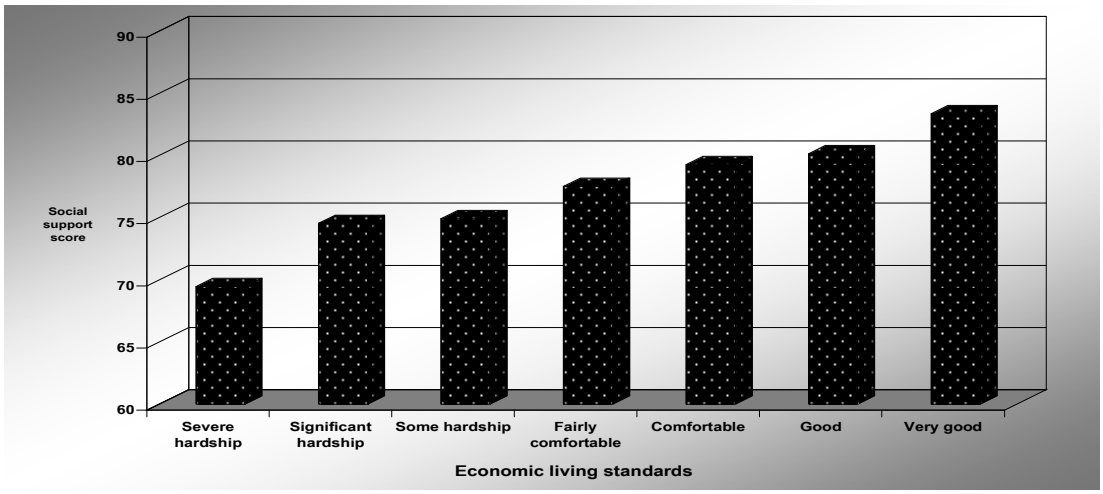

Figure 16. Mean social support scores reported according to economic living standards

Social Capital

Social integration may also be conceptualised at a community or society level. At this level the notion of social capital is often used to describe "…features of social organisation, such as civic participation, norms of reciprocity, and trust in others." (Putnam, 1995). Following these sorts of definitions the aggregate resources available to community members have been measured as trust or levels of volunteering. Kawachi et al., (1997) have shown that in communities in the US lower levels of trust were associated with individual self-rated health and higher mortality from most major causes. In the HWR this aggregate level was measured using items to capture levels of trust that people had in others (on a four point scale from 'people can almost always be trusted' through to 'you almost always can't be too careful') as used in the US studies.

Over three quarters of the HWR sample (77.21%) considered that they could trust other people, either feeling that people can always (12.41%) or usually (64.81%) be trusted. In 2004 (TNS, 2007), 76 percent of people over 65 older people had reported that people can almost always or usually be trusted and this was the same level of trust as that measured in the total population of all ages (MSD, 2007a). The TNS (2007) survey was conducted in 2004. The study was limited in terms of generalisablity because it did not include a sample of the general population (focussing on cities), had only a 22% response rate, and included limited numbers of older people (MSD, 2007a). However, it provides an interesting basis for cautious comparison with the present study.

In the HWR sample, these perceptions of trust were related to network categorisation ($p<.001$). Although this relationship is weak, those classified as Locally Self Contained were the most likely (10.9%) to believe that people cannot be trusted, compared to 9.1% of the Locally Integrated, 8.3% of the Wider Community Focused, 7.4% of the Private, and 7.1% of those classified as family dependant. Perceptions of social support also differed significantly in relation to feelings of trust ($p<.001$) as shown in figure 17.

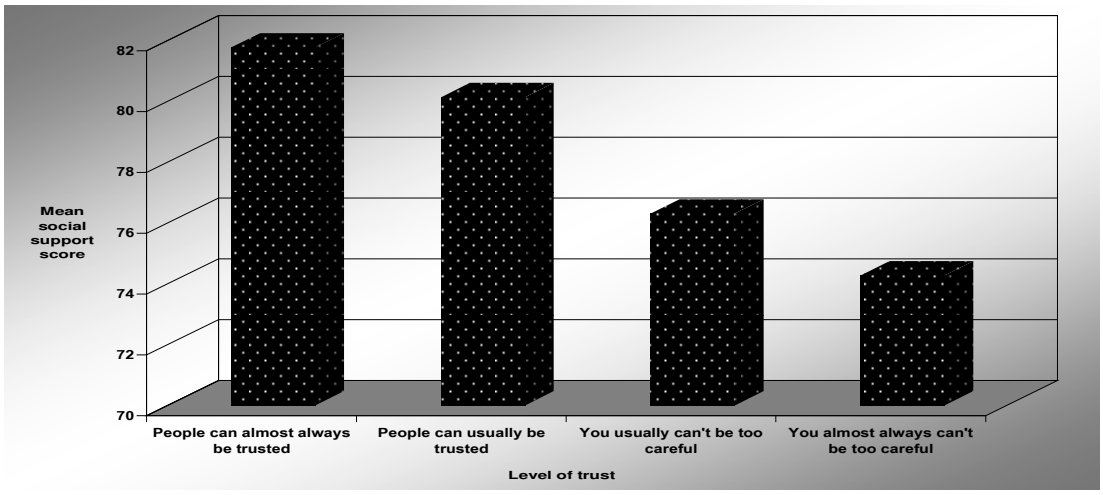

Figure 17. Mean perceived social support scores reported according to levels of trust.

Health

Reports of trust were very weakly correlated with physical (r = .09, p<.001) and mental health summary scores (r = .14, p<.001). The mean physical health score for those who thought people could usually be trusted was significantly higher than those less trustworthy of other people. Likewise, mean mental health scores were higher for those who felt other people could be "almost always" or "usually" trustworthy compared to the other two groups.

Individual and Structural Factors

Women were slightly more likely than men (9.7% versus 7.5%) to believe that people can always be trusted (p<.001). Higher levels of education were also associated with the greater likelihood of believing that people can be trusted. Sixty nine percent of those with a post-secondary education indicated that people can usually be trusted compared to 65% of those with a secondary qualification and 58% of those with no high school qualification. Likewise nine percent of those with no high school qualification indicated that one "can't be too careful" compared to 4.2% of those with a post-secondary education. Household income was also related to perceptions of trust (p<.001). There was a tendency for those on higher household incomes to be more trusting of others. For example approximately 8% of those with household incomes below $30,000 thought that people could not be trusted compared to 3% of those with incomes over $70,000. The relationship between trust and economic living standards follwed the same pattern. Finally, ethnicity was related to perceptions of trust (p<.001). Twenty eight percent of Pasifika peoples thought that people can be trusted almost all of the time compared to approximately 9% of the other three ethnic groups.

Social Connectedness in other New Zealand Data

Other measures of social connectedness have been used in the New Zealand Quality of Life survey (TNS, 2007) and cited in other Ministry of Social Development Reports (e.g. MSD, 2007) to indicate the levels of connectedness among the New Zealand population in major cities and among older people (MSD, 2007a). Four indicators used in these surveys were also measured in the HWR study: telephone and internet access in the home, regular contact with family/friends, trust in others, and the proportion of the population experiencing loneliness. Together, these indicators are seen to "measure the opportunities for and the actual levels of connection between people, both within their immediate social groups and within the wider community" (MSD, 2007). The indicator of trust in others has been discussed above in terms of social capital and results from the other three items will be described here.

Loneliness

When asked about feelings of loneliness, 21.7% responded that they felt lonely sometimes or most of the time (2.8%)[3]. In comparison, in 2004, 15% of people over the age of 65, as measured in the TNS (2007) quality of life survey, said they had either always, mostly or sometimes felt lonely over the last 12 months (MSD, 2007a).

Feelings of isolation and loneliness are, as expected, related to lack of social support. As seen in figure 18, those who report the least overall support are also more likely to feel lonely most of the time.

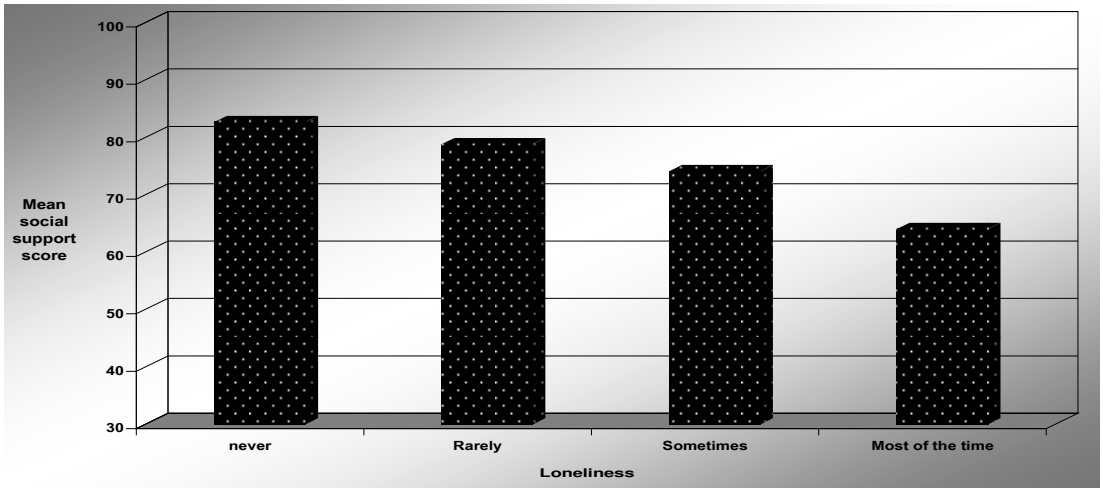

Figure 18. Mean perceived social support scores reported according to levels of loneliness.

This affective response may undermine wellbeing and be detrimental to people's physical and emotional health. In the HWR data, both physical and mental health were strongly related ($p<.001$) to feelings of loneliness: those with the poorest health were most likely to report feeling lonely most of the time (see figures 19 and 20).

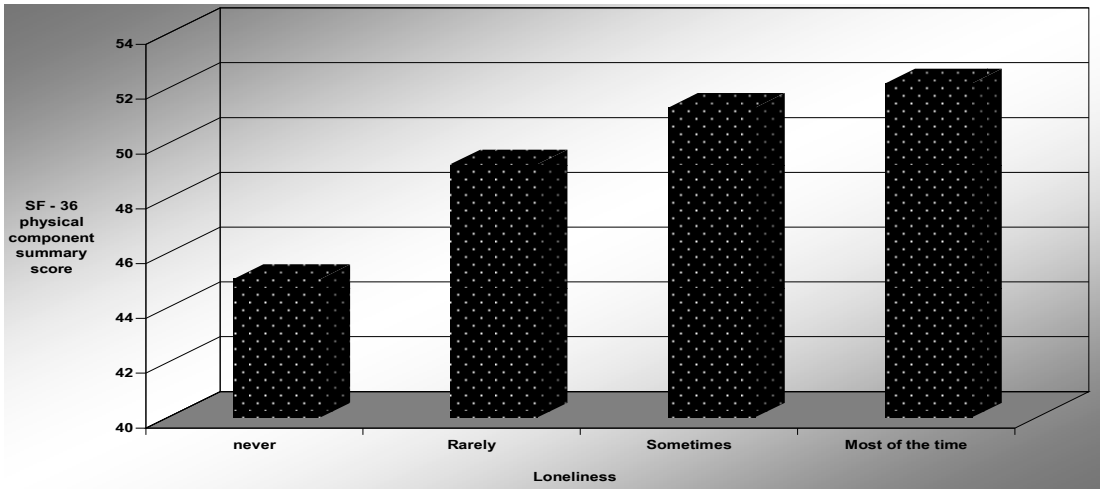

Figure 19. Mean summary physical health scores according to levels of loneliness.

[3] For statistical purposes, those responding "always" (0.6%, N=36) were combined with those responding "most of the time"

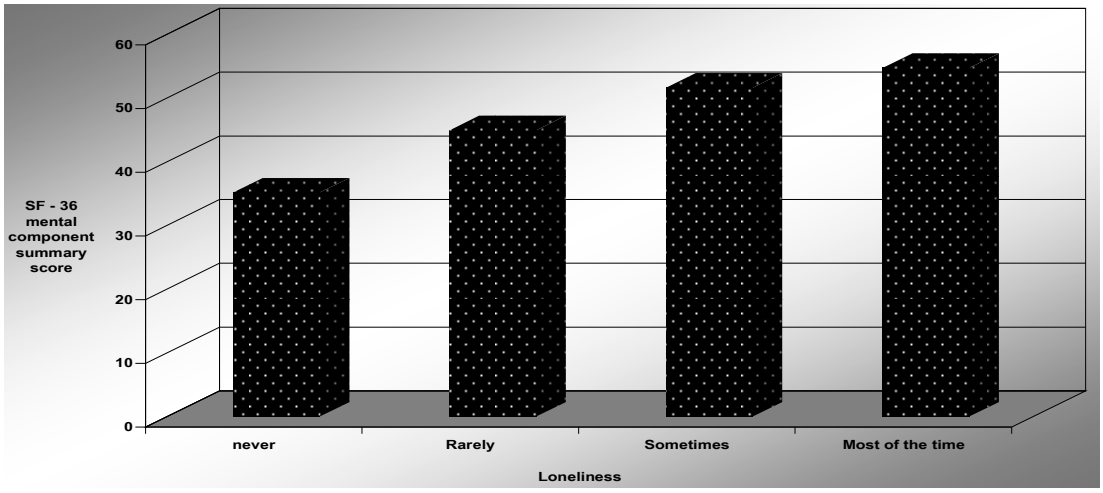

Figure 20. Mean summary mental health scores according to levels of loneliness.

Telephone and Internet Access in the Home

Telephone and internet access allow people to be in touch across distances and enable the ready formation of wider contacts. They support the maintenance of existing connections and ongoing participation in society. In the HWR sample 96.43% had access to a telephone (95% of men, and 98% of women). Together, 58% reported access to the internet. Again, there was a slightly higher percentage of women (60%) than men (55%). This compares well with the national level of access which was 91.60% for the telephone and 60.50% for the internet in 2006 when 53% of 65–69 year olds resided in a household with internet access (Statistics NZ, 2007). In the overall census figures, older men were more likely than older women to live in a household with internet access: in 2006, 43 percent of men over 65 compared with 34 percent of older women had access to the internet, however, these figures include those over 70 years for whom internet access proportions vary (MSD, 2007a). These proportions are also changing rapidly with time and will no doubt continue to increase.

Regular contact with family and friends

This item measures the proportion of people who keep in touch with family and friends by having them over for a meal at least once a month. Figure 21 shows the items that were used to measure this activity, and that nearly 70% of women and 67% of men, do have friends for dinner. These indicators together reinforce the finding that, although we are concerned about those who are isolated and suffer lower levels of wellbeing, the largest percentage of this age group report good social support, supportive networks, active engagement with others and good health.

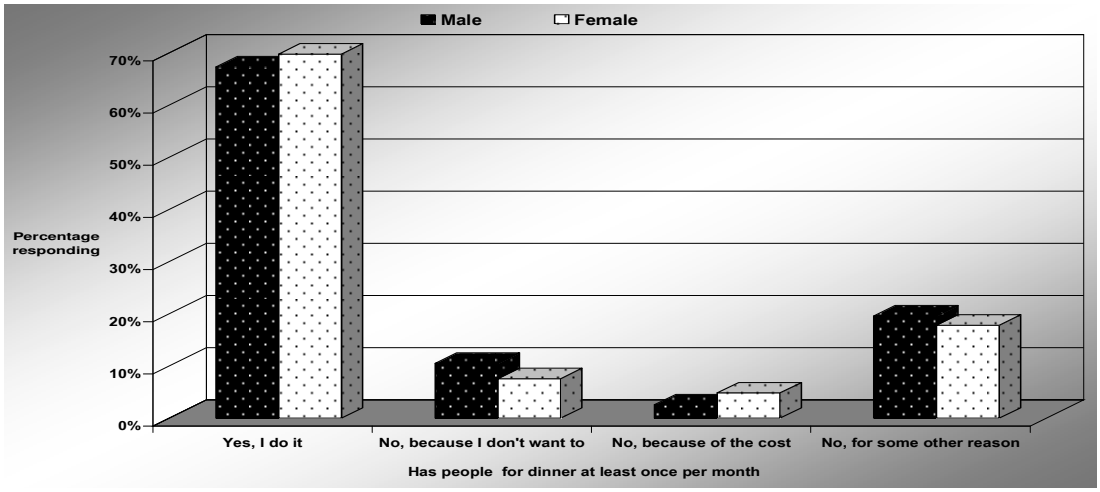

Figure 21. Percentages of men and women who have family and friends to dinner at least once a month.

Concluding Comments

The direct of effects of social networks and social support on the health of the young-old adults in the HWR sample are small. However, there are clear patterns in the relationships between types, sources, and perceptions of social support and health. The differences are in directions that have already been observed in international research with older samples. Current health may be already affecting the types of social networks that people may be engaged with, and their associated perceptions of support. International research has shown that networks and support will affect risks to health and mortality in older age (e.g. Litwin & Shiovitz-Ezra, 2006; Berkman, 2000; Seeman, 1996; Wenger, 1997). The important question at present is how the social network and health relationship will change across time as these people age.

There are some indications that certain groups are at increased risk of the poorer health related to lower social support. In particular, those people on lower incomes and in minority ethnic groups in New Zealand, already report lower levels of social support, restricted social networks, and less integration in society. These are areas for focussed investigation and concern.

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Appendix 1. Means and (Standard Deviations)

	Social support	Physical health summary	Mental health summary
Network categorisation			
Family dependent	80.0 (9.2)	50.4 (9.4)	50.2 (8.4)
Locally integrated	79.7 (9.8)	50.9 (9.1)	51.6 (8.8)
Local self-contained	78.7 (9.9)	51.6 (8.6)	51.2 (8.2)
Wider community focused	78.7 (10.0)	51.2 (8.9)	51.0 (9.1)
Private	76.7 (10.6)	51.1 (9.1)	50.2 (9.6)
Trust			
People can always be trusted	81.8 (10.4)	51.4 (9.5)	52.7 (7.9)
Usually be trusted	80.1 (9.6)	51.8 (8.4)	51.8 (8.3)
You usually can't be too careful	76.3 (9.6)	49.9 (9.6)	49.3 (9.7)
Almost always can't be too careful	74.3 (11.3)	49.3 (10.3)	48.4 (11.4)
Loneliness			
Never	81.8 (10.4)	52.2 (8.4)	54.7 (6.3)
Rarely	80.1 (9.6)	51.3 (8.4)	51.6 (7.2)
Sometimes	76.3 (9.6)	49.2 (10.2)	44.9 (10.0)
Most of the time	74.3 (11.3)	45.1 (11.0)	35.1 (11.2)
Marital status			
Legally married		51.6 (8.6)	51.7 (8.4)
Civil union/de facto/ partnered		51.6 (8.0)	51.7 (8.0)
Permanently separated		49.5 (10.3)	47.9 (11.3)
Divorced or marriage dissolved		49.9 (10.3)	49.1 (10.5)
Widow or widower		49.7 (9.9)	49.5 (9.5)
Never legally married		48.7 (9.4)	49.9 (9.0)
Age			
54 – 59	79.5 (10.1)		
60 – 64	78.8 (9.9)		
65 – 70	78.3 (9.6)		
Status			
Not retired	79.7 (10.1)		
Partly retired	78.8 (9.7)		
Fully retired	77.7 (9.6)		
Gender			
Male	78.0 (10.2)		
Female	79.9 (9.7)		
Ethnicity			
European	79.5 (9.8)		
Euro/Māori	79.5 (9.6)		
Māori	76.7 (9.4)		
Pasifika	73.4 (9.5)		
Income			
$0 – 29,999	75.5 (10.8)		
$30k – 49,999	77.5 (9.5)		
$50k – 69,999	80.2 (9.3)		
$70k – 99,999	80.7 (9.7)		
$100,000 +	81.1 (9.3)		
ELSI			
Severe hardship	69.4 (10.2)		
Sig. hardship	74.5 (10.2)		
Some hardship	74.9 (10.6)		
Fairly comfortable	77.5 (9.5)		
Comfortable	79.2 (9.1)		
Good	80.1 (9.4)		
Very good	83.4 (9.2)		
Education			
No high school qualification	77.2 (10.0)		
High School qualification	78.9 (9.5)		
Tertiary qualification	80.0 (10.6)		