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Abstract

All forms of social, human and cultural capital have positive associations with volunteering, in the form of social connectivity, trust and reciprocity between individuals, groups and wider social networks, community embeddedness and sense of belonging, well-being and mutual resource acquisition relating to friendships, knowledge, skills and education. This article outlines the process undertaken by the research team in the development, validation and testing of a user friendly questionnaire used to measure social capital in volunteering, as part of a large scale mixed method social capital and volunteering study. A 16 item questionnaire was developed and using a computer administered survey tested with a group of volunteers working in a single region in Ireland. Data was collected over a 6 week period in 2011 and the target population was 84 volunteers to validate the scale. A usable sample of 71 volunteers was obtained. These respondents were representative of the entire population of volunteers in the region when compared to regional organisation’s Dashboard database figures. The final summated scale of the 16 indicators had a Cronbach’s alpha of 0.86. Further research is required to validate the scale and to evaluate both the internal structure validity and dimensionality. This scale could be utilized in development planning, placement and administration of volunteering in communities and organisation.

Key Words: Social Capital Theory, social connectivity, sense of belonging, trust, reciprocity

Introduction

Research has underscored the positive relationship between participation in volunteering and enhanced social capital, in the form of social connectivity, trust and reciprocity between individuals, groups and wider social networks, community embeddedness and sense of belonging, well-being and mutual resource acquisition relating to friendships, knowledge, skills and education (Clabourn and Martin 2000; Woolcock and Narayan, 2000; Hurlbert, Haines, & Beggs, 2000; Putnam, 2000; Wollebæk and Selle 2002; Stone and Hughes, 2002; Wollebæk and Selle 2003; Mayer, 2003; Van der Gaag, Snijders, &
Volunteer participation rates and intensity increase as individuals experience heightened levels of trust and reciprocity based on active, passive and multiple levels of familiarities within their volunteer group or community (Sixsmith, Boneham, & Goldring, 2001; Sixsmith and Boneham, 2002; Wollerbeek and Selle, 2002; Hooghe and Stolle, 2003, Kolodinsky, Kimberley, & Isham, 2004; Son and Lin, 2008; Lee, Brudney, & Goodman, 2009; Antoni, 2009).

Intrinsic motivations to volunteer which facilitate social networking are grounded in familiarity (Antoni, 2009) and informal contributions in community engagement (Sixsmith et al., 2001; Sixsmith and Boneham, 2002). Indeed, social relations and networking in volunteer processes can improve individual social skills and assertiveness, outlook on life, wellbeing, knowledge and levels of civic engagement (Ellis and O’Brien, 2001; Hill, 2011; Brodie et al., 2011). The research was undertaken as part of a large scale sequential mixed method study, which utilised social capital theory as heuristic device to explore social processes in volunteer experiences and processes. This ‘Tools of the Trade’ article shall outline the process undertaken by the research team in the development, validation and testing of a user friendly questionnaire used to measure social capital in volunteering. The following steps were followed to develop the scale;

1. Conceptualize volunteering and its relationship to Social Capital
2. Develop a scale to measure the degree that volunteering adds to social capital
3. Assess the content validity of the scale
4. Measure the scale reliability

**Population/sample design**

Non probability sampling was adopted for the study. Due to resource constraints a computer administered survey was considered to be the best approach for data collection. At 90% confidence levels, a sample size of 84 was required to represent the population under investigation. All Volunteers with a register e-mail address at the volunteering center were invited to take part in the questionnaire study. Variables were collected on demographic characteristics to ensure the respondents were representative of the entire Volunteers’ registered in the region under investigation.

**Data collection**

Data was collected over a four week period in October 2011. Following the Dilman (1978) procedure for questionnaire administration the survey was sent in three mailings (i.e. 1 week, 2 weeks and 4 weeks). A statement of purpose, including confidentiality and anonymity was prepared for the mailing to appeal to the respondents’ altruistic sentiments. A return rate of 83(12%) and a useable rate of 71(10%) were obtained from the mailing. After the 6 week cut-off period the survey was terminated and the electronic data was imported into a standard software package, Statistical Package for the Social Sciences (SPSS). No information was available for the non-respondents so the demographic characteristics of the respondents were compared with Dashboard figures, a database used to record volunteering.
activity in the region. These were analysed and considered to be representative of the target population in relation to gender, age, level of education and employment status and deemed useable in the study.

**Conceptualizing volunteering and social capital**

For the purpose of this study social capital was conceptualized as having 8 domains.

![Social Capital Model](image)


With reference to the literature and the fore mentioned qualitative study, 14 indicators of volunteering were developed from the social capital framework, which resulted in the construction of 16 statements.

**Table 1**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Please circle your choice for each statement listed below;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  Generally speaking there is a good community spirit in the area or areas I volunteer in;</td>
<td>Agree strongly, Agree, Neutral, Disagree, Disagree strongly</td>
</tr>
<tr>
<td>2  People that I volunteer with can be trusted;</td>
<td>Agree strongly, Agree, Neutral, Disagree, Disagree strongly</td>
</tr>
<tr>
<td>3  I feel a sense of belonging because I volunteer;</td>
<td>Agree strongly, Agree, Neutral, Disagree, Disagree strongly</td>
</tr>
<tr>
<td>4  The rewards of volunteering are greater than the input I give as a volunteer;</td>
<td>Agree strongly, Agree, Neutral, Disagree, Disagree strongly</td>
</tr>
<tr>
<td>5  Volunteering has increased my involvement in community life;</td>
<td>Agree strongly, Agree, Neutral, Disagree, Disagree strongly</td>
</tr>
</tbody>
</table>
Table 1 – showing each of the statements used in the calculation of total capital score (TCS)

<table>
<thead>
<tr>
<th></th>
<th>Being a volunteer has improved my social relationships;</th>
<th>Agree strongly, Agree, Neutral, Disagree, Disagree strongly</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>I enjoy the feeling of participation when I volunteer;</td>
<td>Agree strongly, Agree, Neutral, Disagree, Disagree strongly</td>
</tr>
<tr>
<td>8</td>
<td>Volunteering has improved my ability to gain or sustain employment;</td>
<td>Agree strongly, Agree, Neutral, Disagree, Disagree strongly</td>
</tr>
<tr>
<td>9</td>
<td>I have learned new skills while participating as a volunteer;</td>
<td>Agree strongly, Agree, Neutral, Disagree, Disagree strongly</td>
</tr>
<tr>
<td>10</td>
<td>Volunteering has increase my sense of well-being;</td>
<td>Agree strongly, Agree, Neutral, Disagree, Disagree strongly</td>
</tr>
<tr>
<td>11</td>
<td>My confidence to try new things has been improved because of my work as a volunteer;</td>
<td>Agree strongly, Agree, Neutral, Disagree, Disagree strongly</td>
</tr>
<tr>
<td>12</td>
<td>Volunteering has increased my awareness of others;</td>
<td>Agree strongly, Agree, Neutral, Disagree, Disagree strongly</td>
</tr>
<tr>
<td>13</td>
<td>I have a greater understanding and acceptance of other cultures because of volunteering;</td>
<td>Agree strongly, Agree, Neutral, Disagree, Disagree strongly</td>
</tr>
<tr>
<td>14</td>
<td>Working as a volunteer has increased my understanding and acceptance of people with special needs or disability;</td>
<td>Agree strongly, Agree, Neutral, Disagree, Disagree strongly</td>
</tr>
<tr>
<td>15</td>
<td>Being a volunteer has raised my awareness of diversity in society;</td>
<td>Agree strongly, Agree, Neutral, Disagree, Disagree strongly</td>
</tr>
<tr>
<td>16</td>
<td>I have formed lasting relationships as a direct result of being a volunteer;</td>
<td>Agree strongly, Agree, Neutral, Disagree, Disagree strongly</td>
</tr>
</tbody>
</table>

These included community spirit, trust in volunteering, sense of belonging, involvement, social relationships, participation, skill development, well-being, confidence, awareness of others, awareness of diversity, and acceptance of other cultures, acceptance of disability or special needs, and rewards. The scale development consisted of a five point likert scale with participants’ requested to indicate their level of agreement by ticking their preferred option for each of the listed statements. Each statement was scored using an arbitrary value, agree strongly = 2, agree =1, neutral=0, disagree=-1, disagree strongly = -2 and finally numerated to give a total capital score (TCS). This produced a scale of -32 to +32. Scores above 0 were deemed to indicate the contributory value of volunteering to social capital. Score less than 0 were considered not to contribute to volunteer based social capital.

**Face and content Validity**

All sixteen statements were further assessed for face and content validity. These included an expert in social capital research, two facility members of an academic institution, a manager of a volunteering center, a statistician and two volunteering administration officers. Four volunteers were also asked to complete the questionnaire and comment on the relevance, applicability, misunderstanding and instructions of the questionnaire. Time for completion was also measured, so as to increase the participation rate of the questionnaire. No major ambiguities were found in the contextual arrangement of the
statements and through a process of discussion the final 16 statements were agreed with the researchers.

Reliability
Cronbach’s alpha coefficient was used to calculate internal consistency and to check that the items in the scale were measuring the underlying construct, i.e. Social Capital in Volunteering. The impact of removing each item from the scale was examined by comparing each of the values to the final alpha value. On examination, all 16 items were above the recommended level of 0.7 for Cronbach alpha and therefore remained within the scale in the final calculation of the alpha value (Bland and Altman, 1997). The Total Capital Score (TCS) had good internal consistency, with a Cronbach’s alpha coefficient reported of 0.86.

Discussion
Care was taken to develop a valid and reliable summated scale to measure for measuring social capital in volunteering. Using the social capital model from Boeck, Fleming, & Kemshall (2006) and the results of the qualitative study, 16 statements were constructed and tested for internal reliability. It appears that the scale developed is valid and reliable in measuring the extent that volunteering adds to social capital. This scale could be utilised as a dependant variable for a wide variety of research designs, including studies that attempt to measure social capital in volunteering based on demographic, organisational and individual attributes, and in causal comparative studies. The tool can also be used as an evaluation tool to assess volunteering development and assist in volunteer administration processes. Data can be obtained both formatively and summatively. We also recognise that the small response rate is a problem in this study and it is feasible that this sample represent those who have stronger interest in volunteering activity. The research is confined to one geographical location and it may limit the extrapolation of results to Volunteers in general. However, it is possible to develop this scale further with the addition of indicator items to measure internal structure validity and assess dimensionality. Nonetheless, the main advantage of this scale is that it is short and can be easily administered and does not overburden the volunteer. Further research will determine if the scale is reliable in target populations.

Reference
Brunie, A. (2009). Meaningful distinctions within a concept: Relational,
collective, and generalized social capital. *Social Science Research*, 38, 251-265.


About the Authors

Michelle Foley, M.Sc is qualified in Medical Science and Epidemiology and is studying for a PhD at the University of Manchester. Michelle currently works at Waterford Institute of Technology and has particular expertise in research methodology and data analysis in health based research.

Marie Claire Van Hout, PhD is a sociologist, free lance researcher and lecturer at Waterford Institute of Technology, Ireland, with particular expertise in the area of social capital theory, alcohol and drug use and health outcomes for ethnic minorities.

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