**Examining Attitudes towards Welfare in an In/Security Regime: Evidence from Ghana**

**Appendix**

# Appendix 1: Descriptive statistics of variables and participants in the study

## Table 1: Descriptive statistics of variables used in the quantitative study a

| **Variable** | **Frequency**  **(N=1381)** | **Percentage** |
| --- | --- | --- |
| **Age** |  |  |
| 18-35 | 755 | 54.7% |
| 36-49 | 217 | 15.7% |
| 50+ | 409 | 29.6% |
| *Age (18-85 years) /Mean (SD)* | 38.27 (16.05) |  |
| **Sex** |  |  |
| Male | 748 | 54.2% |
| Female | 633 | 45.8% |
| **Region of residence** |  |  |
| Ashanti | 546 | 39.5% |
| Greater Accra | 203 | 14.7% |
| Eastern Region | 206 | 14.9% |
| Upper East | 426 | 30.8% |
| **Locality** |  |  |
| Urban | 813 | 58.9% |
| Rural | 568 | 41.1% |
| **Educational attainment** |  |  |
| Never been to school | 212 | 15.4% |
| Primary school | 194 | 14.0% |
| JHS | 344 | 24.9% |
| MSLC | 102 | 7.4% |
| O’ Level | 41 | 3.0% |
| A’ Level | 24 | 1.7% |
| SHS/Vocational/Technical | 243 | 17.6% |
| Tertiary | 188 | 13.6% |
| Postgraduate | 27 | 2.0% |
| **Employment status** |  |  |
| Full time employee | 267 | 19.3% |
| Part-time employee | 89 | 6.4% |
| Self-employed | 438 | 31.7% |
| Pension/retired | 81 | 5.9% |
| Student | 199 | 14.4% |
| Housewife | 33 | 2.4% |
| Unemployed | 270 | 19.6% |
| **Ethnicity** |  |  |
| Asante | 451 | 32.7% |
| Other Akans | 255 | 18.5% |
| Ewe | 77 | 5.6% |
| Ga-Adangbe | 63 | 4.6% |
| Northern ethnicities | 535 | 38.7% |
| **Religiosity** |  |  |
| Extremely non-religious | 27 | 2.0% |
| Very non-religious | 20 | 1.4% |
| somewhat non-religious | 30 | 2.2% |
| Neither religious nor non-religious | 103 | 7.5% |
| Somewhat religious | 174 | 12.6% |
| Very religious | 787 | 57.0% |
| Extremely religious | 228 | 16.5% |
| **Monthly Income** (if employed)  (Range: GH¢20-2500, ~ US$4- 502.50) |  | GH¢480.73 (446.91)  US$96.63 (89.83) |
| Low (US$ 0-57) | 256 | 32.4% |
| Lower-middle (US$58-96) | 162 | 20.5% |
| Middle (US$ 97-166) | 89 | 11.3% |
| Upper-mddle (US$ 167+) | 118 | 14.9% |
| **Socioeconomic Status** |  |  |
| Low | 311 | 39.3% |
| Middle | 405 | 51.2% |
| High | 71 | 9.0% |
| **Household size** |  |  |
| *Mean (SD)* | 5.69 (3.11) |  |
| **Marital status** |  |  |
| Married | 629 | 45.5% |
| Divorced | 34 | 2.5% |
| Windowed | 79 | 5.7% |
| Separated | 33 | 2.4% |
| Living together as married | 30 | 2.2% |
| Single | 540 | 39.1% |
| **Household LEAP Beneficiary** |  |  |
| Yes | 184 | 13.3% |
| No | 1057 | 76.5% |
| **NHIS Subscription** |  |  |
| Yes | 640 | 46.3% |
| No | 739 | 53.5% |
| **Political participation** |  |  |
| Not at all interested | 371 | 26.9% |
| Not very interested | 238 | 17.2% |
| Somewhat interest | 307 | 22.2% |
| Fairly interested | 194 | 14.1% |
| Very interested | 271 | 19.6% |
| **Undeservedness of welfare** |  |  |
| Strongly Disagree | 141 | 10.2% |
| Disagree | 403 | 29.2% |
| Neutral | 295 | 21.4% |
| Agree | 438 | 31.7% |
| Strongly Agree | 104 | 7.5% |
| **Government must provide healthcare** |  |  |
| Definitely should not be | 68 | 4.9% |
| Probably should not be | 170 | 12.3% |
| Probably | 613 | 44.4% |
| Definitely should be | 529 | 38.3% |
| **Government must spend more on the welfare** |  |  |
| Strongly disagree | 92 | 6.7% |
| Disagree | 225 | 16.3% |
| Neither agree nor disagree | 241 | 17.4% |
| Agree | 574 | 41.6% |
| Strongly agree | 249 | 18.0% |

*a Some values may not add to the total sample due to missing responses*

## Table 2: Characteristics of participants in the qualitative study

|  |  |  |
| --- | --- | --- |
| **Characteristic** | **Frequency**  **N=27** | **Percentage** |
| **Age** |  |  |
| 18-35 | 13 | 48.2% |
| 36-49 | 8 | 29.6% |
| 50+ | 6 | 22.2% |
| **Sex** |  |  |
| Male | 15 | 55.6% |
| Female | 12 | 44.4% |
| **Educational attainment** |  |  |
| Never being to school | 1 | 3.7% |
| Primary school | 7 | 25.9% |
| Junior High School/MLSC | 13 | 48.2% |
| SHS/A’Level/O’Level | 3 | 11.1% |
| Tertiary (including postgraduate) | 3 | 11.1% |
| **Regions** |  |  |
| Ashanti | 18 | 66.7% |
| Brong Ahafo | 9 | 33.3% |
| **Locality** |  |  |
| Urban | 16 | 59.3% |
| Rural | 11 | 40.7% |

# Appendix 2: Research design

The Comparative Study of Multidimensional Aspects of Well-being (CSMAW) gathered data from adults (18 years and above), with emphasis on youth (18-35 years) as defined by Ghana Statistical Services (GSS, 2013), and older persons (50 years and above). The age for older persons was in view of relatively low life expectancy in Ghana and LMICs (GSS, 2012; World Health Organization, 2015). Following previous successful practices (Amoah & Phillips, 2018; Gyasi et al., 2018), a person was interviewed in every fifth house in urban areas while every one person was interviewed in every second house in rural areas due to differences in population sizes

The qualitative data was gathered from the Ashanti and Brong Ahafo regions due to their nodal locations, and it included seven urban and five rural communities using a semi-structured interview technique. Snowball and purposive sampling strategies (Creswell, 2014), were employed to recruit participants based on their age (a mix of young and old adults), both sexes, different educational backgrounds, and rural and urban composition. The discussions entailed knowledge of broad and narrow issues about poverty and deprivation and specific government efforts in addressing inequalities. They were also encouraged to discuss their views, expectations, and willingness to support existing social interventions such as the LEAP, capitation grant, and NHIS, by way of paying more taxes. Each interview lasted approximately 45 minutes.

## ***Quantitative study: Measures***

For the quantitative part, two dependent variables were assessed. First, respondents were asked whether they agreed that ‘government should spend more money on welfare benefits to the poor, even if it leads to higher taxes’? (Taylor & Taylor-Gooby, 2015). Second, they were asked if they felt that it is the government’s responsibility to provide healthcare for the sick? (ISSP Research Group, 2015).

The independent variables captured the self-interest and social values hypotheses. For the self-interest, data was gathered on their age (in years), sex, locality (rural or urban), region, educational attainment, and employment status. Others included monthly income, socioeconomic status (SES; on a scale of 1 to 10, with 10 being highest), marital status, household size. Finally, the study ascertained participants’ subscription status to the NHIS, and whether anyone in their households received a welfare benefit (e.g. LEAP: child support grant, disability support, maternity support, and old age support).

For social values*,* these variables were measured: ethnicity and religiosity (the extent to which one described him/herself as religious). Respondents were also asked about their views on deservingness of welfare (such as LEAP): ‘many people who receive welfare benefits don’t really deserve any help’; and their political interest: ‘How interested would you say you personally are in politics?’ The response options can be found in Appendix 1 (Table 1) above.

# Appendix 3: Spearman Correlation Analysis between Study Variables

## Table 3: Spearman Correlation Analysis between Study Variables

|  |  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** | **17** | **18** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Gov’t should provide healthcare** | 1.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **Gov’t must spend more on welfare** | .077\*\* | 1.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **Recipients don’t deserve welfare** | -.066\* | .128\*\* | 1.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **Age** | -.060\* | .043 | .057\* | 1.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **Sex** | .004 | .023 | .014 | .032 | 1.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **Ethnicity** | .053 | .120\*\* | -.089\*\* | .176\*\* | .048 | 1.00 |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **Household Size** | .059\* | .044 | -.058\* | .132\*\* | .003 | .301\*\* | 1.00 |  |  |  |  |  |  |  |  |  |  |  |
|  | **Education** | -.045 | -.134\*\* | -.170\*\* | -.344\*\* | -.140\*\* | -.176\*\* | -.077\*\* | 1.00 |  |  |  |  |  |  |  |  |  |  |
|  | **Region** | .040 | .080\*\* | -.061\* | .245\*\* | .007 | .671\*\* | .339\*\* | -.192\*\* | 1.00 |  |  |  |  |  |  |  |  |  |
|  | **Urban** | .036 | -.111\*\* | .044 | -.119\*\* | -.021 | -.143\*\* | -.198\*\* | .045 | -.266\*\* | 1.00 |  |  |  |  |  |  |  |  |
|  | **Socioeconomic status** | -.134\*\* | -.029 | -.069\* | .000 | -.066\* | -.073\* | .010 | .239\*\* | -.078\*\* | -.018 | 1.00 |  |  |  |  |  |  |  |
|  | **Employment status** | .029 | .036 | -.005 | -.046 | .046 | .148\*\* | .170\*\* | -.128\*\* | .176\*\* | -.079\*\* | -.120\*\* | 1.00 |  |  |  |  |  |  |
|  | **Income monthly** | -.043 | -.199\*\* | -.073 | .130\*\* | -.103\* | -.082 | -.063 | .343\*\* | -.098\* | .051 | .171\*\* | -.277\*\* | 1.000 |  |  |  |  |  |
|  | **Religiosity** | .055 | .106\*\* | .040 | -.065\* | .090\*\* | -.058\* | -.022 | -.017 | -.010 | .034 | -.027 | .017 | -.186\*\* | 1.000 |  |  |  |  |
|  | **Marital status** | .061\* | -.009 | .021 | -.610\*\* | -.062\* | -.147\*\* | -.103\*\* | .291\*\* | -.216\*\* | .140\*\* | -.025 | .045 | -.081 | .054 | .100 |  |  |  |
|  | **NHIS beneficiary** | .262\* | .087\* | -.075\*\* | -.106\*\* | -.019 | .065\* | .026 | .027 | .037 | .007 | -.033 | -.055 | -.009 | -.002 | .030 | .100 |  |  |
|  | **Other welfare beneficiary (family)** | .031 | .097\* | -.005 | -.062\* | .004 | -.019 | -.088\*\* | .054 | -.045 | -.118\*\* | -.136\* | .086\*\* | .039 | .077\*\* | .071\* | .014 | .100 |  |
|  | **Political participation** | -.037 | .048 | .042 | .106\*\* | -.098\*\* | .010 | .032 | -.034 | .048 | .001 | .050 | -.101\*\* | -.065 | .116\*\* | -.083\* | .057\* | -.009 | .100 |

\*p < .05. \*\*p < .01

# Appendix 4: Public attitudes towards more government spending on welfare by Ordinal Logistics Regression

## Table 4: Public attitudes towards more government spending on welfare by Ordinal Logistics Regression

|  | **Estimate** | **95% Confidence Interval** | | **Std. Error** | **Wald** | **Adjusted odds ratio a** |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | Lower Bound | Upper Bound |  |  |  |
| **Age** |  |  |  |  |  |  |
| 18-35 | 0.534\* | 0.073 | 0.995 | 0.235 | 5.154 | 1.706 |
| 36-49 | 0.920\*\*\* | 0.426 | 1.413 | 0.252 | 13.358 | 1.096 |
| 50+(ref) |  |  |  |  |  |  |
| **Sex** |  |  |  |  |  |  |
| Male | 0.244 | -0.106 | 0.594 | 0.179 | 1.869 | 1.276 |
| Female (ref) |  |  |  |  |  |  |
| **Ethnicity** |  |  |  |  |  |  |
| Asantes | -0.528 | -1.163 | 0.108 | 0.324 | 2.645 | 0.589 |
| Other Akans | -0.279 | -1.026 | 0.467 | 0.381 | 0.537 | 0.757 |
| Ewes | -0.765 | -1.740 | 0.210 | 0.497 | 2.364 | 0.465 |
| Ga-Adangbe | 0.577 | -0.441 | 1.595 | 0.519 | 1.233 | 1.781 |
| Ethnicity in Northern Ghana (ref) |  |  |  |  |  |  |
| **Religiosity** | 0.173\*\* | 0.046 | 0.300 | 0.065 | 4.918 | 1.189 |
| **Locality** |  |  |  |  |  |  |
| Urban | -0.377\* | -0.721 | -0.033 | 0.203 | 4.622 | 0.686 |
| Rural (ref) |  |  |  |  |  |  |
| **Educational attainment** |  |  |  |  |  |  |
| Primary school | -0.361 | -1.024 | 0.302 | 0.338 | 1.138 | 0.697 |
| JHS | -0.372 | -1.039 | 0.294 | 0.340 | 1.199 | 0.689 |
| MLSC | 0.421 | -0.401 | 1.243 | 0.419 | 1.007 | 1.523 |
| O’Level | 0.382 | -2.618 | 0.145 | 0.631 | 0.798 | 0.682 |
| A’Level | -0.246 | -1.928 | 1.436 | 0.858 | 0.082 | 0.782 |
| SHS | 0.095 | -0.553 | 0.743 | 0.331 | 0.082 | 1.099 |
| Tertiary | -0.247 | -.889 | 0.394 | 0.327 | 0.571 | 0.781 |
| Postgraduate | -0.158 | -1.273 | 0.956 | 0.568 | 0.078 | 0.984 |
| Never been to school (ref) |  |  |  |  |  |  |
| **Marital Status** |  |  |  |  |  |  |
| Married | -0.107 | -0.530 | 0.316 | 0.216 | 0.245 | 0.899 |
| Divorced | 1.136\* | 0.084 | 3.187 | 0.816 | 4.484 | 3.114 |
| Widowed | 1.533\*\* | 0.463 | 4.603 | 0.846 | 7.878 | 4.632 |
| Separated | 0.142 | -0.765 | 1.364 | 0.566 | 0.305 | 1.156 |
| Living together as couple | -0.327 | -1.466 | 0.811 | 0.477 | 0.089 | 0.721 |
| Single (Ref) |  |  |  |  |  |  |
| **Monthly Income (Log)** | -0.625\*\* | -1.031 | -.219 | 0.207 | 9.109 | 0.535 |
| **Household welfare beneficiary (LEAP)** |  |  |  |  |  |  |
| Yes | 0.401\*\* | 0.130 | 0.627 | 0.081 | 24.235 | 1.493 |
| No (ref) |  |  |  |  |  |  |
| **NHIS Insured** |  |  |  |  |  |  |
| Yes | -0.038 | -0.347 | 0.270 | 0.157 | 0.060 | 0.963 |
| No (ref) |  |  |  |  |  |  |
| **Region of Residence** |  |  |  |  |  |  |
| Ashanti | -0.585 | -1.261 | 0.090 | 0.345 | 2.884 | 0.557 |
| Greater Accra | -0.499 | -1.322 | 0.325 | 0.420 | 1.410 | 0.607 |
| Eastern | -0.695 | -1.723 | 0.333 | 0.525 | 1.755 | 0.499 |
| Upper Eastern(ref) |  |  |  |  |  |  |
| **Undeservedness of welfare** | 0.399\*\*\* | 0.232 | 0.567 | 0.085 | 21.954 | 1.490 |
| *Cox and Snell Pseudo R-Square* | *0.158* |  |  |  |  |  |
| *Nagelkerke Pseudo R-Square* | *0.167* |  |  |  |  |  |

\*p < .05. \*\*p < .01. \*\*\*p < .001. a *Odds ratios were computed using resources provided by De Coster (2005).*

# Appendix 5: Public attitudes towards government healthcare provision by Ordinal Logistics Regression

## Table 5: Public attitudes towards government healthcare provision by Ordinal Logistics Regression

|  | **Estimate** | **95% Confidence Interval** | | **Std. Error** | **Wald** | **Adjusted odds ratio** a |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | Lower Bound | Upper Bound |  |  |  |
| **Age** |  |  |  |  |  |  |
| 18-35 | 0.411\* | 0.011 | 0.812 | 0.204 | 4.060 | 1.508 |
| 36-49 | 0.016 | -0.503 | 0.535 | 0.265 | 0.004 | 1.061 |
| 50+(ref) |  |  |  |  |  |  |
| **Sex** |  |  |  |  |  |  |
| Male | 0.059 | -0.259 | 0.377 | 0.162 | 0.134 | 1.061 |
| Female (ref) |  |  |  |  |  |  |
| **Marital Status** |  |  |  |  |  |  |
| Married | -0.306 | -0.731 | 0.118 | 0.216 | 2.002 | 0.736 |
| Divorced | 0.704 | -0.387 | 1.794 | 0.556 | 1.600 | 2.021 |
| Widowed | 0.272 | -0.463 | 1.007 | 0.375 | 0.526 | 1.312 |
| Separated | -0.345 | -1.564 | 0.873 | 0.622 | 0.309 | 0.708 |
| Living together as couple | -0.015 | -1.046 | 1.016 | 0.526 | 0.001 | 0.985 |
| Single (Ref) |  |  |  |  |  |  |
| **NHIS Insured** |  |  |  |  |  |  |
| Yes | 0.238\*\* | 0.124 | 0.433 | 0.082 | 11.143 | 1.269 |
| No (ref) |  |  |  |  |  |  |
| **Household size** | 0.029\*\* | 0.011 | 0.047 | 0.009 | 9.699 | 1.029 |
| **Socio-economic status** |  |  |  |  |  |  |
|  | -0.098\*\* | -0.165 | -0.030 | 0.034 | 8.040 | 0.907 |
| **Undeservedness of welfare** | -0.120 | -0.250 | 0.010 | 0.066 | 3.274 | 0.887 |
| *Cox and Snell Pseudo R-Square* | 0.107 |  |  |  |  |  |
| *Nagelkerke Pseudo R-Square* | 0.119 |  |  |  |  |  |

*Note: \**p < *.05. \*\**p < *.01. \*\*\**p < *.001. a Odds ratios were computed using resources provided by De Coster (2005).*

**References**

Amoah, P. A. and Phillips, D. R. (2018) ‘Health literacy and health: rethinking the strategies for universal health coverage in Ghana’, *Public Health, 159*, 40-9, doi: <https://doi.org/10.1016/j.puhe.2018.03.002>.

Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches,* (Fourth Edition), London: Sage.

De Coster, J. (2005) *Logistic Coefficient to Odds Ratio*, <http://stat-help.com/spreadsheets.html> [accessed 01.12.2018].

Ghana Statistical Service (GSS) (2012) *2010 Population and Housing Census: Summary Report of Final Results*, Accra: GSS.

Ghana Statistical Service (GSS) (2013) 'Children, Adolescents and Young People in Ghana', *2010 Population and Housing Census Report*, Accra: GSS.

Gyasi, R. M., Phillips, D. R. and Amoah, P. A. (2018) 'Multidimensional social support and health services utilization among noninstitutionalized older persons in Ghana', *Journal of Aging and Health*, doi: 10.1177/0898264318816217.

ISSP Research Group (2015) *Role of Government Questionnaire*, Cologne: International Social Survey Programme (ISSP).

Taylor, E. and Taylor-Gooby, P. (2015) 'Benefits and welfare: long-term trends or short-term reactions?', *British Social Attitudes Survey* (Vol. 32 Report), London: National Centre for Social Research.

World Health Organization (2015) *World Report on Ageing and Health*, Geneva: World Health Organization.