Social capital in individuals over fifty: does formal volunteering have an impact?

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Abstract

Objectives

Social capital is a comprehensively researched phenomenon which is widely understood to relate to social interactions (Hanifan, 1916), networks (Putnam, 2000; Onyx and Bullen, 2000) and activities (Onyx and Bullen, 2000). Putnam (2000) identified volunteering as one contributor to developing social capital which is particularly influential to the social capital of older people as it encourages them to leave the confines of their homes and engage in the community which many otherwise lack the opportunity to do (Cox, 2011). Consequently the main objective of this study is to determine whether volunteers over fifty display greater social capital than non-volunteers. Furthermore, this study aims to establish whether other influences such as demographics, and motivations and barriers to volunteering also impact social capital in this age group.

Design

This study makes a comparison of social capital in volunteers and non-volunteers, along with using multiple regression to determine whether the independent variables of volunteer functions and barriers to volunteering predict social capital, as the dependent variable.

Method

Using Onyx and Bullen's (2000) questionnaire, levels of social capital was measured for the volunteer and non-volunteer groups. Volunteers also reported their motivations of volunteering using Clary and Snyder's (1999) Volunteer Functions Inventory, and non-volunteers reported their barriers preventing volunteering through a questionnaire developed by the Volunteer Development Agency (2007). The differences been the groups were compared and the significance of functions and barriers to volunteering for predicting social capital was sought.

Results

Volunteers measured higher in social capital than non-volunteers, along with women more so than men. Other demographics, across both groups, were found to predict social capital, including income, which correlated negatively. Clary and Snyder's (1999) 'enhance' and 'values' functions were found to significantly predict social capital along with barriers to volunteering, in particular having an illness or disability.

Conclusions

The study has successfully supported the hypothesis that volunteers have greater social capital than non-volunteers, and has found that there are also other influences. These findings mean that methods by which social capital can be developed have been identified, and in turn, the benefits of volunteering are evidenced. However, the relationship between volunteering and social capital is somewhat difficult to decipher with uncertainty as to which leads to the other. Nevertheless, this quantitative analysis offers support for the existence of a relationship, beneficial to the economy and government policy, as well as being applicable to over twenty-one million over fifty's in the UK (Age UK London, 2011).

Introduction

Similarly to many concepts within psychology the notion of social capital has been explored by many who have all offered insights into the phenomenon. The term was first used by Hanifan (1916) to describe things that were important in people's day-to-day lives, focusing on social interactions, companionship and kindness. Bourdieu (1986) on the other hand viewed social capital in terms of the resources produced by social interaction. Bourdieu (1986) links social capital very closely to economic capital suggesting that social interactions can often be converted into economic capital. Brisson and Usher (2005) found a significant interaction between neighbourhood income and social capital, thus demonstrating support for some relationship between economic capital and social capital. Kawachi, Kennedy, Lochner, and Prothrow-Stith (1997) developed this argument further, suggesting that neighbourhoods experience reduced social capital where there exists an inequality in income as this impacts levels of cohesion. However, Bourdieu's focus on economic capital has little applicability to certain relationships. Social interactions with friends and family would rarely be for economic gain, thus according to Bourdieu's approach these relationships would not necessarily be an important aspect of social capital. Like Bourdieu and Hanifan, Fukuyama (1995) also incorporates social interactions into her view of social capital but focusing not on economic gain but the norms, such as reciprocity and kindness that are produced as a consequence of such interactions.

Research by Onyx and Bullen (2000) provides empirical support for the relationship between social capital, norms and reciprocity that Fukuyama theorises. Studying five different Australian communities, Onyx and Bullen (2000) concluded that there exists eight indicators of social capital: local community participation, social activity, trust and safety, neighbourhood networks, friends and family networks, work networks, acceptance of diversity and valuing life. Onyx and Bullen (2000) found that each varied in contribution across the different communities but did not correlate with demographic characteristics. Daniere, Takahashi and NaRanong (2002)

argue though that these indicators are only effective for measuring social capital when it is defined in terms of these. Other definitions of social capital exist to which Onyx and Bullen's measure would be ineffective as social capital defined not in terms of these indicators could not be successfully measured using them. This argument appears void however as these eight indicators are widely supported by many psychologists. Putnam, for example, examined the US General Social Survey (Smith, Phillipson and Scharf, 2002) analysing the different measures he believed indicated social capital: community/organisational life, engagement in public affairs, community volunteerism, informal sociability and social trust (Putnam, 2000,). Putnam's indicators do not greatly differ from those that Onyx and Bullen suggest thus offering further support to one another's ideas. Putnam went on to define social capital as the "connections among individuals – social networks and the norms of reciprocity and trustworthiness that arise from them" (2000, p. 19). His definition not only supports the work of Onyx and Bullen but also earlier ideas such as those by Hanifan.

In addition to defining social capital, Putnam was the first to distinguish different types (Woolcock, 2001). Putnam (2000) identified bonding social capital and bridging social capital. The former relates to socialising with people who are similar to ourselves in terms of, for example, age and gender. This reinforces what and who we know. The latter incorporates different groups who are less familiar to us and closes the gap between social divides. Many definitions of social capital have been generated which utilise these concepts. Dekker and Uslaner (2001, p. 2), for example, defined social capital as being "about bonding similar people and bridging between diverse people, with norms and reciprocity." Field (2003) argued that Putnam failed to support his concepts with evidence, but Varshney (2001) later produced empirical support for the two concepts. He found that communities that had stronger bonds, as opposed to communities with stronger bridging, experienced more violence demonstrating the necessity of bridging to prevent conflict. Putnam (2000, p.22) however

stressed the need for both types of social capital as “Bonding…is…good for getting by, but bridging…is crucial for getting ahead.”

Putnam (1995) believed that social capital in America was in decline. This decline was characterised by a decrease in political involvement such as voting, an increase of tolerance towards one another but at the expense of trust, and a reluctance to be a member of local or civic organisations (Putnam, 2000). The ‘Bowling Alone’ title that Putnam appropriate names his book successfully encapsulates his argument that despite popularity of bowling in America there has been a reduction in the number of league members (Putnam, 1995). Putnam (2000, p. 367) acknowledged “suburban sprawl” as a big contributor to the decline with people spending more time travelling to work and he attributed a large decline in group activities to television.

Empirical support for the decline comes from Andersen, Grabb and Curtis (2006). From time-use diaries over a forty-year period, they found that the US had seen a decline in civic participation but that this had not been the case in the UK. Furthermore, Hall (1999) also concluded that the UK had not seen the loss of social capital that America apparently had. However Smith, Phillipson and Scharf (2002) recognise that different data had been used by Putnam and Hall, which may have influenced the measurement of social capital. Conversely though, authors including Skocpol (2003) and Lemann (1996) believe that social capital is not declining, but instead changing. For example, in America, soccer leagues are becoming more popular than bowling leagues (Putnam, 2000). Perhaps therefore, the UK has embraced this change and acknowledged that social capital is now obtainable through different means to those originally suggested. As a consequence of this embrace, the UK does not demonstrate a decline in social capital, but America is still yet to recognise this change and thus continues to demonstrate a decline.

Although it is not decided whether social capital is in decline or just changing, it is important that social capital is not lost to ensure its positive elements, such as companionship (Hanifan, 1916), trust (Purnam, 2000;

Onyx and Bullen, 2000) and reciprocity (Putnam 2000; Fukuyama, 1995) are evident and experienced by individuals in society. Moreover, Putnam (2000) notes the positive impact of social capital on health and happiness thus demonstrating the importance of ensuring the existence of social capital. Maloney, Smith and Stoker (2000) suggest that the development and maintenance of social capital is greatly under researched, but those such as Boneham and Sixsmith (2003) have found that volunteering can is useful for both creating and maintaining social capital. Furthermore, throughout Putnam's (2000) work he links the decline in social capital to a decline in volunteering, demonstrating a link between the two. The concept of volunteering used by Boneham and Sixsmith, and Putnam is difficult to decipher though as it come in many forms. For example, Thomas and Finch's (as cited in Boneham and Sixsmith, 2003) historical perception sees volunteering as a "middle-class notion of helping others less fortunate than oneself…via formal organisations," whereas Lukka and Ellis (as cited in Boneham and Sixsmith, 2003) note that informally helping others, such as doing a favour for a neighbour, is equally an example of volunteering. Nevertheless, identifying how volunteering builds social capital is not challenging. Clary and Snyder (1999) found that motivations, including helping others and strengthening social relationships were evident for volunteering. These functions are common themes throughout definitions of social capital thus highlighting its relationship with volunteering. Esmond and Dunlop (2004, p. 43) looked at Clary and Snyder's Volunteer Functions Inventory (VFI) and detailed that 'values' was a very important motivator for volunteering. This was characterised by "…the importance for one to help others." This motivator is important for social capital as offering help is a social activity that brings people together creating trust and networks, both characteristics that Onyx and Bullen (2000) found essential for creating social capital.

Project Re:action, (Boeck, Makadia, Johnson, Cadogan, Salim, and Cushing, 2009) which explored the impact of volunteering on social capital and community cohesion, found that 60% of their volunteers had felt as though they had supported their own community or helped to "bridge the gap between different communities." These empirical findings reflect that

volunteering does impact social capital and they support the concepts of bonding and bridging that Putnam (2000) earlier descried.

The relationship between volunteering and social capital is further strengthened by Boneham and Sixsmith's (2003) identification that both concepts centre around mutual co-operation, reciprocity, trust and networking. However, Boneham and Sixsmith's (2003) also identify the negative side to volunteering, often not given the acknowledgement it deserves. Their research found that volunteering could lead feelings of inadequacy as a consequence of failing to make positive changes which could lead to a withdrawal from community life. This negatively impacts social capital creating the opposite effect volunteering is believed to generate. However, there is minimal research into the negatives of volunteering so it is difficult to verify such assertions.

Whilst the link between volunteering and social capital is apparent, there is reason to believe that there exists a particularly strong impact of volunteering on social capital in older people. Volunteer Now (2011) reported that social isolation is one of the biggest issues for older people, and Cox (2011) argues that volunteering provides older people with an opportunity to leave the confines of their homes (Cox, 2011). This is fundamental to social capital as it gets older people socially oriented in their communities. Extracts from focus groups (Cox, 2011) demonstrates how important older people themselves see socialising: *"…when you're able-bodied you must get out among people…" "…You have to keep active. If you sit [around] you are definitely going to deteriorate."* The activity of leaving the home is at the forefront of Hanifan, Bourdieu and Putnam's views of social capital as a result of social interactions.

A study of volunteers aged 50+ (Volunteer Development Agency, 2007) found volunteering increased civic engagement as 15% of volunteers had attended some form of public consultations, compared to only 1.8% of non-volunteers. This demonstrates an increase in social capital in volunteers relating closely to Putnam's (2000) belief that social capital arises from engagement in public affairs.

The motivations behind volunteering also help to demonstrate its link with social capital in older individuals. Comparing the motivations of younger people to those of older people revealed that younger individuals tended to volunteer in order to increase job opportunities. Older volunteers on the other hand were wanted to give something back to their community, meet new people and develop reciprocal relationships (Cox, 2011). Furthermore, around 30% of older volunteers do so because they believe it will benefit the community compared to only 14% of individuals aged sixteen to twenty-five (Cox, 2011). Although the community focus of the older group shows greater levels of social capital it is difficult to determine whether volunteering increases social capital, as the likes of Putnam would suggest, or whether these individuals have a greater level of social capital and it is this that encourages them to volunteer. It is likely, however, that it works both ways, creating a relationship which is difficult to decipher.

Focusing on the motivations of older volunteers, Greenslade and White (2005) used Clary and Snyder (1999) VFI to find that the social function was the only significant motivator for participants volunteering. Moreover, Davila and Diaz-Morales (2009), also using the VFI, found a positive correlation between age and social motivators contrasting the negative correlation between age and career motivators for volunteering. This social focus of volunteering continues to demonstrate high levels of social capital in older volunteers. In addition to these findings it is important to note that having time to spare and wanting to utilize existing skills preceded motivations such as the social function as well as helping people and meeting new people (Volunteer Development Agency, 2007; Cox, 2011). Therefore, although motivations to volunteer in older people may be oriented around factors that increase social capital, they do not exist without having time and skills.

Volunteering can be divided into formal and informal volunteering. Formal volunteering has been found to create increased social capital more so than informal volunteering because the latter generally consists of helping out friends and/or family who are groups of known and familiar people (bonding), whereas the former exposes volunteers to a greater variety of

people (bridging) (Boneham and Sixsmith, 2003). For example, the Volunteer Development Agency (2007) found that 56% of formal volunteers had greatly increased contact with individuals of other religions as a result of volunteering compared to only 17% of informal volunteers. This exposure to a wider range of people increases the development and availability of networks. Furthermore, as volunteers begin to familiarise with those different to themselves they become more understanding and accepting of the diversity that exists within communities. Onyx and Bullen (2000) describe both of these as key characteristics for social capital, thus supporting the view that formal volunteering is a necessity for developing social capital.

Building on formal volunteering, particular types can also be especially beneficial for increasing social capital. A good example is school based volunteering as after sport orientated activities, schools are the most common establishment (Volunteer Development Agency, 2007). This is hugely beneficial for social capital as Age UK (as cited in Cox, 2011) reports that contact with different generations reduces loneliness in older individuals much more effectively than contact with the same generation. This supports the argument that increasing intergenerational contact by volunteering in schools better increases social capital compared to contact with those of the same generation. Project Re:action (Boeck, Makadia, Johnson, Cadogan, Salim, and Cushing, 2009) found that school based volunteering “challenged preconceived attitudes” thus breaking down negative stereotypes and bringing together different groups of people. This creates greater social capital based on defining it by accepting diversity, social interaction and relationship development (Onyx and Bullen 2000; Bourdieu, 1986).

Intergenerational contact is a prime example of Putnam’s concept of bridging social capital. Older individuals volunteering in schools bridges different groups which Fukuyama (1995) believes greatens levels of trust. Moreover, Putnam’s (2000, p.22) idea that bridging is crucial for “getting ahead” is reinforced as volunteering of this nature helps create an enduring and expansive cohesion of different groups. Older volunteers

thus have a greater sense of social capital as they engage in their communities and socialise with groups different to themselves. Fifty-one percent of participants in Project Re:action (Boeck, Makadia, Johnson, Cadogan, Salim, and Cushing, 2009) said they began socialising with people who are different to themselves as a direct consequence of formal volunteering. This subsequently creates new networks and reciprocal relationships whilst establishing trust and tolerance.

Despite the amount of research that supports volunteering as a beneficiary to social capital, there are an increasing number of factors that prevent volunteering. Research into barriers to volunteering continuously show that the most common reasons for not formally volunteering surround having a lack of time as a result of too many other commitments, with caring for children or the home being the most common (Volunteer Development Agency, 2007). So, if the relationship between volunteering and social capital is as strong as research suggests this means that social capital is inevitably going to decline as these types of barriers are extremely common and unlikely to cease. Conversely though, as it is time that prevents individuals from volunteering, the possibility arises that they generate social capital in other ways that are less time consuming. For example, Putnam noted the importance of voting as a contributor of social capital. This is reinforced by research that found that older (65+) non-volunteers are more likely to vote than volunteers (Volunteer Development Agency, 2007). Consequently, the differences in social capital between volunteers and non-volunteers requires investigation to further explore what impact volunteering has.

Using Onyx and Bullen's (2000) Social Capital questionnaire, this study aims to measure and compare levels of social capital in volunteers and non-volunteers aged over fifty. This study aims demonstrate that those who volunteer have greater levels of social capital than those who do not. Moreover, keeping in mind Brisson and Usher's (2005) relationship between income and social capital, along with findings suggesting that low income is linked to crime, poor housing and family breakdown, to name a

few (Volunteer Development Agency, 2007), this study hypothesises that the greater the participants income the greater their levels of social capital will be.

In addition to measuring social capital, this research uses Clary and Snyder's (1999) VFI to understand the motivations of the participants volunteering, as well a 'barriers to volunteering' questionnaire developed by the Volunteer Development Agency (2007) to understand reasons behind not volunteering by the non-volunteer group. In light of previous research by Clary and Snyder (1999) and the Volunteer Development Agency (2007) this study intends to establish that volunteers who are motivate by the values function will have greater social capital along with non-volunteers who express 'doing enough' and 'work commitments' as their greatest barriers.

Quantitative research of this kind is particularly justified as the wealth of research that exists on older people largely focuses on quality of life (Gabriel and Bowling, 2004) and physical health (Metz, 2000; Jakobsson and Hallberg, 2002). The concept of social capital in specific relation to older generations appears to lack the attention it deserves.

<u>Hypotheses</u>

- Volunteers have greater social capital than non-volunteers
- The greater the participants level of income, the greater their social capital
- The more 'values' is a motivator for volunteering, the greater the level of social capital
- The greater the barriers of 'already doing enough' and 'work commitments' for non-volunteers, the greater their levels of social capital

Method

Design

With the primary independent variable taking categorical form of volunteer or non-volunteer, the groups were pre-determined and not randomly allocated, thus this study has a between participants quasi-experimental design. Other independent variables (predictor variables) are the volunteer functions (VFI) and the barriers preventing volunteering. The dependent variable is the measure of social capital.

Participants

One hundred and nine individuals participated in this study; sixty-three volunteers and forty-six non-volunteers (control group). Fifty women and thirteen men comprised the volunteer group, and twenty-eight women and eighteen men the non-volunteer group. All participants were aged between fifty and ninety-five, with a mean age of sixty-four.

Volunteer participants were recruited through Intergen CIC, an intergenerational organisation with a database of older volunteers. The Chief Executive of Intergen contacted participants to ensure no data protection issues arose. The non-volunteer participants were a general population sample and recruited through friends and family by word of mouth.

Materials

Three questionnaires formed the main materials. These questionnaires were available as hard copies and online through SurveyGizmo (www.surveygizmo.com)

Social Capital Questionnaire (Appendix 1)

Created by Onyx and Bullen (2000) this questionnaire comprised of thirteen demographic questions including age, gender, annual income, and

twenty-nine questions to measure social capital. The latter questions were presented as a likert scale with scores from 1 to 4, and fell in to one of seven categories determined by Onyx and Bullen as indicators of social capital (also illustrated in Appendix 1)

Volunteer Functions Inventory (VFI) (Appendix 2)
Developed by Clary and Snyder (1999) this questionnaire used thirty questions to explore the motivations for volunteering and eleven questions to understand the outcomes of volunteering experienced. The motivations and outcomes fell into categories: career, social, values, understanding, enhance and protect. Five questions were asked to determine the satisfaction of the participants volunteering experience and one question to determine the participants 'Long-term intentions'. Questions were presented as a 1 – 7 likert scale reflecting how important or accurate each statement was.

Barriers to Volunteering Questionnaire (Appendix 3)
Nineteen questions, on likert scales, were taken from the Volunteer Development Agency (2007) 'Its all about time' full report which explored the barriers to volunteering that non-volunteers experienced. Permission to use this questionnaire was requested from the Volunteer Development Agency who approved its use (Appendix 4). In addition to questions what prevents the individual volunteering, included was also a question which addressed whether the participant would like to offer more time helping groups and also a question asking how they would respond when directly asked for help.

Along with the questionnaires, participants were provided with an invitation letter, consent form and debrief (Appendices 5, 6 and 7 respectively).

Procedure

Ethical approval for this research was ascertained from the Research Ethics Board of the University of East London (Appendix 8). Following this, Intergen volunteers were posted the Social Capital Questionnaire and the VFI. Volunteers were asked to complete and return these in the enclosed SAE. The volunteer group were allocated participant numbers to ensure anonymity.

Non-volunteer participants were contacted through family and friends via e-mail and word of mouth. They were provided with a link inviting them to complete the Social Capital Questionnaire and Barriers to Volunteering Questionnaire online through SurveyGizmo or given a hard copy of the questionnaires. This group were asked to allocate themselves a participant number. The online questionnaires were configured so that no duplicate participant numbers were allowed.

Both groups were presented with the social capital questionnaire first so that the measures taken from the responses were objective and not in any way influenced by having completed a questionnaire about their reasons for volunteering or not volunteering. Furthermore, participant invitations, consent forms and a debrief were provided to all participants whether postal or online.

Participant responses, the raw data, were collated and entered into SPSS for statistical analysis.

Results

Descriptive statistics

Volunteer

Table 1 shows that the average social capital score for volunteers is 20.99 compared to 18.79 for non-volunteers. The standard deviation for both groups (SD volunteers = 2.47, SD non-volunteers = 2.3) demonstrates that the scores fall fairly close to the mean and the distribution of scores are very similar for each group. This greater average social capital score for the volunteer group supports the hypothesis that volunteers will have greater social capital than non-volunteers. The effect size (d = 0.95) is quite large with 45% (Dancey and Reidy, 2007) of the distribution of scores overlapping. Effect size was calculated using the following formula (Dancey and Reidy, 2007):

$$d = \frac{mean^1 - mean^2}{mean\ SD}$$

Table 1. Sample characteristics: total number, mean, and standard deviations, for social capital scores in volunteers and non-volunteers

	Volunteer	Mean	Standard Deviation
Social Capital	Yes	20.99	2.467
	No	18.79	2.297

Gender

Table 2 shows that women demonstrated a slightly higher average social capital score than men, 20.55 and 18.76 respectively. Likewise with the volunteer groups, the scores were distributed close to the mean and variability was very similar for both gender groups (SD women = 2.52, SD men = 2.48). Using the formula above, a quite large effect size was calculated (d = 0.72) with 57% (Dancey and Reidy, 2007) of the distribution of scores overlapping.

Table 2. Sample characteristics: total number, mean, and standard deviations, for social capital scores in men and women

	Gender	Mean	Standard Deviation
Social Capital	Male	18.76	2.484

	Female	20.55	2.517

Demographics

Most participants had an annual income of £25,000 – £34,999 (Table 3). This income bracket incorporates the UK national average annual income which the Office for National Statistics (2012) estimated was £26,500. Participants scored at the upper end of the qualification scale suggesting most were educated to at least A-level (or equivalent). Marginally more participants were unemployed (mean = 1.66. Based on 1 = employed, 2 = unemployed), but almost equal amounts of participants income was based on wages/salary and pension/benefits (mean = 1.47. Based on 1 = wages/salary, 2 = pension/benefits). The variability in scores was narrow for all demographic variables; gender was the least dispersed (SD = .45) and annual income was the most (SD = 1.47).

Table 3. Sample characteristics: mean and standard deviations for demographics

	Mean	Standard Deviation
Annual Income	4.1782	1.47239
Gender	1.7129	.45468
Employment	1.6634	.47492
Income Source	1.4653	.53971
Qualification	3.3861	.83630

Volunteer Functions Inventory

Table 4 shows that participants averagely scored highest for values function (mean = 27.42) and lowest for the careers function (mean = 8.24). The scores for each function were very widely spread around the mean with standard deviations ranging from 4.31 (career function) to 7.02 (understand function).

Table 4. Sample characteristics: mean and standard deviations for VFI

	Mean	Standard Deviation
Values Function	27.4200	6.74034
Career Function	8.2400	4.30737
Social Function	12.6600	5.16902
Understand Function	23.0800	7.02137
Enhance Function	20.1600	6.68034
Protect Function	12.3800	5.73528

Barriers to volunteering

Table 5 illustrates that the means for each barrier to volunteering do not greatly differ, but work commitments and doing enough average slightly higher than the others (mean = 1.95, mean = 1.92, respectively). All scores fall very close to the mean, within less than one standard deviation.

Table 5. Sample characteristics: mean and standard deviations scores for barriers to volunteering

	Mean	Standard Deviation
Would like to spend more time volunteering	1.5641	.68036
Work commitments	1.9487	.88700
Look after someone ill	1.5385	.64262
Look after children or home	1.6410	.77755
Already doing enough	1.9231	.70280
Not got necessary skills or experience	1.4615	.60027
Wont fit in concern	1.3846	.59007
Out of pocket concern	1.2821	.45588
Too old	1.3077	.52082
Would lose benefits	1.1026	.38353
Partner or family preventing	1.1026	.30735
Concerned would be unable to stop	1.4103	.63734
Bureaucracy	1.6154	.63310
Physical safety concern	1.1795	.45142
Liability for things gone wrong	1.3590	.48597
Don’t know how to find out	1.4359	.64051
Have an illness or disability	1.2821	.45588
Not thought about it	1.3590	.53740
New to the area	1.1282	.46901

Not heard about any opportunities	1.5897	.67738

Inferential statistics

Volunteer

An independent samples t-test (Table 6, Appendix 9) demonstrated that the variance between the volunteer groups was not significantly different (homogeneous), as assessed by Levene's Test for Equality of Variance. The t-test revealed that volunteers have significantly higher levels of social capital than non-volunteers, $t(105) = 4.7$, $p < 0.001$, with a difference of 2.20. In relation to the population mean, with 95% confidence it is estimated that the mean difference between the groups falls between 1.27 and 3.13. The results are therefore not a consequence of sampling error and they statistically support the hypothesis that volunteers will have greater social capital than non-volunteers.

Gender

An further independent samples t-test (Table 7, Appendix 9) demonstrated the homogeneity of the variance between gender conditions using the Levene's Test for Equality of Variance. The t-test showed that there is a significant difference between the levels of social capital in women and men, $t(105) = 3.31$, $p < 0.05$, with women scoring higher. In relation to the population, we can be 95% sure that the mean difference is between 2.86 and 0.72. The difference between social capital in women and men is statistically significant and not due to sampling error.

Demographics

A multiple regression analysis demonstrates that the association between the demographic (predictor) variables and social capital is moderate (Multiple R = .46) (Table 8, Appendix 9). Seventeen percent of the variance (adjusted R^2) in social capital scores is accounted for by the predictor variables and a slightly lesser than a large effect size (.27) has been detected based on Cohen's (1992) effect size index f^2, given the value of R^2 (Table 8, Appendix 9). Collectively the demographic variables significantly predict levels of social capital ($F(5, 95) = 5.08$, $p < .001$)

Qualification ($t = 2.57$, $p < 0.05$; $B = .76$, 95% CI = .17 – 1.35) and gender ($t = 2.97$, $p < 0.05$; $B = 1.52$, 955 CI = .51 – 2.54) significantly correlate positively with social capital, and annual income shows a significant negative correlation with social capital ($t = -2.56$, $p < .05$; $B = -.52$, 95% CI = -.92 – -.12) (Table 9, Appendix 9). It is therefore unlikely that the relationship between social capital and these three predictors is a consequence of sampling error.

Standardised coefficients reveals that annual income is a marginally stronger predictor of social capital. The negative correlation between annual income and social capital opposes the hypothesis that the two will positively correlate.

Volunteer Functions Inventory

A multiple regression analysis showed that the association between social capital and the volunteer functions (predictor variables) is moderate (Multiple R = .42). As a group, the predictor variables account for only 7% of the variance (adjusted R^2) of social capital, however, despite a slightly greater than medium effect size (.22) (Cohen, 1992) they did not significantly predict social capital ($F (6, 43) = 1.57$, $p = .18$) (Table 10, Appendix 9). Cohen (1992) argues that, given this effect size, to detect any significant effect of these six predictor variables on social capital, with a power of .80, at least ninety-seven participants are required based on a significance level of .05.

Of the predictor variables entered, the values function and enhance function significantly predicted social capital ($t = 2.11$, $p < .05$; $t = -2.57$, $p < .05$, respectively) (Table 11, Appendix 9) thus their correlation with social capital is unlikely to be a result of sampling error. The former was positively correlated with social capital ($B = .19$, 95% CI = .01 - .37) whereas the latter was negatively correlated ($B = -.26$, 95% CI = -.47 – -.06). Standardised coefficients show that the enhance function is a stronger predictor of social capital. Despite this, the significant correlation between values and social capital provides for the support for the hypothesis that the greater the influence of values as a function, the greater the level of social capital.

Barriers to volunteering

The association between social capital (criterion variable) and the barriers to volunteers (predictor variables) is strong (Multiple R = .88). Collectively the predictor variables account for 51% of the variance in the criterion variable (adjusted R^2). Using Cohen's (1992) effect size index f^2 a very large effect size was found (3.35) and the model as a whole significantly predicts social capital ($F(20, 18) = 2.99$, $p < 0.05$) (Table 12, Appendix 9). The findings are therefore unlikely to be a consequence of sampling error.

Having an illness or disability was the only predictor variable to singly significantly correlate with social capital ($t = -2.96$, $p < .05$) with a negative correlation (B = -2.71, 95% CI = -4.64 – -.79) (Table 13, Appendix 9). This fails to significantly support the hypothesis that non-volunteers who express doing enough or work commitments as their barriers would have the greatest social capital.

Discussion

Overall, the volunteer participants demonstrated higher levels of social capital, thus supporting the hypothesis that volunteers have greater social capital than non-volunteers, but volunteering is not the only influential factor on social capital. Gender was also found to impact social capital regardless of volunteering status, with women demonstrating greater social capital than men. An analysis of variance (ANOVA) however revealed that there exists significant no interaction between volunteering status, gender and social capital (Table 14, Appendix 10). Social capital was also significantly predicted demographic features (annual income, gender, employment status, income source and qualification), but only annual income and qualification were significant predictors as individuals. Annual income, however, negatively correlated with social capital. This consequently fails to support the hypothesis that the higher the participants income, the greater their social capital.

As a collective, Clary and Snyder's (1999) volunteer functions do not significantly predict social capital, but individually, the values and enhance functions were significant predictors. 'Values' displayed a positive correlation with social capital thus supporting the hypothesis that the greater 'values' is as a motivator, the greater the individuals social capital is. The enhance motivator on the other hand showed a negative link to social capital.

Barriers to volunteering were found to significantly predict social capital with a strong correlation. But, already doing enough and work commitments were not found to correlate, as individual predictors, with social capital thus refuting this hypothesis. Instead having an illness or disability was the only individual significant predictor, displaying a negative correlation with social capital.

The relationship between volunteering and social capital has earlier been clearly identified and explained. Both concepts are based on similar underpinnings such as strengthening relationships (Clary and Snyder, 1999) and helping others which were used by Thomas and Finch (as cited

in Boneham and Sixsmith, 2003) to define volunteering. Moreover, Project Re:action (Boeck, Makadia, Johnson, Cadogan, Salim, and Cushing, 2009) found that 60% of their volunteers felt they had supported theirs, and other, communities which highlights and reinforces the close relationship between volunteering and social capital. Consequently, it is the common factors that characterise these two concepts that explain the relationship that this study has unsurprisingly found.

Taking a traditional approach to the roles of women can help explain why this study found greater social capital in women. Many of the factors that have been argued to constitute social capital such as companionship (Hanifan, 1916), local community participation, neighbourhood networks, (Onyx and Bullen, 2000) and social networks (Putnam, 2000) are relationships and interactions achieved outside of professional work. Consequently, Moore (1990) argues that the view of women as those who abstain from professional work and look after the home and family provides more of an opportunity for women to build social capital. Social capital is therefore more achievable by women as seen in a traditional light. Moreover, Norris (as cited in Islam, 2012) believes that such relationships and interactions are formed particularly by women as a means of maximising their resources which further reinforces the why greater social capital was found in women.

Aside from gender, the other demographic variables measured are all closely related to one another and likely to influence the lifestyle of the participant and the community they live in; the better the individual's education, qualification and income, the better their lifestyle and community is likely to be (Mirowsky and Ross, 1998). Consequently, the positive correlation between demographic predictors and social capital is explainable through this relationship. Those individuals who reported to be better off in terms of the demographic predictors are likely to live in communities with less crime and poor housing (Volunteer Development Agency, 2007) and therefore experience greater community cohesion and engagement. These demographic predictors are therefore paramount to social capital. Whilst the hypothesis that a greater level of income would create greater social capital supports this relationship, the findings

specifically relating to annual income and social capital contradicted this by demonstrating a negative correlation between the two. Drawing on ideas that explain why women showed greater social capital can also help to explain this correlation. As income increases this suggests a work oriented focus which limits an individuals capacity to engage in many areas that characterise social capital. Those with lower income on the other hand maximise their resources in similar ways to the traditional women through, for example, neighbourhood networks, consequently developing stronger social capital.

As a group Clary and Snyder's (1999) volunteer functions failed to significantly predict social capital. The most obvious explanation for this is that the reasons why people volunteer are unrelated to social capital; the link between social capital and volunteering does not lie in the motivations of volunteers. Instead, perhaps it lies in the outcomes or gains that volunteers experience. Alternatively, it is arguable that not all of the functions in the VFI are applicable to those over fifty therefore explaining why as a group they did not significantly predict social capital. For example, Clary and Snyder's (1999) career function is likely to be an irrelevant motivator to those over fifty, furthermore, Cox (2011) acknowledges that this motivation is primarily associated with younger volunteers. What reinforces this argument further is the finding that alone, the values motivator does predict social capital. Clary and Snyder (1999) define this function as 'helping the less fortunate' which is very relevant to this group who are all older volunteers helping younger individuals. Younger individuals could be perceived as less fortunate due to lesser knowledge and experience than the volunteers themselves. This explains why 'values' is relevant to this group and so significantly predicts their social capital. Consequently, perhaps social capital is predictable by volunteer motivations but only those motivations relevant and specific to the volunteer group.

It is unsurprising that having an illness or disability significantly predicts social capital for this sample as they are all at least fifty years old, therefore given their age it is likely that illness and/or disability is more prominent within this group than it would in a general population sample

(Volunteer Now, 2011). The physical constraints that illness and disability result in are inevitably going to impact social capital as this limits their ability to volunteer. Furthermore, Andrews (2001) argues that those with an illness or disability are much more likely to become isolated resulting in social withdrawal. The two factors are in turn likely to inhibit an individual's ability to network, and develop and maintain relationships; key requisites for social capital (Onyx and Bullen, 2000).

The findings of this research are hugely useful not least because they support the primary hypothesis that those who volunteer have greater levels of social capital than those who do not. This study justifies the conclusion that school based volunteering in older individuals is beneficial to increasing social capital. The usefulness of the findings are reinforced by a representative sample of the target population comprising of a range of ages over fifty, men and women, a range of employability status', income and income source, as well as living arrangements. While the results can therefore be generalised to the approximately twenty-one million over fifty's in the UK (Age UK London, 2011), the findings are quite limited as they tell us little about social capital and volunteering in other contexts. Moreover, it is not conclusive whether the increased social capital in the volunteer group is a consequence particularly of school based volunteering, or volunteering in general. Age UK (2011) believe that intergenerational volunteering is particularly beneficial because it decreases isolation through socialising with different groups to usual which creates wider networks (Boeck, Makadia, Johnson, Cadogan, Salim, and Cushing, 2009). However, comparisons to an appropriate control group were not made, therefore conclusions in regard to particular types of volunteer and social capital cannot be derived from this study. The results of this study are further compromised by a confounding variable that impacts their validity (Martin, Carlson and Buskist, 2009). The non-volunteer group contained participants who did not engage in any formal volunteering. However, no attempt was made to acknowledge or control any informal volunteering they may take part in, which Boneham and Sixsmith, (2003) believe also impacts social capital. Therefore, if informal

volunteering has an influence on social capital as the dependent variable, this should have measured and controlled.

The quantitative nature of the questionnaires provides results that are objective. The participant responses to each question are not open to subjective or bias interpretation by the researcher due to the set, predetermined response options that were available to the participant. Consequently, the results produced by these questionnaires can be considered reliable. However, the response options such as ‘some’ and ‘a little’ that are presented on the Social Capital and barriers to volunteering questionnaires are some what vague and do not offer a defined quantity thus open to interpretation by the respondent. This lack of operationalisation can lead to results that are unreflective of the participants’ views. Furthermore, the predetermined nature of the responses offers no opportunity for any elaboration. With this in mind, does this quantitative research therefore really provide much insight into the phenomenon of social capital and volunteering? As already established, both are concepts that are defined in many ways with a magnitude of contributors working together to create them. As a result of their dynamic qualities it is arguable that actually social capital and volunteering cannot really be explored through quantitative measures. Moreover, it is unlikely that the nature of an individual’s experience of both of social capital and volunteering really be understood by means of questions answered using a likert scale. Nevertheless, although an in-depth analysis is difficult to obtain with quantitative methods, this research does offer insight into social capital and volunteering by presenting a valuable quantified comparison of volunteers and non-volunteers. Quantitative research should therefore not be overlooked as it has its merits, and can compliment and add to qualitative research that exists not only in regards to social capital and volunteering, but any phenomenon being researched.

With reference to previous ideas and research into social capital and volunteering, this study provides both support and contradictions. Although a causal link cannot be made between the two, the results of this research

support the idea that volunteering contributes to increasing social capital. This supports Putnam's (2000) views of the important role volunteering plays in social capital as well as Boneham and SIxsmith's research (2003) which highlights how beneficial volunteering in social settings is.

The significant link between income and social capital supports Brisson and Usher's (2005) interaction, but the direction, a negative correlation, contradicts Bourdieu's belief that social capital can be converted to economic capital; those with greater social capital noted lower levels of income therefore this proposed conversion is unsupported. Having said this, this study's focus on volunteers over fifty may mean it is inappropriate to compare the findings of this study to Bourdieu's ideas as a sample more oriented towards economic capital might present a different relationship between economic and social capital.

Although this study did not set out to define or explore the definition of social capital, the results do offer some support for existing definitions. For example, Clary and Snyder (1999) suggest 'helping the less fortunate' as an example of the values function. In the context of this study this incorporates creating neighbourhood networks, community participation, acceptance of diversity and is a social activity, all of which Onyx and Bullen (2000) found to indicate social capital. The significance of the values function therefore offers support for Onyx and Bullen's definition. This is encouraging as it validates the questionnaire used to assess social capital which Daniere, Takahashi and NaRanong (2002) argue is only effective when social capital is defined in terms of their indicators.

Although the results support Onyx and Bullen's definition they do contradict their findings regarding a lack of correlation between demographic characteristics and social capital (Onyx and Bullen, 2000). This difference could be attributed to the different samples used; Onyx and Bullen used a much more general sample with ages ranging between eighteen and sixty-five (Onyx and Bullen, 2005). Consequently it could be that demographics influence social capital more so in older individuals as such factors play a greater role in defining an older person as they lose other identities (Volunteer Now, 2011), that younger individuals may still

maintain, through, for example, employment (Greenfield and Marks, as cited in Volunteer Now, 2011).

It is well established that this study supports Clary and Snyder's (1990) values function. Cox (2011), however, found meeting new people and benefitting the community as important motivations for volunteering which could constitute Clary and Snyder's (1999) social function. This study did not find this function to be a significant indicator of social capital. But, prior to any motivation to volunteer, the Volunteer Development Agency (2007) argues that individuals must have the spare time and the right skills. Factors such as these were only considered in this study in relation to barriers preventing the non-volunteer group, but actually, these factors could have equally been applied to the volunteer group as reasons or pre-requisites for volunteering. It is interesting that although the Volunteer Development Agency (2007) found time to be the most common barrier, using the same questionnaire and despite also finding 'work commitments' and 'already doing enough' to be the greatest barriers, this study did not find that they significantly predict social capital. This study suggests therefore that 'time' as a barrier to volunteering, which is mostly impacted by work and family commitments (Volunteer Development Agency, 2007) only predicts social capital in conjunction with other barriers.

As with all psychological research multiple interpretations of the results are often warranted. Given the themes that are presented in previous literature regarding the benefits of volunteering to social capital, (Putnam, 2000; Boneham and Sixsmith, 2003) the interpretation of these results such that volunteering increases social capital was justified. However, this conclusion is flawed. This research fails to explore the possibility that increased social capital levels may have existed in the volunteer group, more so than the non-volunteer group, prior to volunteering. If social capital is indicated as Onyx and Bullen (2000) suggest, then these could have acted as motivators and consequently, levels of social capital may influence likelihood of volunteering. This could be further explored by changing this study to a pre-test-post-test design and measuring social capital before any volunteering had been carried and again after a period

of volunteering. Any change in the scores could then be attributed to volunteering.

There are a number of other changes that could be made to improve this study. The absence of significance of the VFI in predicting social capital could be due to a lack of power. Cohen (1992) argues that to successfully capture any significant effect of the VFI, based on six predictor variables, ninety-seven participants are required. This is based on the medium effect size calculated using his effect size indicator for multiple regression at a power of .08. This should have ideally been addressed before the study was carried out (Howell, 2013) with the correct number of participants sought so that a null hypothesis regarding the significance of the VFI could be correctly rejected. However, this is based on Cohen's classification of effect sizes into small, medium and large which Howell (2013, p. 235) describes as "arbitrary". Consequently, it is not conclusive that ninety-seven participants would be sufficient, but nevertheless, Cohen's classifications are widely used so Howell (2013) believes that as long as this is not overlooked his classifications are a useful guide.

Two changes to the presentation of the questionnaires would have benefitted the study. Firstly, using counterbalancing to provide half of each group with the social capital questionnaire first followed by their second relevant questionnaire, and the other half of each group the opposite order. This would ensure that if the questionnaire presented first had any influence on the responses of the second questionnaire, these would be eliminated. Secondly, randomising the questions would ensure that the same questions weren't continually last and thus possibly given less consideration due to the sheer volume of questions.

The reliability of the results would have been improved if the response options provided on the questionnaires had been better operationalized. Instead of using terms such as 'a few' as an option for response in the Social Capital and barriers to volunteering questionnaires, this should be replaced with a quantifiable response, such as '1 – 3', to prevent varying interpretation by the participants.

Any similar research could benefit from a mixed methods approach, instead of purely quantitative. One participant noted on their response that there was a "*need for qualitative questions in order to explain/amplify q/a responses.*" This approach would allow for a much more in depth exploration of the experiences of volunteers and social capital. Mixed methods would still allow for a good comparison of groups to be made but at the same time themes derived from qualitative elaboration could facilitate a more in-depth understanding of the relationship. This would allow for greater exploration of volunteering which is a much more complex concept than presented here. Utilising greater time and resources, further research should explore social capital and volunteering across a wider age group as well as a variety of different contexts and situations. This would provide a more comprehensive evaluation of the relationship between volunteering and social capital than this study could begin to offer.

The findings of this study contribute to the impact of social capital at a much greater level than just a psychological perspective. Although the usefulness of reducing social capital to a number is debateable, economic rationalists believe that 'if you can measure it, you can manage it' (Onyx and Bullen, 2005). Consequently, quantifying social capital and experiences of volunteering mean that it can be managed by influential agencies such as the Government. But, currently, the Government have not created policies designed to focus exclusively on volunteering, instead, volunteering often forms a part of a policy with bigger objectives (Volunteer Development Agency, 2007). Determining the relationship between volunteering and social capital is key to influencing policies as it means the Government can support this relationship through tailoring policies to promote volunteering in ways that benefit social capital. Furthermore, promoting volunteering will produce economic changes as in 2007 formal volunteering was valued at £504 million in Northern Ireland alone (Volunteer Development Agency, 2007).

Overall, the results of this study provide an important contribution to the phenomena of the relationship between volunteering and social capital in older individuals. Understanding this relationship provides an insight into how social capital can be increased, with motivations and barriers helping to understand which aspects of volunteering are most linked to social capital. Knowing ways to increase social capital is important for community cohesion (Boeck, Makadia, Johnson, Cadogan, Salim, and Cushing, 2009) and individual engagement (Putnam, 2000). The impact of such findings reaches far and wide by being applicable to government policy as well as largely supporting existing theory, literature and research. Furthermore, the identified criticisms and improvements of this study offer the opportunity for developed and extended research to be carried out generating a clearer understanding of volunteering and social capital.

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Appendix 1

Questionnaire 1 – Social Capital

This questionnaire asks you about your social interactions and local community. You will also be asked for some demographic information such as your age and gender. Please complete this questionnaire to the extent you are conformable doing so. You do not need to write your name.

Please circle the most appropriate response 1, 2 3 or 4

1. Do you feel valued by society? **(Value of life)**

No	Not much	Yes	Very much
1	2	3	4

2. If you were to die tomorrow, would you be satisfied with what your life has meant? **(value of life)**

No	Not much	Yes	Very much
1	2	3	4

3. Do you ever pick up other people's rubbish in a public place? **(Proactivity in social context)**

No	Not much	Yes	Very much
1	2	3	4

4. Some say that by helping others you help yourself in the long run. Do you agree? **(Proactivity in social context)**

No	Not much	Yes	Very much
1	2	3	4

5. Do you feel safe walking down your street after dark? **(feelings of trust and safety)**

No	Not much	Often	Very much
1	2	3	4

6. Do you agree that most people can be trusted? **(feelings of trust and safety)**

No	Not much	Yes	Very much
1	2	3	4

7. If someone's car breaks down outside your house, would you invite them into your home to use the phone? **(feelings of trust and safety)**

No	Maybe	Probably	Definitely
1	2	3	4

8. Can you get help from friends when you need it? **(neighbourhood connections)**

No	Maybe	Probably	Definitely

1	2	3	4

9. Does your area have a reputation for being a safe place? **(feelings of trust and safety)**

No	Not much	Yes	Very much
1	2	3	4

10. If you were caring for a child and needed to go out for a while, would you ask a neighbour or help? **(neighbourhood connections)**

No	Maybe	Probably	Definitely
1	2	3	4

11. Have you visited a neighbour in the past week? **(neighbourhood connections)**

No	Once	Occasionally	Often
1	2	3	4

12. Have you attended a local community event in the past 6 months (eg, church fete, school concert, craft exhibition)? **(Participation in local community)**

No	Probably	Occasionally	Often
1	2	3	4

13. Are you an active member of a local organisation or club (eg, sport, craft, social club)? **(Participation in local community)**

No	Occasionally	Often	Very active
1	2	3	4

14. Does your local community feel like home? **(feelings of trust and safety)**

No	Not much	A bit	Very much
1	2	3	4

15. In the past week, how many phone conversations have you had with friends? **(Friends and family connections)**

None	Not many	Some	Many
1	2	3	4

16. How many people did you talk to yesterday? **(Friends and family connections)**

None	Not many	Some	Many
1	2	3	4

17. Over the weekends do you have lunch/dinner with other people outside your household? **(Friends and family connections)**

No	Sometimes	Often	Nearly always
1	2	3	4

18. Do you go outside your local community to visit your family? (Participation in local community)

No	Sometimes	Often	Nearly always
1	2	3	4

19. When you go shopping in your local area are you likely to run into friends and acquaintances? (Neighbourhood connections)

No	Sometimes	Often	Nearly always
1	2	3	4

20. If you need information to make a life decision, do you know where to find that information? (Proactivity in a social context)

No	Sometimes	Often	Nearly always
1	2	3	4

21. In the past 6 months, have you done a favour for a sick neighbour? (neighbourhood connections)

No	Occasionally	Often	Frequently
1	2	3	4

22. Are you on a management committee or organising committee for any local group or organisation? (Participation in local community)

No	One	A few	Several
1	2	3	4

23. In the past 3 years, have you ever joined a local community action to deal with an emergency? (Participation in local community)

No	One	A few	Several
1	2	3	4

24. In the past 3 years have you ever taken part in a local community project? (Participation in local community)

No	One	A few	Several
1	2	3	4

25. Have you ever been part of a project to organise a new service in your area (eg, youth club, scout hall, child care, recreation for disabled)? (Participation in local community)

No	Occasionally	Often	Frequently
1	2	3	4

26. If you disagree with what everyone else agreed on, would you feel free to speak out? (Proactivity in a social context)

No	Sometimes	Often	Nearly always
1	2	3	4

27. If you have a dispute with your neighbours (eg, over fences or dogs) are you willing to seek mediation?

(Proactivity in a social context)

No	Occasionally	Often	Frequently
1	2	3	4

28. Do you think that multiculturalism makes life in your area better?

(Tolerance of diversity)

No	Not much	Yes	Very much
1	2	3	4

29. Do you enjoy living among people of different life styles?

(Tolerance of diversity)

No	Not much	Yes	Very much
1	2	3	4

30. If a stranger, someone different, moves into your street, would they be accepted by the neighbours?

(Tolerance of diversity)

No	Maybe	Probably	Definitely
1	2	3	4

Yourself

In the following questions please tick the most appropriate response (or write in the correct answer in the questions with dots .....).

37. What is your gender?

[ ] 1. Female [ ] 2. Male

38. Are you employed?

[ ] No [ ] Yes If yes, how many hours per week.....

39. What is your age in years? .....

40. What is the Postcode of your address? .....

41. Are you living in:

[ ] Private house, flat, unit [ ] Public housing [ ] Other

42. Are you renting your accommodation?

[ ] Yes [ ] No

43. How long have you lived in your local area? .....years

44. Who do you live with?

[ ] alone [ ] just partner [ ] just children [ ] partner and children

[ ] extended or blended family [ ] friends [ ] other

45. Do you have children under 18 years of age?
[ ] No [ ] Yes.
If yes: How many under school age ..... How many school age to 18.....

46. What language do you prefer to speak at home?
[ ] English [ ] Other

47. What is the main source of income for your household?
[ ] Wages or Salary [ ] Pension or benefit [ ] Other

48. What is your current income?
[ ] Less than £1000

[ ] £1,001 to £14,999

[ ] £15,000 to £24,999

[ ] £ 25,000 to £34,999

[ ] £ 35,000 to £44,999

[ ] £ 45,000 to £54,999

[ ] £ 55,000 +

49. What are your qualifications
[ ] Less than GSCE or equivalent

[ ] GSCE or equivalent

[ ] A-levels (or equivalent)

[ ] Degree or Post Graduate qualification

Appendix 2

Questionnaire 2 – Volunteer Functions Inventory

This questionnaire consists of two sets of questions that relate to the reasons why you volunteer and the outcomes of your volunteering experience. Please complete this questionnaire to the extent you are conformable doing so. You do not need to write your name.

Using the 7-point scale please indicate how important or accurate each of the following possible reasons for volunteering is for you. Record your answer in the space next to each item.

Reasons for volunteering

not at all important/ accurate for you 1 2 3 4 5 6 7 extremely important/ accurate for you

Rating

__ 1. Volunteering can help me get my foot in the door at a place where I'd like to work

__ 2. My friends volunteer.

__ 3. I am concerned about those less fortunate than myself.

__ 4. People I'm close to want me to volunteer.

__ 5. Volunteering makes me feel important

__ 6. People I know share an interest in community service.

__ 7. No matter how bad I've been feeling, volunteering helps me to forget about it.

__ 8. I am genuinely concerned about the particular group I am serving.

__ 9. By volunteering, I feel less lonely.

__ 10. I can make new contacts that might help my business career.

__ 11. Doing volunteer work relieves me of some of the guilt over being more fortunate than others.

__ 12. I can learn more about the cause for which I am working.

__ 13. Volunteering increases my self-esteem.

__ 14. Volunteering allows me to gain a new perspective on things.

__ 15. Volunteering allows me to explore different career options.

__ 16. I feel compassion toward people in need.

__ 17. Others with whom I am close place a high value on community service.

__ 18. Volunteering lets me learn through direct “hands on” experience.

__ 19. I feel it is important to help others.

__ 20. Volunteering helps me work through my own personal problems.

__ 21. Volunteering will help me succeed in my chosen profession.

__ 22. I can do something for a cause that is important to me.

__ 23. Volunteering is an important activity to the people I know best.

__ 24. Volunteering is a good escape from my own troubles.

__ 25. I can learn how to deal with a variety of people.

__ 26. Volunteering makes me feel needed.

__ 27. Volunteering makes me feel better about myself.

__ 28. Volunteering experience will look good on my resume.

__ 29. Volunteering is a way to make new friends.

__ 30. I can explore my own strengths.

Volunteering Outcomes

Using the 7-point scales below, please indicate how strongly you agree or disagree with each statement. Record your answer in the space next to each item.

Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

Rating

__ 31. In volunteering with this organisation, I made new contacts that might help my business or career.

__ 32. People I know best know that I am volunteering at this organisation.

__ 33. People I am genuinely concerned about are being helped through my volunteer work at this organisation.

__ 34. From volunteering at this organisation, I feel better about myself.

__ 35. Volunteering at this organisation allows me the opportunity to escape some of my own troubles.

__ 36. I have learned how to deal with a greater variety of people through volunteering at this organisation.

__ 37. As a volunteer in this organisation, I have been able to explore possible career options.

__ 38. My friends found out that I am volunteering at this organisation.

__ 39. Through volunteering here, I am doing something for a cause that I believe in.

__ 40. My self-esteem is enhanced by performing volunteer work in this organisation.

__ 41. By volunteering at this organisation, I have been able to work through some of my own personal problems.

__ 42. I have been able to learn more about the cause for which I am working by volunteering with this organisation.

__ 43. I am enjoying my volunteer experience.

__ 44. My volunteer experience has been personally fulfilling.

__ 45. This experience of volunteering with this organisation has been a

worthwhile one.

__ 46. I have been able to make an important contribution by volunteering at this organisation.

__ 47. I have accomplished a great deal of “good” through my volunteer work at this organisation.

48. One year from now, will you be (please circle your best guess)
A. volunteering at this organisation.
B. volunteering at another organisation
C. not volunteering at all.

Appendix 3

Questionnaire 2 – Barriers to Volunteering
This questionnaire asks you questions relating to volunteer work. Please complete this questionnaire to the extent you are conformable doing so. You do not need to write your name.

Please circle the most appropriate answer

1. **Do you ever feel that you would like to spend more time helping groups, clubs or organisations?**

   Yes No Don't know

2. **If someone asked you directly to help in some way, how to you think you would respond?**

   I would be pleased to help

   I would feel I couldn't refuse

   I would refuse because I haven't got the time

   I would refuse for other reasons

   It would depend

   Don't know

3. **There are a lot of reasons why people don't get involved in volunteering, even when they feel like they might like to. For each of these things, please indicate how much they apply to you.**

A. I have a lot of work commitments

Applies a lot	Applies a little	Does not apply
1 2		3

B. I haven't got the right skills or experience to be able to help

Applies a lot	Applies a little	Does not apply
1 2		3

C. I'd be worried that I wouldn't fit in with other people who are involved

Applies a lot	Applies a little	Does not apply
1	2	3

D. I'd be worried that I might end up out of pocket

Applies a lot	Applies a little	Does not apply
1 2		3

E. I feel I am too old to get involved with volunteering activities

Applies a lot	Applies a little	Does not apply
1 2		3

F. I'd be worried that I'd loose my benefits

Applies a lot	Applies a little	Does not apply

1 2 3

G. My family/partner wouldn't want me to get involved

Applies a lot Applies a little Does not apply
1 2 3

H. I wouldn't be able to stop once I had got involved

Applies a lot Applies a little Does not apply
1 2 3

I. I'd be put off by all the associated bureaucracy

Applies a lot Applies a little Does not apply
1 2 3

J. I'd be worried about any threat to my own physical safety

Applies a lot Applies a little Does not apply
1 2 3

K. I'd be worried about the risks and being liable if anything goes wrong

Applies a lot Applies a little Does not apply
1 2 3

L. I don't know how to find out about getting involved in voluntary activities

Applies a lot Applies a little Does not apply
1 2 3

M. I have an illness or disability I feel prevents me from getting involved

Applies a lot Applies a little Does not apply
1 2 3

N. I have to look after someone who is elderly or ill

Applies a lot Applies a little Does not apply
1 2 3

O. I have to look after children/the home

Applies a lot Applies a little Does not apply
1 2 3

P. Never thought about it

Applies a lot Applies a little Does not apply
1 2 3

Q. I'm new to the area

Applies a lot Applies a little Does not apply
1 2 3

R. Haven't heard about opportunities to help

Applies a lot Applies a little Does not apply
1 2 3

S. I'm already doing enough

Applies a lot Applies a little Does not apply
1 2 3

Appendix 4 – permission to use 'It's all about time' questionnaire

-----Original Message-----
From: Christine Irvine
[mailto:Christine.Irvine@volunteernow.co.uk]
Sent: Tue 11/20/2012 10:34 AM
To: [redacted]
Subject: use of q'aire

Hi,

This is to confirm that Volunteer Now give you permission to use the questionnaire from the 'its all about time'. We only ask that you acknowledge us as the original author of the work in your references.

Good luck with your project.

Christine
Christine Irvine
Senior Policy and Information Officer
129 Ormeau Road, Belfast
T: 02890 81 8332
E:
Christine.Irvine@Volunteernow.co.uk<mailto:Christine.Irvine@Volunteernow.co.uk>

Appendix 5 – Participant invitation letter

University of East London
School of Psychology
Stratford Campus
Water Lane
London E15 4LZ

The Principal Investigator(s)
Miss [redacted]
U1045825@uel.ac.uk

Consent to Participate in a Research Study
The purpose of this letter is to provide you with the information that you need to consider in deciding whether to participate a research study. The study is being conducted as part of my BSc Psychology with Counselling and Mentoring degree at the University of East London.

Project Title
An investigate into the effects of formal volunteering on perception of social capital in older people (50+)

Project Description
This project will investigate whether volunteering or not volunteering by people aged over 50 has an influence on a sense of belongingness in society (social capital).

[For volunteer participants]
As a participant you will be asked to fill out two short questionnaires:
- Social Capital Questionnaire (Questionnaire 1)
- Volunteer Functions Inventory (Questionnaire 2)

[For non-volunteer participants]
As a participant you will be asked to fill out two short questionnaires:
- Social Capital Questionnaire (Questionnaire 1)
- Barriers to Volunteering (Questionnaire 2)

Questions will relate to your attitudes towards volunteering, social relationships and their views of the local community. It should take you no longer than 15 minutes to complete the two questionnaires. If you would like to take part in the research please complete and return the consent form and questionnaires. It is important that you return a signed consent form as without this your information cannot be used, even if you return the questionnaires. All of these are enclosed along with a SAE.

No hazards or risks are expected as a result of taking part in this study, nor is any discomfort of distress. Should you wish to discuss the project before, during or after participation then you are welcome to contact me.

Confidentiality of the Data

The information and responses you provide will be retained by myself, the researcher, and will not be accessed by anybody else.
You will be given a unique 4-digit participant number that will be associated to your questionnaire so that you can remain anonymous. Your responses will be stored in an analytical software packages (SPSS) against this number.
You will need to retain this number so that your responses can located and be destroyed or provided to you, should you request this before the data has been analysed.

After the project is complete your completed questionnaires will be destroyed. Your responses however will be retained in electronic format for analysis purposes, and the analysis may be used for conference of publication purpose, however you will remain anonymous throughout.

Your consent forms will be stored separately to your data in a safe that that only myself as the research will have access to. It will be destroyed after the project is complete.

Location
Your contribution to the project will take the form of a questionnaire, so you may complete this in any location you would like.

Disclaimer
You are not obliged to take part in this study and should not feel coerced. You are free to withdraw at any time. Should you choose to withdraw from the study you may do so without disadvantage to yourself and without any obligation to give a reason. Should you withdraw, you may request for your data to be destroyed, however it would be very helpful to myself the research and the project if we could continue to use the anonymised information.

Please feel free to ask me any questions. If you are happy to continue you will be asked to sign a consent form prior to your participation and ensure that you include it with your filled in questionnaire. Please retain this invitation letter for reference.

If you have any questions or concerns about how the study has been conducted, please contact the study's supervisor, Dr Helen Murphy, School of Psychology, University of East London, Water Lane, London E15 4LZ. 020 8223 4490. h.murphy@uel.ac.uk.

or

Chair of the School of Psychology Research Ethics Sub-committee: Dr. Mark Finn, School of Psychology, University of East London, Water Lane, London E15 4LZ.
(Tel: 020 8223 4493. Email: m.finn@uel.ac.uk)

Thank you in anticipation.
Yours sincerely,

Miss [redacted]
U1045825@uel.ac.uk

Appendix 6 - participant consent form

UNIVERSITY OF EAST LONDON

Consent to participate in a research study

An investigation in the effects of volunteering on social capital in older people (50+)

I have the read the information sheet relating to the above research study and have been given a copy to keep. The nature and purposes of the research have been explained to me, and I have had the opportunity to discuss the details and ask questions about this information. I understand what is being proposed and the procedures in which I will be involved have been explained to me.

I understand that my involvement in this study, and particular data from this research, will remain strictly confidential. Only the researcher(s) involved in the study will have access to identifying data. It has been explained to me what will happen once the research study has been completed.

I hereby freely and fully consent to participate in the study which has been fully explained to me. Having given this consent I understand that I have the right to withdraw from the study at any time without disadvantage to myself and without being obliged to give any reason.

Participant's Name (BLOCK CAPITALS)

…….

Participant's Signature

……
..

Researcher's Name (BLOCK CAPITALS)

……
..

Researcher's Signature

……
…

Date: ……..…….

Appendix 7 – Participant Debrief

Debrief

Thank you for taking the time to complete these questions. If you would like any further information about any part of my research, including these questionnaires, please feel free to contact be on:

u1045825@uel.ac.uk

or

07985 356 772.

You are remain under no obligation to be part of this research and may still withdraw, but please be assured any information you have provided will be kept confidential and I am the only person who will have access to your responses.

Thank you again.

Appendix 8 – ethical approval

ETHICAL PRACTICE CHECKLIST (BSc/MSc/MA)

SUPERVISOR: Helen Murphy **ASSESSOR:** Kenneth Gannon

STUDENT: [redacted] **DATE (sent to assessor):** 12/11/2012

Proposed research topic: An investigation into the effects of formal volunteering on perception of social capital in older people (50+)

Course: BSc Psychology

1.	Will free and informed consent of participants be obtained?	YES
2.	If there is any deception is it justified?	N/A
3.	Will information obtained remain confidential?	YES
4.	Will participants be made aware of their right to withdraw at any time?	YES
5.	Will participants be adequately debriefed?	YES
6.	If this study involves observation does it respect participants' privacy?	NA
7.	If the proposal involves participants whose free and informed consent may be in question (e.g. for reasons of age, mental or emotional incapacity), are they treated ethically?	NA
8.	Is procedure that might cause distress to participants ethical?	NA
9.	If there are inducements to take part in the project is this ethical?	NA
10.	If there are any other ethical issues involved, are they a problem?	NA

APPROVED

YES		

MINOR CONDITIONS:

REASONS FOR NON APPROVAL:

Assessor initials: KG Date: 13 November 2012

RESEARCHER RISK ASSESSMENT CHECKLIST (BSc/MSc/MA)

SUPERVISOR: Helen Murphy **ASSESSOR:** Kenneth Gannon

STUDENT: [redacted] **DATE (sent to assessor): 12/11/2012**

Proposed research topic: An investigation into the effects of formal volunteering on perception of social capital in older people (50+)

Course: BSc Psychology

Would the proposed project expose the researcher to any of the following kinds of hazard?

1	Emotional	NO
2.	Physical	NO
3.	Other (e.g. health & safety issues)	NO

If you've answered YES to any of the above please estimate the chance of the researcher being harmed as: HIGH / MED / LOW

APPROVED

YES		

MINOR CONDITIONS:

REASONS FOR NON APPROVAL:

Assessor initials: KG Date: 13 November 2012

For the attention of the assessor: Please return the completed checklists by e-mail to ethics.applications@uel.ac.uk within 1 week.

Appendix 9 – Results tables

Table 6. Independent samples t-test for social capital and volunteer status

		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Social capital	Equal variances assumed	.188	.665	4.700	105	.000	2.199	1.271	3.126
	Equal variances			4.747	100.381	.000	2.199	1.280	3.117

Table 7. Independent samples t-test for social capital and gender

		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Social capital	Equal variances assumed	.286	.594	-3.311	105	.001	-1.787	-2.857	-.717
	Equal variances not assumed			-3.330	53.584	.002	-1.787	-2.863	-.717

Table 8. ANOVA table for multiple regression of demographic predictors of social capital.

Model		R	R^2	Adjusted R^2	df	F	Sig.
1	Regression	.459	.211	.169	5	5.076	.000
	Residual				95		
	Total				100		

Table 9. Results of multiple regression of social capital and demographic predictors

Model		Unstandardised Coefficients	Standardised Coefficients	t	Sig.	95% Confidence Intervals for B	
		B	Beta			Lower Bound	Upper Bound
1	Constant	16.149		8.744	.000	12.483	19.815
	Annual Income	-.518	-.302	-2.585	.011	-.916	-.120
	Gender	1.523	.274	2.969	.004	.505	2.542
	Employment	.672	.126	1.154	.251	-.484	1.827
	Income Source	-.244	-.052	-.429	.669	-1.374	.886
	Qualification	.763	.253	2.574	.012	.174	1.351

Table 10: ANOVA table for multiple regression of VFI Function as predictors of social capital.

Model		R	R^2	Adjusted R^2	df	F	Sig.
1	Regression	.424	.180	.065	6	1.570	.179
	Residual				43		
	Total				49		

Table 11. Results of multiple regression of social capital and VFI functions as predictors

Model		Unstandardised Coefficients	Standardised Coefficients	t	Sig.	95% Confidence Intervals for B	
		B	Beta			Lower Bound	Upper Bound
1	Constant	19.005		12.063	.000	15.828	22.182
	Values Function	.190	.496	2.107	.041	.008	.372
	Career Function	.113	.188	1.094	.280	-.095	.321
	Social Function	.076	.152	.741	.463	-.131	.283
	Understand Function	-.018	-.049	-.200	.842	-.202	.165
	Enhance Function	-.260	-.674	-2.571	.014	-.465	-.056
	Protect Function	.067	.148	.739	.464	-.115	.248

Table 12. ANOVA table for multiple regression of barriers to volunteering as predictors of social capital.

Model		R	R^2	Adjusted R^2	df	F	Sig.
1	Regression	.887	.768	.511	20	2.988	.012
	Residual				18		
	Total				38		

Table 13. Results of multiple regression of social capital and barriers to volunteering as predictors

Model		Unstandardised Coefficients	Standardised Coefficients	t	Sig.	95% Confidence Intervals for B	
		B	Beta			Lower Bound	Upper Bound
1	Constant	28.970		6.298	.000	19.306	38.634
	Would like to spend more time volunteering	-1.031	-.313	-1.548	.139	-2.430	.369
	Work commitments	-.191	0.076	-.315	.757	-1.468	1.085
	Look after someone ill	.043	.012	.064	.949	-1.358	1.444
	Look after children or home	-.148	-.051	-.268	.791	-1.302	1.007
	Already doing enough	1.161	.364	1.978	.063	-.072	2.393
	Not got necessary skills or experience	-.340	-.091	-.334	.743	-2.481	1.801
	Wont fit in concern	-.451	-.119	-.416	.683	-2.730	1.828
	Out of pocket concern	.779	.158	.625	.540	-1.839	3.397
	Too old	.725	.168	.687	.501	-1.492	2.942
	Would lose benefits	.570	.097	.454	.655	-2.066	3.205
	Partner or family preventing	-2.223	-.305	-1.334	.199	-5.725	1.278
	Concerned would be unable to stop	-.939	-.267	-1.587	.130	-2.182	.304
	Bureaucracy	-.805	-.227	-1.452	.164	-1.970	.360
	Physical safety concern	-.946	-.190	-1.035	.314	-2.866	.974
	Liability for things gone wrong	.747	-.162	1.015	.324	-.799	2.292
	Don’t know how to find out	.214	.061	.300	.768	-1.286	1.714
	Have an illness or disability	-2.713	-.552	-2.962	.008	-4.637	-.789
	Not thought about it	-.311	-.074	-.301	.767	-2.480	1.858
	New to the area	-1.727	-.361	-1.728	.101	-3.827	.373
	Not heard opportunities	-.513	-.155	-.677	.507	-2.106	1.080

Appendix 10 – ANOVA. DV: Social Capital; IV: Volunteer and Gender

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent Parameter	Observed Power (a)
Corrected Model	175.576[a]	3	58.525	10.885	.000	.241	32.656	.999
Intercept	31856.254	1	31856.254	5924.995	.000	.983	5924.995	1.000
Gender	33.530	1	33.530	6.236	.014	.057	6.236	.696
Volunteer	105.788	1	105.788	19.676	.000	.160	19.676	.993
Gender * Volunteer	12.470	1	12.470	2.319	.131	.022	2.319	.326
Error	553.788	103	5.377					
Total	43727.307	107						

Table 14: ANOVA test of between-subject effects

Corrected Total	729.364	106