

## Research

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Volume 3 : Issue 1

Article Ref. #: 1000PCSOJ3119

### Article History

Received: September 30<sup>th</sup>, 2016

Accepted: December 6<sup>th</sup>, 2016

Published: December 7<sup>th</sup>, 2016

### Citation

Ochieng BM, Duma S, Ochieng JN, Kaseje DCO. Development and testing a volunteer screening tool for assessing community health volunteers' motives at recruitment and placement in Western Kenya. *Psychol Cogn Sci Open J*. 2016; 3(1): 6-16. doi: [10.17140/PCSOJ-3-119](https://doi.org/10.17140/PCSOJ-3-119)

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# Development and Testing a Volunteer Screening Tool for Assessing Community Health Volunteers' Motives at Recruitment and Placement in Western Kenya

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## ABSTRACT

**Introduction:** In times of inadequate resources and rising public demand, social service organizations rely on volunteers to meet needs. In the current human resource for health crisis in Africa there is urgent need for community health volunteers (CHVs). Studies have highlighted problems of high attrition rates leading to high replacement training costs among CHVs. There is need for careful selection of volunteers that can serve long-term, once trained. This study was done to develop a volunteer assessment framework for recruitment of CHVs. The framework is based on identification intrinsic motives for volunteering that have been shown to be associated with long volunteer service.

**Methods:** The assessment tool was developed by searching literature for theory based constructs and assessment items associated with volunteering. These constructs and items were synthesized into a proposed assessment framework. The framework was subjected to face content and construct validation in West Kenyan context in phase 1 of the study. The validated framework was tested for ability to differentiate between long serving volunteers and non-volunteers matched by gender, age and residence. The 2 groups were presented with test items and asked to record their agreement on a scale of 1 to 5 on the reasons why people volunteer.

**Results:** From literature we identified functional, role identity, and social exchange as theories underpinning volunteering. From these theories we identified 8 constructs to include in a proposed volunteer assessment framework. We tested the framework and although all the eight constructs satisfied internal consistency test only 5: altruism, materialism, social adjustment, esteem enhancement and career development were statistically significantly more associated with either volunteers or non-volunteers. Therefore, only these were included on the final volunteer assessment framework, for identification of long serving volunteers in the local context.

**Conclusion:** We propose a volunteer assessment tool with the 5 constructs and 25 assessment items for identification and recruitment of CHVs, with motives consistent with long-term volunteer service. The final framework consists of altruistic (altruism, social adjustment, esteem enhancement) or egoistic (material gain and career development) constructs with 25 assessment statements. The frame work would able to identify individuals with altruistic motives to include and those with egoistic tendencies to exclude during a volunteer recruitment exercise.

**KEYWORDS:** Community; Health volunteer; Assessment; Motives; Assessment Motives; Constructs.

**ABBREVIATIONS:** CHV: Community Health Volunteers; VAF: Volunteer Assessment Framework; FGD: Focus Group Discussion.

## INTRODUCTION

Volunteerism has existed for centuries and in all cultures based on the notion of solidarity and reciprocity where people live.<sup>1</sup> Volunteering is characterized by acts undertaken freely for reasons other than financial gain, for the benefit of others.<sup>2</sup> When the State cannot reach every individual and household with essential care it must rely on volunteers to complement its efforts.<sup>3</sup> Community health volunteers (CHV) is such an approach, built on the local strengths, tradition and experience which has become a major service delivery strategy in Kenya.<sup>4,5</sup>

Yet more recently, a major debate has existed as to whether people in poor settings can be expected to volunteer, particularly in delivering health services at the community level. Researchers in this field have highlighted problems such as high attrition rate and high cost of training as reasons against CHVs yet studies show their effectiveness in addressing human resource crisis,<sup>6</sup> and have been shown to be cost-effective.<sup>7</sup>

This paper presents the development and testing of a theory based framework for identifying volunteers likely to serve for long as community health volunteers, based their motives for volunteering. Using this framework to assess volunteers at recruitment would improve retention after training and thus reduce costs by minimizing replacement. This would improve the cost-efficiency of community volunteer programs. The paper focuses on the development and testing of a volunteer assessment framework (VAF) for Western Kenya.

### Study Objectives

1. To develop a volunteer assessment framework from theories in literature.
2. To test the validity and reliability of the proposed volunteer assessment framework for CHVs in the local context.

## METHODS

### Development of the Volunteer Assessment Framework

We reviewed literature to identify theories on volunteerism relevant to CHVs, intrinsic and extrinsic factors that have been shown to influence volunteer retention and performance. We searched for the volunteer assessment items that have been used in the field of volunteerism research in order to develop an assessment framework. The search was limited to published literature in English globally scope and unlimited time period. The keywords used in the search included theories, volunteer, motives.

The search engine used was mainly Google and data bases included MEDLINE, CINAHL, Cochrane, PSYCNET, HINARI, EMBASE, POPLINE information was extracted using theories, motives and assessment items as themes. Constructs and items to measure them were identified as described by re-

searchers.<sup>8-10</sup> This process yielded an emerging framework to be tested in the local setting.

Face and content validity was undertaken in a population of 300 respondents as described Netemeyer,<sup>11</sup> and Hogan and Greenfield.<sup>12</sup> This was done in Kisumu district, a population similar to the study population, using self-administered questionnaires. In addition the researcher conducted a focus group discussion (FGD) and key informant interviews with local community resource people to ensure that constructs and assessment items were suited to the local socio-cultural context. From the pretest new suggestions were incorporated in the draft framework. Further, a panel of content experts reviewed the proposed assessment items to verify that they were appropriate indicators of respective constructs, as described by Schultz and Whitney<sup>13</sup> to refine the tool.

The resulting draft Volunteer Assessment Framework consisted of 8 constructs with a total of 84 assessment items. It was translated into local languages (Kiswahili and Luo) by 2 pairs of the respective language experts and back translated to English by independent language experts to confirm the accuracy of the local language versions of the framework. The final draft from the face and content validity data was pretested a population similar to the study population to ensure that constructs and assessment items were suited to the local socio-cultural context. The framework was transformed into structured questionnaires administered to 150 volunteers and 150 non-volunteers matched by sex, age and residence. The respondents were to express their agreement with assessment statements based on Likert scale, to determine suitability the constructs and assessment items as expressed in the local language, in terms of the questions and meanings conveyed to suit the local setting in which the tool would be used.

### Testing of the Volunteer Assessment Framework

The testing of the framework was carried out in Nyakach, Rarieda and Butere Sub-Counties in Western Kenya. The study population consisted of all community health volunteers listed by the Sub Counties of study and their next door neighbors. All 530 CHVs who had been active as volunteers for 5 or more years were enrolled in the study. A similar number of neighbors that were non-volunteers were also recruited into the study as comparison group, matched by gender, residence and age, making the sample population 1060.

The proposed VAF was tested in 2 steps. First, construct validity was assessed using Cronbach's alpha index,<sup>14</sup> to establish the reliability of the internal consistency of the framework. The responses on volunteers' motives were thus validated by correlations with construct measures, in the local context. The internal consistency test was thus undertaken using the Cronbach's alpha coefficient test, as described by Polit and Beck.<sup>15</sup>

To identify constructs and items that were more associ-

ated with CHVs than non-CHVs the framework was assessed to identify constructs and assessment items demonstrating the responses among volunteers that were significantly different from non-volunteers. This was done by presenting the descriptions of the 8 volunteer motives contained in the tool being tested, to the 1062 respondents, half of whom were non-CHVs, by self administered structured statements. The assessment items explored responses to statements designed to assess motives for volunteering, under the 8 constructs. The participants were to express the degree to which they agreed or disagreed with the assessment items as stated, concerning reasons why people volunteer, based on a Likert scale of 1 to 5.

We used cluster analysis to determine association between the constructs and assessment items statistically significantly more with volunteers than with non-volunteers. We clustered the responses into agree (4, 5), undecided (3) and disagree (1, 2) and cross tabulated against the proportions among volunteers and non-volunteers. We compared the proportions in the different clusters for each of the constructs and assessment items. The significance of difference in proportions between the 2 groups was assessed by a chi-square statistic ( $\chi^2$ ), degrees of freedom (df) and significance values ( $p$ ). This was used to examine the relationship between constructs and assessment items and volunteer status. The constructs and assessment items that showed statistically different scores between volunteers and non-volunteers, were considered suitable for inclusion in the final volunteer assessment framework. A  $p$  value  $< 0.05$  was considered statistically significant.

We obtained ethical approval from the Great Lakes University of Kisumu ethical review board.

## Findings

**From literature:** Motivation has been examined from psychosocial,<sup>16</sup> need-based,<sup>17</sup> intrinsic factors,<sup>18</sup> social identity,<sup>19</sup> value-based,<sup>20</sup> and self concept-based.<sup>21</sup> Key concepts described by other researchers include concepts from the social exchange,<sup>22</sup> functional approach<sup>23</sup> and role identity<sup>24</sup> theories. Applying the theories to better understand why volunteering is good for everyone.<sup>25</sup> People continue to volunteer to the extent that their experiences fulfill their relevant motives.<sup>26,27</sup>

Social exchange theory was developed by Kohlberg.<sup>22,28,29</sup> It underpins the motive of material gain, such as remuneration, as a basis for volunteering, people volunteer according to perceived reward, balancing contributions and rewards. Similar motives have been described as extrinsic motivation.<sup>30,31</sup>

**Functional theory:** Clary and Snyder<sup>32</sup> defined functional analysis as being “concerned with the reasons and purposes that underlie and generate psychological phenomena served by people’s beliefs and their actions”. The main premise is that while different people can perform the same actions, the actions serve different psychological functions for different individuals.<sup>31,33,34</sup>

Clary and Snyder<sup>32</sup> found that individuals who reported greater satisfaction also expressed stronger intentions to continue volunteering. Indeed, satisfaction was shown to correlate with time spent volunteering and longevity of service.<sup>35</sup> Material motives include rewards such as strengthening one’s résumé, and developing one’s career, Morrow-Howell and Mui.<sup>36</sup>

**Role identity theory:** Role identity theory, developed from social psychology, which states that individuals classify themselves and others according to their social roles. Individuals adopt multiple roles which have associated behavioral expectations.<sup>37</sup> These roles impact on their role identity suggesting psychosocial benefits from volunteer activities.<sup>38</sup> According to this perspective roles are stable across time and situations<sup>39</sup> and individuals will seek to reinforce their role perceptions, motivated by factors such as self-esteem and efficacy.<sup>40,41</sup> A key dimension of role identity is role enhancement,<sup>42</sup> benefits of accumulation of social roles. Roles have a buffering effect contributing to the need to be productive and maintain meaning throughout life.<sup>43</sup> These benefits are considered important by those who choose to volunteer.<sup>44,45</sup> Volunteering becomes, not so much what one does, but who one is Van Dyne and Farmer.<sup>26</sup> Finkelstein<sup>46</sup> stresses that role identity dictates how others perceive you and is important throughout life Stryker.<sup>37</sup> Warburton<sup>47</sup> suggests that volunteering in health may provide a key role for those affected by the erosion of traditional family and cultural values in the African context.

Social motives refer to individual satisfactions with rewards of interpersonal interactions Morrow-Howell and Mui.<sup>36</sup> They identified three major categories of volunteer motivations: (1) Altruistic (2) Material and (3) Social. Altruistic motives pertain to intangible rewards that are intrinsic to the volunteering act itself, namely satisfactions resulting from feeling that one has helped someone else. A study by Anderson and Moore<sup>49</sup> provided empirical evidence for altruistic motives for volunteering. They seek to translate their deeply held values into actions<sup>50</sup> similar to the need for esteem.<sup>17</sup>

In a research program on AIDS volunteers, Omoto and Snyder<sup>35</sup> found that 5 specific motives for volunteer work could be consistently identified: (1) values, and (2) community concern, which are altruistic. Community concern reflects people’s sense of obligation to their community, Omoto<sup>51</sup>, Penner<sup>52</sup>; (3) understanding, (4) esteem enhancement, which are social and (5) personal development which is materialistic. Understanding reflects the fact that volunteering may serve to satisfy a person’s intellectual curiosity about other people, a social construct. Esteem enhancement encompasses motivations dealing with finding ways to cope with guilt over being more fortunate than others which is social. Finally, personal development focuses on personal growth, considered materialistic. Similarly, Clary<sup>10</sup> identified 5 factors relating to intention to volunteer<sup>10</sup>: (1) value expression, (2) knowledge, (3) social adjustment, (4) ego protection, and (5) utilitarian concern which correspond to Omoto and Snyder’s.<sup>35</sup> Clary’s<sup>8</sup> 6 motivations, which they claim to be of generic relevance to volunteerism, (1) values, (2) understanding,

(3) social, (4) protective (5) enhancement and (6) career development. Ochieng<sup>53</sup> added spirituality as an important construct in Kenya’s local setting, along with material gain and community concern highlighted in her study.<sup>53</sup>

The following 8 motive constructs were identified from literature: for use in proposed volunteer assessment framework (Table 1).

**1. Altruistic:** Motives have intangible rewards, intrinsic to the volunteering act itself, namely satisfactions resulted from feeling that one has helped someone else. They are based on underlying beliefs held that one should make humanitarian contributions to society.<sup>35,54</sup> Anderson and Moore<sup>49</sup> suggested measurement items as: the person tends to think about the welfare of other people, feels empathy for them, and acts to benefit them, looks for opportunity to express their humanitarian concerns.

**2. Community Concern:** This reflects people’s sense of obligation to their community as described by Omoto and Snyder.<sup>35</sup>

**3. Spirituality:** Mentioned by Ochieng<sup>53</sup> in her study among volunteers in Kenya.

**4. Social adjustment:** Social motives refer to individual satisfactions with rewards of interpersonal interactions, group identification, and networking.<sup>10,36</sup> Participating in activities viewed favorably by important others and group.

**5. Esteem enhancement:** Are positive strivings of the ego and self-confidence.<sup>10</sup> Helping is a means of maintaining positive feelings about themselves.<sup>55,56</sup>

**6. Development of understanding:** Opportunity to learn, and satisfy intellectual curiosity.<sup>10,35,54</sup>

**7. Material gain:** Material motives, according to Morrow-Howell and Mui<sup>36</sup> are concerned with extrinsic tangible rewards.

**8. Career enhancement:** Volunteerism enhances one’s career Beale,<sup>57</sup> “stepping stones” to employment by learning skills,<sup>35</sup> improves labor market value,<sup>58</sup> self-development experience for youth.<sup>59</sup>

**Testing of the Framework**

All the motive constructs in the proposed Volunteer Assessment Framework satisfied internal consistency test, described by Polit and Beck,<sup>15</sup> scoring greater than Cronbach alpha 0.8 (Table 2).

Theories	Motives	Assessment items
Functional theory/ Role identity	Altruistic	Feeling to help others, Belief in helping others, Thinks about the welfare of others, Feeling empathy for others, acting to benefit others Express humanitarian concern, Feeling to translate deeply held values to action
Functional theory	Community Concern	Sense of obligation to community, contributing to society
	Spirituality	
Role identity	Social adjustment	Normative social pressure, getting along with others, Need to respond to group demand, Emotional gratification, desire to interact with others, build relationship with others, Activities viewed favorably by others, meeting expectations of others, self concept, Considers volunteering as a leisure activity, Satisfies the expectations of others
Role identity	Esteem enhancement	Enhance self confidence, to feel good about one-self, Self improvement, self acceptance, Brings meaning and purpose to life, Contributes to well-being, Valuable to self
Role identity theory	Development of understanding	Satisfies intellectual curiosity about other people and their problems, Educational experience, Chance to gain new experience, Opportunity to challenge self, test existing skills
Functional theory	Career development	Learning job related skills, Offers employment opportunity, Maintain employment skills, Opportunity to make friends and learn from them new skills, Learn more about area of interest, Increase job prospects, Career path, Stepping stone to job
Social exchange theory	Material gain	Benefit in kind or cash, Benefit from materials, Frequent rewards, Benefits add wealth

Table 1: Assessment items by motives and theories.

Constructs (Volunteer Motives)	Cronbach’s Alpha	Cronbach’s Alpha Based on Standardized Items	No. of Items
Altruistic	0.84	0.84	12
Development of Understanding	0.85	0.85	10
Community Concern	0.91	0.92	20
Esteem Enhancement	0.87	0.87	10
Social Adjustment	0.91	0.91	13
Material Gain	0.90	0.90	5
Career Development	0.86	0.86	11
Spirituality	0.80	0.80	5

Table 2: Cronbach’s Coefficient alpha values by motive constructs.

For altruistic values all the assessment scale items were significantly associated with long serving volunteers than with non-volunteers, (Table 3A). For community concern and spirituality there was no statistically significant difference of scores between volunteers and non-volunteers. For social adjustment all the assessment scale items were significantly more associated with long serving volunteers than with the non-volunteers (Table 3B). For esteem enhancement all the assessment scale items were significantly more associated with long serving volunteers than with non-volunteers (Table 3C).

Development of understanding did not seem to resonate consistently with respondents in our study. The test item “to satisfy curiosity was more associated with volunteers, while the rest either demonstrated no difference between volunteers and controls such as “gain experience” or were associated more with controls (Table 3D) and may not be suitable for the framework.

For materialistic constructs, all the assessment scale items were significantly associated more with non-volunteers than with volunteers (Table 3E). Similarly all assessment items under career development motives were significantly associated with non-volunteers than with volunteers (Table 3F).

**DISCUSSION**

All 8 constructs can be used in the local setting since the internal consistency of the proposed framework all the constructs in the tool were above 0.8 by Cronbach’s alpha coefficient test as described by Polit & Beck.<sup>15</sup> The framework was adequately valid in the local context.

Altruistic constructs had strong association with volunteers. Altruistic values have been recognized by other studies that had described individuals who volunteer in order to express

Altruistic value assessment items	Respondents	Disagree n (%)	Undecided n (%)	Agree n (%)	p value
It creates a better society	CHVs	12 (1.2)	9 (0.9)	509 (48.1)	0.00
	Non-CHVs	15 (1.5)	32 (3.0)	483 (45.6)	
Of values and belief in making things better for others.	CHVs	23 (2.1)	18 (1.7)	489 (46.1)	0.00
	Non-CHVs	47 (4.4)	35 (3.3)	448 (42.3)	
It translates deep held values into actions.	CHVs	28 (2.6)	30 (2.8)	472 (44.6)	0.01
	Non-CHVs	52 (4.9)	50 (4.7)	428 (40.4)	
They think about the welfare of other people	CHVs	18 (1.7)	41 (3.9)	471 (40.3)	0.00
	Non-CHVs	56 (5.3)	36 (3.2)	438 (41.3)	
They feel empathy for others	CHVs	24 (2.3)	23 (2.2)	483 (45.5)	0.00
	Non-CHVs	52 (4.9)	35 (3.3)	443 (41.8)	
They benefit others	CHVs	38 (3.5)	13 (1.3)	479 (45.2)	0.00
	Non-CHVs	85 (8.0)	23 (2.1)	422 (34.5)	
Intention to contribute positively to society	CHVs	18 (1.7)	23 (2.2)	489 (46.1)	0.05
	Non-CHVs	38 (3.6)	35 (3.3)	457 (43.1)	
They consider themselves to be people who get involved	CHVs	47 (4.5)	37 (3.4)	446 (42.1)	0.00
	Non-CHVs	125 (11.8 )	47 (4.4 )	358 (33.8)	

Table 3A: Proportion of respondents agreeing with altruistic values by volunteer status.

Social adjustment		Agree	Undecided	Disagree	p value
It is an opportunity for relationships	CHVs	84 (7.9)	24 (2.3)	422 (39.8)	0.00
	Non-CHVs	105 (9.9)	32 (3.0)	393 (37.1)	
People at job/school/church/group would approve of their volunteering	CHVs	169 (15.9)	41 (3.9)	320 (30.2)	0.04
	Non-CHVs	129 (12.2)	42 (3.9)	359 (33.9)	
People who are close to them would support them to volunteer	CHVs	188 (17.8)	39 (3.6)	303 (28.6)	0.04
	Non-CHVs	139 (13.1)	38 (3.6)	353 (33.3)	
Their family members would encourage them to volunteer	CHVs	207 (19.5)	47 (4.5)	276 (26.1)	0.00
	Non-CHVs	155 (14.6)	55 (5.2)	320 (30.2)	
Of reciprocal interactions in community	CHVs	242 (22.8)	43 (4.0)	245 (23.1)	0.00
	Non-CHVs	169 (16.0)	44 (4.1)	317 (29.9)	

Table 3B: Proportion of respondents agreeing with social adjustment values by volunteer status.

Esteem enhancement		Agree n (%)	Undecided n (%)	Disagree n (%)	p value
They want to instill pride in themselves	CHVs	309 (29.1)	28 (2.7)	193 (18.3)	0.00
	Non-CHVs	236 (22.3)	53 (5.0)	241 (18.3)	
They want to instill self-esteem in themselves	CHVs	255 (24.1)	46 (4.3)	229 (21.6)	0.00
	Non-CHVs	197 (18.6)	40 (3.7)	293 (27.6)	
No matter how bad they have been feeling, volunteering helps them to forget about it	CHVs	214 (20.2)	54 (5.1)	262 (24.7)	0.00
	Non-CHVs	182 (17.2)	42 (3.9)	306 (28.9)	
They enjoy being part of activities in the community	CHVs	141 (13.3)	45 (4.2)	344 (32.5)	0.02
	Non-CHVs	94 (8.9)	46 (4.3)	390 (36.8)	
They enjoy doing the activity	CHVs	139 (13.1)	42 (3.9)	349 (32.9)	0.02
	Non-CHVs	126 (11.9)	44 (4.1)	360 (33.9)	
It makes them feel good about themselves	CHVs	231 (21.8)	28 (2.7)	271 (25.6)	0.01
	Non-CHVs	176 (16.6)	45 (4.2)	309 (29.2)	
Community Concern	CHVs	154 (14.5)	26 (2.5)	350 (33.1)	0.03
	Non-CHVs	144 (13.6)	34 (3.2)	352 (33.2)	
It makes them feel important	CHVs	282 (26.6)	25 (2.4)	223 (21)	0.00
	Non-CHVs	225 (21.2)	51 (4.8)	254 (23.9)	
It makes them feel appreciated	CHVs	249 (23.5)	48 (4.6)	233 (22)	0.00
	Non-CHVs	226 (21.3)	49 (4.6)	255 (24.1)	
It makes them feel recognized	CHVs	253 (23.9)	41 (3.9)	236 (22.3)	0.00
	Non-CHVs	197 (18.6)	47 (4.4)	304 (27)	

Table 3C: Proportion of respondents agreeing with esteem enhancement values by volunteer status.

Development of understanding		Disagree n (%)	Undecided n (%)	Agree n (%)	p value
It satisfies their curiosity about other people and the problems that they face	CHVs	69 (6.5)	31 (2.9)	430 (40.6)	0.03
	Non-CHVs	94 (8.9)	30 (2.8)	406 (38.3)	
Of personal growth	CHVs	180 (17)	55 (5.2)	295 (27.9)	0.00
	Non-CHVs	144 (13.6)	36 (3.3)	350 (33.1)	
Of the opportunity to make friends	CHVs	183 (17.3)	47 (4.4)	300 (28.3)	0.00
	Non-CHVs	145 (13.7)	32 (8.9)	353 (33.3)	
Of the chance to gain new experience	CHVs	83 (7.9)	28 (2.7)	419 (39.5)	0.02
	Non-CHVs	69 (6.5)	46 (4.3)	415 (39.2)	
Of opportunity to challenge themselves	CHVs	194 (18.3)	60 (5.7)	276 (26.0)	0.00
	Non-CHVs	145 (13.6)	54 (5.1)	331 (31.3)	
Volunteerism allows them to test their existing skills and abilities	CHVs	123 (11.7)	42 (4.0)	366 (34.4)	0.03
	Non-CHVs	108 (10.2)	61 (3.9)	381 (35.9)	

Table 3D: Proportion of respondents agreeing with development of understanding values by volunteer status.

Material gain	Respondents	Disagree n (%)	Undecided n (%)	Agree n (%)	p value
They benefit at times in terms of cash or kind	CHVs	331 (31.3)	36 (3.4)	163 (15.4)	0.00
	Non-CHVs	226 (21.4)	43 (4.0)	261 (24.6)	
Sometimes they are paid	CHVs	314 (29.6)	51 (4.8)	165 (15.6)	0.00
	Non-CHVs	226 (21.4)	33 (3.1)	271 (25.5)	
At times they are given materials that have remained after volunteering	CHVs	290 (27.4)	45 (4.3)	195 (18.4)	0.00
	Non-CHVs	207 (19.5)	45 (4.2)	278 (26.2)	
Sometimes they are rewarded and they feel good	CHVs	274 (25.8)	46 (4.4)	210 (19.9)	0.00
	Non-CHVs	200 (18.8)	37 (3.5)	293 (27.6)	
Volunteer benefits add to their wealth	CHVs	245 (23.1)	35 (3.3)	250 (23.6)	0.00
	Non-CHVs	193 (18.2)	34 (3.2)	303 (28.6)	

Table 3E: Proportion of respondents agreeing with material gain values by volunteer status.

Career development		Disagree n (%)	Undecided n (%)	Agree n (%)	p value
They want to learn job-related skills	CHVs	100 (9.5)	33 (3.1)	397 (37.5)	0.01
	Non-CHVs	87 (8.2)	29 (2.8)	414 (39.1)	
It will help them get an opportunity at a place where they would like to work	CHVs	80 (7.6)	53 (5.0)	397 (37.5)	0.00
	Non-CHVs	83 (7.9)	27 (2.6)	420 (39.6)	
It can help them get a job	CHVs	100 (9.5)	33 (3.1)	397 (37.5)	0.01
	Non-CHVs	87 (8.2)	29 (2.8)	414 (39.1)	

Table 3F: Proportion of respondents agreeing with career development values by volunteer status.

firmly held beliefs of the importance for one to help others.<sup>50,60</sup> Under this construct strong personal values underpin the motive for volunteering. This finding is consistent with research undertaken on volunteer motivation by Penner<sup>61</sup> suggesting this construct to be among the most powerful predictors of long-term volunteerism such as is required for CHVs (Table 4).

Social adjustment describes individuals who volunteer to build social networks and enjoy interactions. In our study, this construct was associated with volunteers. The statements that volunteers identified more with as compared to non-volunteers were approval by peers, friends, and family and expecting reciprocity from other members of the community which are culturally supportable.<sup>53</sup> Volunteering was seen as useful not only

intrinsically, but in the eyes of others.<sup>46</sup>

Esteem enhancement encompasses motivations with positive strivings of the ego.<sup>8</sup> Carlson et al<sup>55</sup> working on mood of helping others suggested that people use helping as a means of enhancing positive feelings about themselves. This phenomenon is explained by Cheng et al<sup>62</sup> suggesting that undertaking generative acts is becoming increasingly challenging for older people in the technical age, when older people have less and less to teach the younger generation. For this reason older people may take up volunteerism to maintain positive relationships with offspring.<sup>63</sup>

Egoistic constructs, material gain, had strong associa-

Complete the following sentences about the reason people volunteer and indicate the degree of your agreement with each one.

People volunteer because:

	Strongly Agree	Agree	Undecided	Disagree	Strongly disagree
<b>1. Altruistic value (core)</b>					
It creates a better society					
It translates deep held values into actions					
They think about the welfare of other people					
They feel empathy for others					
They consider themselves to be people who get involved					
<b>2. Social adjustment</b>					
It is an opportunity for relationships					
People at job/school/church/group would approve of their volunteering					
People close to them would support them to volunteer					
Their family members would encourage them to volunteer					
Of reciprocal interactions in community					
<b>3. Esteem enhancement</b>					
They want to instill pride in themselves					
No matter how bad they have been feeling, volunteering helps them to forget about it					
They enjoy being part of activities in the community					
It makes them feel good about themselves					
It makes them feel important					
It makes them feel appreciated					
It makes them feel recognized					
<b>4. Material Gain</b>					
They benefit at times in terms of cash or kind					
Sometimes they are paid					
At times they are given materials that have remained after volunteering					
Sometimes they are rewarded and they feel good					
Volunteer benefits add to their wealth					
<b>5. Career Development</b>					
They want to learn job-related skills					
It will help them get an opportunity at a place where they would like to work					
It can help them get a job					

Table 4: The resulting Final Volunteer Assessment Framework (VAF)

tion with non-volunteers. Hence, a tool with egoistic constructs can be used to identify people who are unsuitable for being long serving volunteers, as required for CHVs. Our finding is consistent with many other social theories underlying reasons for people to take action because they weigh investment against benefits, such as social cognitive theory by Bandura,<sup>48</sup> or those perceiving volunteering as a productive activity.<sup>25</sup> All the assessment items were strongly associated with non-volunteers than volunteers. Career development was also associated with non-volunteers. Gidron<sup>59</sup> suggested that the rewards for volunteering were either personal or indirectly economic such as gaining work experience. All the assessment scale items under career development motives were significantly associated with controls. The remaining 2 constructs, community concern and spirituality, did not demonstrate adequate difference in association with either volunteers or non-volunteers and may not be useful in the framework in the local context. Community concern and spirituality may be rooted on theories that are beyond psychosocial in the disciplines of social anthropology and theology that were not adequately explored in this study, and therefore an area for further investigation. Some studies point out that volunteerism is associated with social philanthropy that are associated religious values as sources of motivation.<sup>64,65</sup>

## CONCLUSION

This study provided valuable information about the actual motivations and their relative importance to identify volunteers likely to serve long as needed in community based health care. Of the 8 constructs considered 5 with 25 test items were useful in identifying volunteers, positively or negatively. Development of understanding had inconsistent association with volunteers and non-volunteers. Spirituality and community concern did not differentiate between volunteers and non-volunteers and therefore unsuitable for the framework being tested. Researchers in this field have described the importance of these differences to managers involved in the recruitment, placement and retention of volunteers within their organization, but have not clearly demonstrated the differences and hence the contribution of this study. This framework will be instrumental in the recruitment of appropriately motivated volunteers for long-term assignments, and hence improve the retention rate among volunteers, by excluding those that are unsuitable. Taking the 2 tests together, using both altruistic and egoistic constructs one can identify volunteers to include as well exclude people who cannot serve long-term as volunteers required of community health volunteers. This will improve the cost-efficiency CHV programs. By understanding the motivations of their volunteers through the framework, a manager of volunteers can identify and select volunteers that are likely to serve long-term based on their motivation. The final framework has 5 constructs and 20-30 assessment items.

## ACKNOWLEDGEMENT

This work was carried out with support from the Great Lakes

University of Kisumu and Teseadale Corti research Programme, a research funding partnership composed of the Canadian Institutes of Health Research, Foreign Affairs, Trade and Development Canada, and the International Development Research Centre. This work was carried out with the aid of a grant from the International Development Research Centre (IDRC), Ottawa, Canada, and with the financial support of the Government of Canada provided through Foreign Affairs, Trade and Development Canada (DFATD).

## CONSENT FROM PARTICIPANTS

All participants were briefed on the purpose of the research and they were given free will to choose whether to participate in the research.

The Principle Investigator seek consent from all participants. The information provided by the participants was kept private and confidential.

The study results was shared will all interested participants.

## COMPETING INTERESTS

The authors declare no competing interests in the research study.

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