Assessing Volunteering Levels and Differences: Evidence from Meta-Analyses of Survey Data on Volunteer Work

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Abstract

Volunteering is essential for addressing social and health challenges; however, individual characteristics related to volunteering require further investigation to understand its scale and determinants better globally. This study utilised meta-analysis to estimate the regional and global prevalence of volunteering, analysing data from 49,458 individuals aged 15 and older across 37 World Values Surveys conducted between 2000 and 2018 in 31 countries. Our results show a global prevalence of volunteering of 39.93% (95% CI: 33.25%—46.62%), with the highest rates in Africa (61.15% CI: 50.54%—77.77%) and North America (43.64% CI: 30.14%—46.62%). Volunteering rates are relatively equal between genders but vary significantly by education level. These findings offer valuable insights for policymakers to enhance and invest in volunteering initiatives. We recommend addressing methodological limitations by implementing dedicated volunteer survey modules as suggested by the International Labour Organisation (ILO).

Keywords: Volunteering, meta-analysis, non-profit, SDGs

Introduction

Volunteers strengthen community relationships and trust, advocate for policy changes to support marginalised and underserved populations, and foster cooperation and innovation (International Labour Organisation, 2021; United Nations Volunteers, 2018, 2021). Through their efforts, many challenges, including poverty, hunger, health issues, inequality, and the

need for inclusive, safe human settlements, are addressed, particularly in countries in the Global South (Russell, 2016; International Labour Organisation, 2021; United Nations Volunteers, 2021). Researchers and various stakeholders increasingly recognise that, just as volunteering contributed to the Millennium Development Goals (MDGs), it is also essential for achieving many countries' Sustainable Development Goals (SDGs) (Haddock and Devereux, 2016; Russell, 2016; Allum and Devereux, 2020; Plan of Action, 2020). As many as over 100 million volunteers worldwide engaged in various roles through informal and organisational-based volunteering (Salamon et al., 2018; United Nations Volunteers, 2018), there is a growing appreciation for volunteerism's unique contributions to addressing social, economic, and environmental challenges at local, national, and global levels. However, data on the scale and scope of volunteering and the factors that influence it still need to be made available.

Understanding and evaluating the individual factors associated with volunteering can help governments and policymakers develop programs and encouragements to attract potential volunteers, ultimately supporting communities more effectively (Seabe, 2014; Anheier & Salamon, 1999). However, an empirical assessment of the scope of volunteerism and its determinants is limited due to the unavailability of volunteer work data. Volunteer work is often part of national labour force surveys in developed countries. Developing countries have yet to measure volunteering consistently (Yimer, 2020; Logan et al., 2020). One program that has attempted to collect volunteer work data with an extensive geographical scope using standardised modules and questionnaires is the World Values Survey (WVS) (https://www.worldvaluessurvey.org).

This paper presents summary statistics on the prevalence of volunteering and its associations with age, gender, and education, derived from 37 WVS datasets collected across 31 countries. It offers valuable insights at both global and continental levels while also highlighting variances in volunteering practices. This work contributes innovative perspectives by applying existing data on volunteering to the 2030 Agenda and the Sustainable Development Goals (Plan of Action, 2020b; United Nations Volunteer, 2021). Prior systematic reviews and meta-analyses concerning volunteering have significantly advanced our understanding of factors influencing volunteerism. However, many of these studies primarily concentrated on the impact of formal volunteering on volunteers' health and well-being (Jenkinson et al., 2013; Morris et al., 2013; Wit et al., 2022; Nichol et al., 2023), motivations and satisfaction among volunteers (Zhou et al., 2023), volunteer turnover (Forner et al., 2022), student volunteers in health-related contexts (Mahsusi et al., 2024), gender differences in motivations related to

sports volunteering (Part et al., 2019), or volunteering among older populations (Morris et al., 2013; Wit et al., 2019). In addition to being population-specific, these reviews often combined findings from studies employing varied designs and methodologies. Our objective was to address these limitations by conducting a two-stage meta-analysis, wherein the first stage involves estimating prevalence and associations from individual datasets collected using standardised measurement and collection tools. Consequently, our findings aim to bolster confidence in the conclusions derived from the results.

. Multiple demographic factors, such as gender, age, and race, significantly affect an individual's likelihood of volunteering and indirectly influence other key determinants of this behaviour (Wilson and Musick, 1997). Research consistently shows that gender differences play a significant role, with women volunteering more than men. This may stem from societal norms and gender role stereotypes (Rankopo et al., 2007; Taniguchi, 2006). Regarding age effects, motivation to volunteer tends to evolve and shift across different age groups, with younger volunteers often driven by the acquisition of career skills, experience, and personal development. Meanwhile, older adults may prioritise more meaningful social engagement and making an impact. These changing priorities have been explained as resulting from life course factors, such as family formation, career considerations, transitions from the paid workforce to retirement, health changes, widowhood, and reductions in social network size (Dávila and Díaz-Morales, 2009). Butrica et al. 2009; Hank and Erlinghagen 2009; Wilson 2000). Generally, empirical research has suggested that the association between volunteering participation rates and age has both a negative linear and a negative quadratic relationship, indicating a curvilinear trajectory in age effects (Choi et al. 2007; Chambre and Einolf, 2011; Han et al., 2023). However, in a few instances, the relationship between age and volunteering is linear, with increasing participation rates in some societies (Seabe, 2014; Fondling et al., 2023; Logan et al., 2020). Younger volunteers are usually driven by career advancement and personal development, whereas older volunteers often focus more on social concerns than the desire to make new friends.

Regarding race, in countries where race is closely associated with socioeconomic status and culture, there has been conflicting evidence. In South Africa, the black population volunteers more than their white counterparts (Seabe, 2014; Fondling et al., 2023). In the United States, non-white individuals have been found to have lower rates of volunteering (Fondling et al., 2023; Han et al., 2023). Due to confounding issues related to race as a predictor and differences in racial composition between countries, this analysis will not consider race. The impact of demographic factors on volunteering is complex. It is influenced by other

elements such as human capital (including education, income, and wealth), social capital (such as social relationships and membership in associations), health status (overall health and disability), and cultural capital (such as religiosity) (Logan et al., 2020; Han et al., 2023. Seabe (2014) thoroughly discussed the various individual factors influencing individual volunteering. Regarding contextual factors affecting individual likelihood of volunteering, Enjolras (2021) discusses several of them, including economic, political, social, and religious contexts. This paper explores the extent and nature of volunteer work, considering age, education, and gender, to evaluate variations in volunteering behaviour.

Research studies have shown significant differences in volunteering rates across various countries, regions, and continents. For example, Gesthuizen and Scheepers (2012) and Engolra (2021) used quantitative multilevel models to identify substantial variations in formal volunteering among 17 countries studied by the Organisation for Economic Cooperation and Development (OECD) and 23 European countries, respectively. These differences were attributed to country-level wealth, income inequality, political tolerance, and social and religious diversity. On the other hand, Logan et al. (2020) analysed civic engagement data from Afrobarometer surveys across 37 African countries. They found that wealthier countries tend to report lower levels of volunteerism, while democracies generally report higher levels. Salamon et al. (2018) provided a more in-depth analysis of volunteering rates, highlighting significant variations across different regions. This variability was explained by macro-level factors influencing individuals' capacity to volunteer, including economic, human, political, social, and religious contexts. Differences observed between countries may also arise from the appropriateness of local volunteering measurements and specific volunteering behaviours (Russell, 2016). Through meta-analysis in cross-border studies, Allik and Realo (2004) found that in countries with high GDP, a long history of political systems, and Protestants as the majority, residents participate in volunteering activities more frequently. On the other hand, Aydinli et al. (2015) found that cultural differences between societies and countries play a complex role in motivation to volunteer. Changes in the community and community-related variables, including socio-cultural value (individualism and collectivism), socio-demographic and socio-economic features, or political characteristics, impacted the scale and scope of volunteering (Aydinli et al., 2013).

To our knowledge, no study has comprehensively measured the scale and scope of volunteer work and how it correlates with differences in gender, age, and educational level on a global scale. This study aims to fill this gap by conducting a meta-analysis of volunteering prevalence using multiple datasets from the World Values Survey program, which employs

consistent tools and methodologies for data collection across countries. Our method will enhance the objectivity and generalizability of our findings while increasing the statistical power of our analysis. This research will provide valuable insights into volunteerism's overall reach and impact, an area that warrants further understanding. Additionally, the findings will support the United Nations Volunteers (UNV) initiative to assess the scale and scope of volunteer efforts using available data.

Methods

Data

The study used volunteering prevalence data reported by over 49,458 persons aged at least 15 years in 37 World Values Surveys (WVS) conducted between 2000 and 2018 across 31 countries worldwide (Inglehart et al, 2014). The World Values Survey (WVS) (www.worldvaluessurvey.org) is an international research programme of social scientists and researchers that provides nationally representative household surveys that provide data on people's social, political, economic, religious, and cultural values worldwide. Eight successive waves have been completed across over 120 societies on all six continents, representing 94,5% of the world's population.

Measures of Volunteering in World Values Surveys

The World Values Survey (WVS) data sets include demographic and socioeconomic variables, as well as critical subjective questions about whether the sampled individuals engaged in unpaid voluntary work for any of six types of organisations: religious groups, sports, women's, professional and political groups, community health, and others. This engagement was evaluated using a set of 14 questions. Our study defined overall volunteering as any indication of unpaid work in any organisation, as Seabe (2014) described.

Statistical Analysis

Random effects meta-analyses were implemented to produce global and continental estimates of the prevalence of volunteering and its association with age, education and gender. Results are presented using forest plots that show the pooled prevalence and association in each region and period, along with their 95% confidence intervals (CIs) for each study. Heterogeneity between reported prevalence rates was assessed by conducting the Chi-square test, Q-statistics, and I^2 test (Higgins et al., 2003). Based on the statistical test results, if significant heterogeneity is observed among the included studies, a random-effects meta-analysis model would be

conducted to estimate overall pooled effects worldwide and within the five continents. The reference category for gender was male, while the reference categories for age and education levels were individuals under 35 years old and those with primary education or less, compared to secondary education, respectively, when estimating relative risks. The 35 cut-off for age is based based on the work of Newman and Newman (2014), among others, who defined four life stages: late adolescence (18-24), early adulthood (25-34), middle (35-60), and late adulthood (61-75). Therefore, the age of 35 could be considered the midpoint between adolescence and early adulthood, as well as middle and late adulthood.

Results are presented using forest plots that display point prevalence and relative risk estimates, along with 95% confidence intervals, for each survey dataset and the pooled results. Subgroup meta-analyses were performed between continents to investigate the sources of heterogeneity in the meta-analysis findings. All analyses were conducted using Stata 17.0 and the *metan* command.

Results

Survey-specific and pooled prevalence estimates of any volunteering are presented in Figure 1a by continent, with 95% confidence intervals. The dotted vertical line represents the prevalence of the pooled result. The overall volunteering rate was estimated at 39.93% (95% Confidence Interval (CI): 33.25% – 46.62%). However, the included survey data sets exhibited significant heterogeneity in volunteering rates ($I^2 = 99.6$, $p < 0.001$), ranging from 19.16% (19.16% – 22.76%) in Russia to 80.27% (CI: 77.99% – 82.55%) in Tanzania, with Uganda reporting a rate of 72.00% (CI: 69.18% – 76.22%). Continental results showed that the highest pooled estimates of volunteering were in Africa (61.15%; 50.54% – 77.77%), followed by North America (43.64%; 30.14% – 46.62%). At 16.77% (13.76), volunteering in religious organisations was the most preferred type of volunteering, followed by volunteering in community and health organisations, which had a rate of 14.62% (11.74 – 17.50) (Figures 1b-c). Continental variations in religious volunteering were notable, with the highest rates observed in Africa at 41.09% (20.17 – 62.02) and the lowest in Europe at 8.10% (5.25 – 10.95). Similarly, the rates for volunteering in community and health organisations varied significantly by continent. Africa and Asia had the highest community and health volunteering rates at 21.41% (7.44 – 35.37) and 21.17% (12.96 – 29.37), respectively, while South America recorded the lowest rate at 7.89% (5.65 – 10.12).

Figures 2a-c illustrate the likelihood of volunteering, using three individual-level indicators, namely gender, education and age, presented as relative risk (RR) alongside a 95% confidence interval. The dashed vertical line indicates the risk ratio of the pooled results. The solid vertical line at the value of 1 signifies no difference in volunteering rates between the two groups. It is demonstrated that individual-level factor differences in volunteering exhibit significant variability across countries, continents, and within continents. Females were less likely to undertake volunteer work in many countries in Africa, Asia and South America. Only in North America did females show a higher likelihood of volunteering than males (RR: 1.07; 1.02 – 1.13). However, the pooled gender association shows that volunteering was relatively evenly distributed between females and males (Risk Ratio (RR) of 0.91, 95% CI: 0.86-0.97). In many countries, there is a positive relationship between age and volunteering (the United States (RR: 1.12 (95% CI: 1.02 – 1.23)); Canada (RR: 1.21 (95% CI: 1.08 – 1.36) and Puerto Rico (RR: 1.35 (95% CI: 1.11 – 1.65). The pooled estimate of age differences in volunteering was not significant (RR: 1.00; 95% CI: 0.95 – 1.05), indicating no substantial change in volunteering rates with age globally. Only educational differences in volunteering were significant, with individuals having secondary or higher education having a pooled estimated relative risk of 1.2 (95% CI: 1.18–1.36). This effect was particularly pronounced in Europe, where the risk ratio was 1.54 (95% CI: 1.21–1.97). In contrast, Africa showed the lowest educational effect on volunteering rates, with a relative risk of 1.17 (95% CI: 1.03–1.33).). Montenegro had the most significant and most prominent education difference in volunteering (RR: 8.57 (95% CI: 2.78 – 26.39), followed by Serbia (RR: 3.19 (95% CI: 1.32 – 7.69)

Sensitivity Analysis

There was a degree of heterogeneity in the prevalence of volunteering among countries and regions in the studies, which may raise concerns about the validity of the pooled estimates and the potential for outliers that could have distorted the overall findings. We performed the leave-one-out method of sensitivity analysis to investigate the validity and robustness of the meta-analysis. The outcomes of the 37 meta-analyses employing the leave-one-out method were consistently comparable to the pooled estimates; thus, there is confidence that the overall meta-analysis is robust, suggesting no potential issues with outliers.

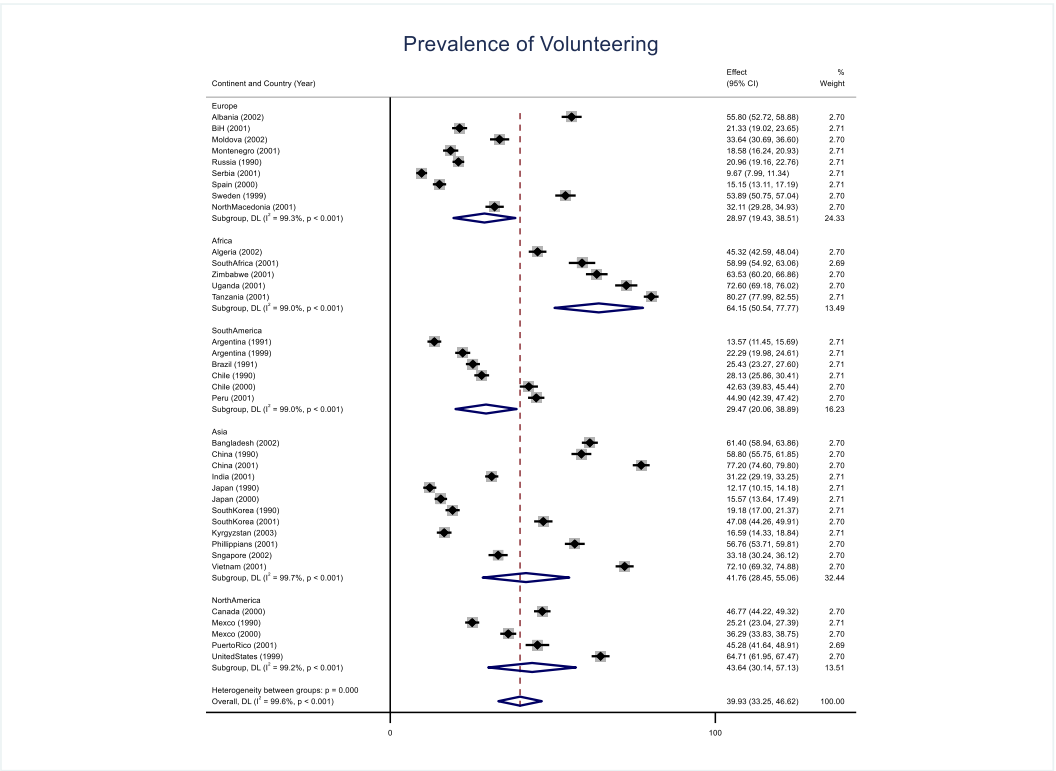

Figure 1a: Prevalence of any volunteering activity according to the continent. The dotted vertical line represents the prevalence of the pooled results, with a 95% confidence interval.

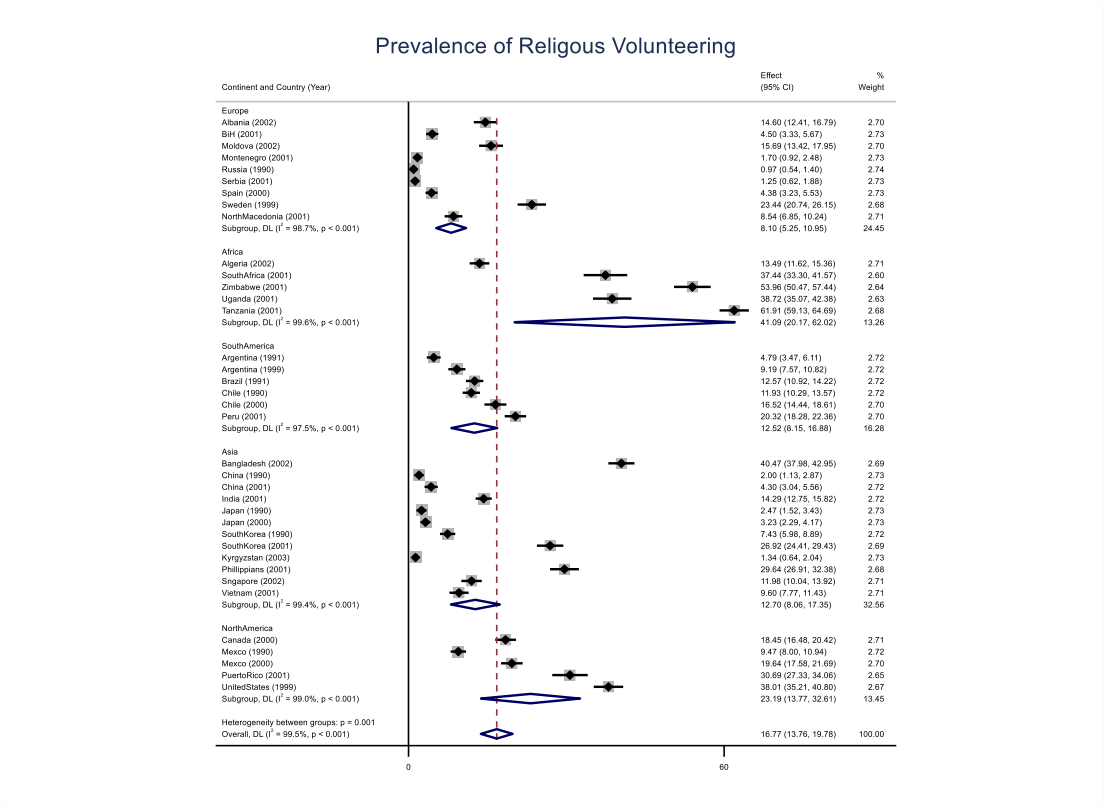

Figure 1b: Prevalence of volunteering activity in a religious organisation according to the continent. The dotted vertical line represents the prevalence of the pooled results, with a 95% confidence interval.

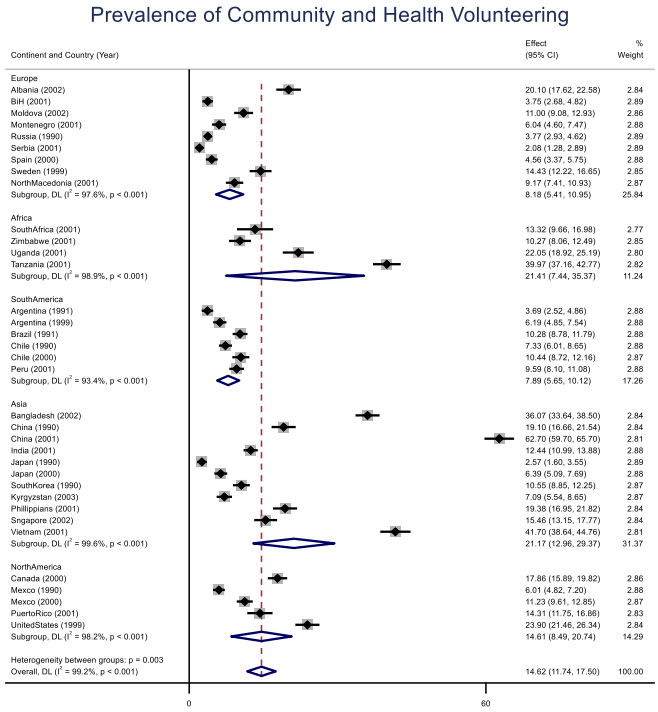

Figure 1c: Prevalence of volunteering activity in community and health organisations according to the continent. The dotted vertical line represents the prevalence of the pooled results, with a 95% confidence interval.

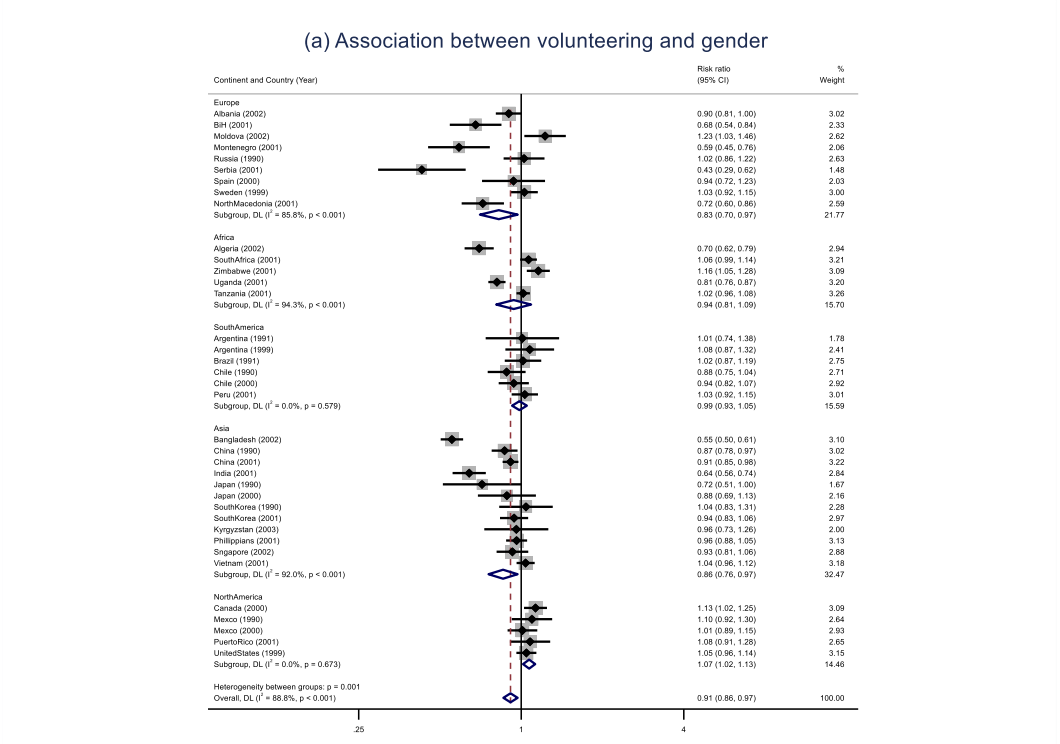

Figure 2a: The likelihood of volunteering among females compared to males across different continents, accompanied by a 95% confidence interval. The dashed vertical line represents the risk ratio of the pooled results. In contrast, the solid vertical line at the value of 1 indicates no difference in volunteering rates between females and males.

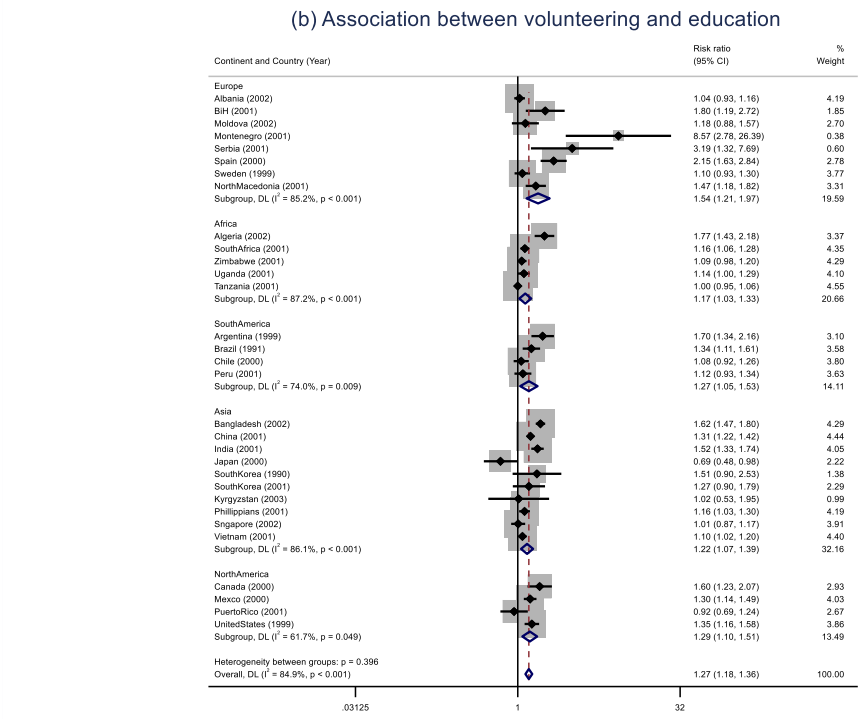

Figure 2b: The likelihood of volunteering among individuals with at least a secondary education, compared to those without or with only a primary education, is presented across different continents alongside a 95% confidence interval. The dashed vertical line indicates the risk ratio of the pooled results. In contrast, the solid vertical line at the value of 1 signifies no difference in volunteering rates between education levels.

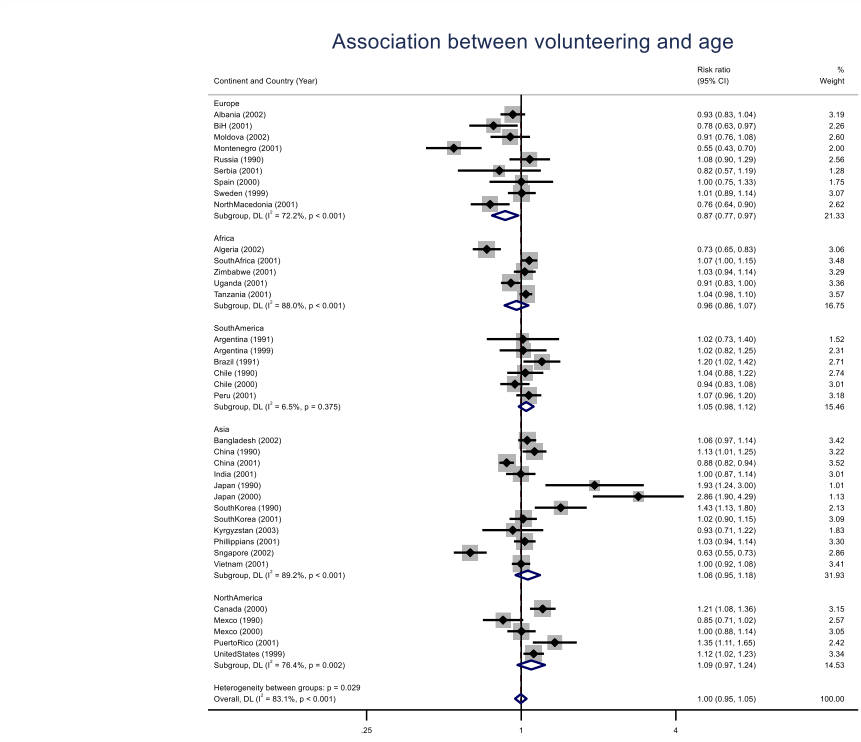

Figure 2c: The likelihood of volunteering among individuals aged at least 35 years compared to those aged less than 35 across different continents, presented alongside a 95% confidence

interval. The dashed vertical line indicates the risk ratio of the pooled results. In contrast, the solid vertical line at the value of 1 signifies no difference in volunteering rates between the two age group levels.

Discussion and Conclusions

This study aimed to analyse a more extensive set of volunteering data from thirty-seven World Values Surveys (WVS) datasets collected through standardised methods from individuals aged 15 and older in 31 countries worldwide. This approach enabled us to estimate the global prevalence of volunteering and to examine how factors such as age, gender, and education level influence volunteering rates. Our analysis offers a more comprehensive overview of volunteering worldwide and presents more substantial empirical evidence than similar studies that relied on cross-sectional surveys. Previous research has often focused on specific countries (for example, Seabe, 2014; McGarvey et al., 2019; Fondling et al., 2023; Yimer, 2020) or covered multiple countries (Gesthizen and Scheepers, 2012; Logan et al., 2020; Engolra, 2021). While these earlier studies provide valuable insights into the scope and scale of volunteering, they fail to deliver an in-depth global analysis and do not account for variations in individual capabilities related to volunteering. Furthermore, some earlier studies, such as Salamoni et al. (2018), utilised data from diverse sources that employed different methodologies. This inconsistency makes it challenging to compare findings across countries and continents.

We found much variation in volunteering rates between countries and continents. The pooled prevalence of volunteering has been estimated at 39.93% (95% Confidence Interval (CI): 33.25% – 46.62%), ranging from 19.16% (CI: 19.16% – 22.76%) in Russia to 80.27% (CI: 77.99% – 82.55%) in Tanzania, with Uganda reporting a rate of 72.00% (CI: 69.18% – 76.22%). Continental results have shown that the highest pooled estimates of volunteering were in Africa (61.15%; CI: 50.54–77.77%), followed by North America (43.64%; CI: 30.14–46.62%). Similar findings of large and significant variation levels of volunteerism have also been observed across 17 Organizations for Economic Cooperation and Development (OECD) countries using volunteer data from the International Adult Literacy Survey (IALS) (Gesthuizen and Scheepers, 2012) in Enjolras (2021) between 23 European countries using the European Union (EU) Survey on Income and Living and in Logan et al. (2020) between 34 African countries using data from Afrobarometer surveys.

Our findings regarding variations in volunteering between countries and continents are consistent with previous studies, although the explanations for these findings may differ. For example, Engolra (2021) attributed the observed variations in volunteering to other institutional arrangements across Europe. Countries with low socioeconomic inequality, due to high levels

of redistribution, and high social trust have higher volunteering rates than countries with high inequality and low social trust. However, this is also true in some countries, where low inequality coexists with lower levels of social trust. The differences observed in our study could be due to variations in the distribution of resources at the macro level, where enhanced resources allow individuals to be more capable of volunteering (Gesthizen and Scheepers, 2012). Additionally, the country's educational levels have had a significant impact on volunteering rates, particularly where employment opportunities differ substantially between individuals with lower and higher levels of education (Gesthizen and Scheepers, 2012). It has been argued that higher-status jobs have a positive influence on volunteering, which explains why lower-educated individuals tend to volunteer less frequently than their higher-educated counterparts. In the Western context, higher positions are often bestowed upon individuals who have taken on some responsibilities and roles in volunteering.

On the one hand, while several previous studies have found a positive association between democracy, social trust, and volunteerism (Gestthizen and Scheepers, 2012; Baer et al., 2019), some studies have found that wealthier countries, on average, report lower levels of volunteerism (Logan et al., 2020). Our findings suggest that the highest levels of volunteering are found in Africa. A possible explanation for this finding could be that higher levels of religiosity, prevalent in most countries on the continent, might enhance the impact of networks and participation in religious organisations, which play essential roles in civic engagement, social support, and other forms of assistance in Africa. Thus, altruism and collective motivations stemming from religiosity might positively influence volunteering in Africa (Storm, 2015; Bennett, 2015). Another possible explanation could be a tendency within communities to rely on mutual aid and cultural norms of collectiveness in resource-limited settings, which extend beyond the effects of religiosity. In particular, in the Global South, the culture is less individualistic, where families and communities share close bonds and norms of reciprocity. Mutual aid is more substantial and collective participation is valued over individual and market-driven forms (Butcher et al, 2017).

Also, the differences in volunteering observed in our study may be attributed to various ethnic and cultural values and heterogeneity. Aydinli et al. (2013) compare prosocial actions, suggesting that helping outgroup members may occur more frequently in rural and less affluent contexts compared to urban and wealthier settings. Nonetheless, Western and affluent countries are more engaged in long-term formal volunteering.

The pooled gender differences in volunteering, while not significant, were noticeable. In many countries, women were less likely to volunteer than men. This trend aligns with

findings from analyses of survey data in Africa (Logan et al., 2020) and Europe (Enjolras, 2021). In contrast, North America showed that women participated in direct volunteering activities more than men. In most African and European countries studied, the expected gender differences in volunteering were confirmed, likely due to higher levels of gender inequality, which influence socialisation patterns and participation in the public sphere. We found that older people were generally more likely to volunteer in most countries, although this finding was not statistically significant. Our findings indicate that having a secondary or higher educational status is the most critical factor that enables individuals to volunteer. This conclusion is consistent with previous research by Fondling et al. (2003) and Seabe (2014) in the South African context, as well as Han et al. (2023) in the USA. Additionally, findings from combined analyses of African countries (Logan et al., 2020) and European countries (Gesthuizen and Scheepers, 2012; Enjolras, 2021) also found that individuals with higher education levels are more likely to volunteer. This could be explained by the fact that highly educated individuals have a greater awareness of societal issues and increased self-confidence to volunteer. Education also equips people with knowledge, understanding, and empathy for the problems surrounding them, stemming from their exposure to and interest in current events (Gesthuizen and Scheepers, 2012).

Strengths and limitations of the study

We pooled and investigated the associations of individual age, gender and level of education using multiple nationally representative datasets and analysed the data in each country in a unified manner. Compared with a single-country study, our work included 31 countries worldwide and could thus provide a more generalisable estimation. Instead of merging data from all countries and conducting a one-stage analysis, we employed meta-analyses, which allowed the effects of age, gender, and education level to vary across countries (Basagaña et al., 2018). This has enabled the generalizability of volunteer work estimates at the population level, rather than smaller studies that may be based on particular population subsets. The sampling methods and the instruments used adhere to the accepted ethical standards recommended for research. Another strength of the study is that, rather than providing an appraisal and summary of volunteering prevalence data, as in Russell (2016), our study has synthesised empirical evidence on the scope and disparities of volunteering to provide global and continental estimates using readily and publicly available observational data. Our study has contributed to the Plan of Action (2020) recommendations, advocating for leveraging freely

available data sources to analyse volunteerism. Thus, it provides findings showing which groups are more likely to volunteer, which is necessary for optimal interventions.

The limitation of the study is that we have conducted a secondary analysis of data already collected in each country. We had no control over the data collection and management procedures. Additionally, differing survey frames and instruments across contexts may impact the analysis results. Specifically, the difficulty of constructing representative sampling frames in the Global South may influence reliability and validity issues (Russel, 2016). Apart from variables related to civic participation and some variables on reasons for volunteering, the WVS surveys are not as comprehensive in capturing other aspects of volunteerism, such as volunteer empowerment and life satisfaction, which limits their use in providing an in-depth understanding of volunteerism (Salamon et al., 2018). Moreover, self-reported volunteering work activities may be subject to recall and social desirability biases, which could result in overreporting or underreporting certain aspects of participants' experiences. This could introduce biases in data collection concerning volunteering and may have led to inaccurate estimates.

A significant limitation of our study is that it utilised data specific to the World Values Survey in various contexts worldwide, often without substantial adaptation. A case in point was when Russell (2016) obtained significantly different volunteering rates in South Africa, depending on the data source: the Charities Aid Foundation's (CAF) World Giving Index, the International Labour Organisation's Manual Volunteering Activity Survey, or Social Surveys in Africa. Suppose the analysis used a different survey, such as the Time Use Survey, which measured volunteering activities with a 24-hour recall. The issue of differing methodologies, ranging from the simplistic elicitation of volunteering in any groups, clubs, or organisations to a listing of activities or consideration of volunteering activities within a fixed period window, such as the past 24 hours or 12 months, limits proper and robust between-country comparisons. Thus, definitions, contexts and local adoptions should consider universally agreed-upon measurements and methodologies of volunteering work. Also, the data we analysed is based on formal volunteering through organisations and associations. Sokolowski et al. (2018) noted that 70% of global volunteer activity occurs through direct, person-to-person engagement. Thus, our findings in this study could have underestimated the scale of volunteering.

We could have chosen to perform an individual participant data (IPD) analysis with a multi-level approach that accommodates data at both the individual and country levels. Reporting volunteer levels at an aggregate country level is crucial for identifying more receptive groups to volunteer, thus informing policy interventions. Our analysis has provided

countries and relevant stakeholders with pooled data on volunteer work, allowing them to assess the scope and scale of volunteer contributions toward the 2030 Sustainable Development Goals (SDGs). Moreover, several studies have demonstrated that both approaches to meta-analysis yield highly comparable results. Additionally, we acknowledge that using country-level summaries for comparison and synthesis may have obscured intra-country variations in volunteering, which could be significant. For example, country-level summaries may mask intra-country variations, such as rural-urban and provincial disparities, as seen in Fondling et al (2023), Yimer (2020), and Gramatki and Watt (2020). Furthermore, we could have analysed differentials in volunteering by other known determinants, such as religious beliefs and practices (for example, the importance of God in their lives and regular church attendance and volunteering), which have consistently been found to be positively associated with volunteering at the individual level (Storm, 2015; Bennett, 2015; Damian, 2019).

Our study has highlighted the methodological and data coverage deficiencies of using cross-sectional surveys to measure volunteerism across all aspects. Due to the limitations inherent in cross-sectional studies, several researchers (e.g., Gesthuizen and Scheepers, 2012; Logan et al., 2020; Enjolras, 2021) have supplemented available survey data with external information in their analyses. We recommend the implementation of stand-alone volunteer household surveys, as was the case with the Time Well Spent national survey on the volunteer experience in the United Kingdom (McGarvey et al., 2019) or specialised and dedicated volunteer survey modules embedded in household health surveys, for example using as the traditional Labor Force Surveys to gather information on a variety of aspects regarding volunteering as outlined in the ILO manual (ILO, 2021). However, even if a detailed and comprehensive harmonised volunteer measurement tool becomes available, it will still need to be adapted to appropriately measure volunteering within the local contexts of volunteering behaviours (Russell, 2026). In this way, the tool will calculate the contribution of volunteering towards socio-economic development and the achievement of the Sustainable Development Goals (SDGs) in countries.

Conclusions:

Utilising the 31-country World Value Survey, a nationally representative, population-based survey, our study has provided a significantly broader and globally representative analysis of volunteering prevalence. The findings offer policymakers actionable insights for effectively targeting volunteer initiatives. We have also demonstrated that existing data sources are adequate for measuring and reporting on volunteer work. This is particularly critical given the

scarcity of alternative sources that provide high-quality data on volunteer work in most countries. Our analysis indicates that existing data yields valuable insights into the scope and factors influencing volunteering. Our findings reveal that volunteering rates vary considerably across different countries. Education plays a significant role in an individual's likelihood to volunteer. This information could greatly assist policymakers and nonprofit organisations as they promote, plan, and allocate resources for volunteer initiatives. We recommend enhancing and refining the questionnaires, measurements, and methodological tools related to volunteer work through dedicated survey modules, as suggested by the International Labour Organisation (ILO), within household surveys, with appropriate local adaptations.

Availability of Data

The data that support the findings of this study are freely and publicly available from the following resources available in the public domain: https://www.worldvaluessurvey.org/WVSContents.jsp

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