

Bolstering a Collective Legacy: A Case Study of New Mexico Extension Master Gardeners

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Introduction

Through Land-grant Universities, Cooperative Extension Service offers community programs like the Extension Master Gardeners (EMG) to communicate research-based horticultural knowledge where EMG volunteers are key to disseminate this information to the public in their local communities (Bauske et al., 2011; Navaratnam, 1986). The EMG National Committee (Extension Master Gardener, n.d.) in their 2025 report estimated at least 76,292 EMG volunteers, across the United States and District of Columbia, contributed around 5.1 million hours to educate others, teach gardening practices to grow food, improve their physical and mental health, and address environmental issues in which these efforts contribute an estimated \$175.4 million dollars in value to the public. For New Mexico, there are 15 county chapters across the state where volunteers actively engage in leading presentations, workshops, resilient food and garden projects, and other outreach efforts. Our study sought to explore the New Mexico Master Gardeners (NMEMG) statewide program as a case study to see why NMEMG volunteers are motivated to participate and retain membership in the program and explore how their role impacts the Land-grant mission and improve the lives of New Mexicans. The following two research objectives guided this study: (RO1) Describe the relationship between motivational factors influencing Extension Master Gardener volunteers and their motivations within the program. (RO2) Describe the role of Extension Master Gardener volunteers in social contexts.

Conceptual Framework

This study used social identity theory (SIT) and role theory to frame and contextualize the understanding of the NMEMG volunteer motivations where the statewide program is viewed as an organization with designated roles programmatically and as a social group with authentic human social interaction experiences. SIT distinguishes between personal and collective self-esteem (also referred to as self and group-self) and other levels as a function of different levels of self-categorization (Turner, 1999). Role theory provides a conceptual explanation of the social behavior an individual assumes by the social position they occupy in a relationship with others, in this case, a group volunteer member of NMEMG program (Anglin et al., 2022). Additionally, this framework guided the qualitative coding process to the quantitative motivations self-assessment to explain the metainferences found in the case study.

Methods

The study purpose was to explore the NMEMG statewide program as a case study to build a deeper understanding of the motivations, retention, and role of the volunteers as aligned with the “advancing public knowledge of AFNR systems” national research value of the American Association for Agricultural Education (2023). This study employed a mixed methods explanatory sequential research design with the quantitative strand at the beginning followed by the qualitative strand to further explain and contextualize the findings (Creswell, 2015; DeCoster & Lichtenstein, 2007). For the quantitative strand, phase one, NMEMG participants completed an online Qualtrics survey questionnaire ($n = 56$) and 17 of these participants completed the follow-up one-on-one semi-structured interviews via Zoom for the qualitative strand, phase two. The survey instrument adapted from Clary et al. (1998) and modified for EMG by Takle et al. (2016), volunteer functions inventory (VFI) using the 7-point Likert scale (1 = *not important at all* to 7 = *extremely important*), defined six motivational factors of volunteer motivation:

understanding, values, enhancement, social, protective, and career with five statements per factor. Reliability for the 30-item instrument, measured by Cronbach's alpha, received an excellent internal consistency ($\alpha = .931$) (Cronbach, 1951). For the Zoom interviews, the study used data triangulation and self-reflexivity to establish trustworthiness and rigor of the qualitative research (Lindlof & Taylor, 2019; Shenton, 2004). The quantitative strand of the study used IBM SPSS 29 and the qualitative strand of the study used manual coding in NVivo 15 to complete the mixed thematic analysis of the transcribed interviews using deductive and inductive approaches (Saldaña, 2021).

Results and Findings

The quantitative findings from highest to lowest group means for VFI, the order is as follows: Values ($M = 5.91$, $SD = 1.19$), understanding ($M = 5.22$, $SD = .96$), enhancement ($M = 4.20$, $SD = 1.55$), social ($M = 3.80$, $SD = 1.45$), protective ($M = 3.10$, $SD = 1.56$), and career ($M = 1.99$, $SD = 1.57$). Values and understanding were moderately important, enhancement was neutral, social and protective were slightly important, and career was little to no importance. For the qualitative findings, there were two themes (DT) and four subthemes from the deductive approach as followed: (DT1) Identity attachment and program alignment, with subthemes of sense of belonging and organizational pride and challenges with identity misfit or disconnection, (DT2) Role and perception, with subthemes of professional mastery and navigating the role strain and inter-role conflict, and (DT3) External identity verification. From the inductive approach, there were two emergent themes (ET) and five subthemes as followed: (ET1) Science communication practices, with subthemes of credibility of the "Extension Master Gardener" label, strategies for research-based information delivery, and navigating accessibility and situational barriers and (ET2) Volunteer pathways and future engagement, with subthemes of recruitment, initiation, and state-to-state transfers and collaborative partnerships and educational growth. Overall, each theme shares the stories of NMEMG and how their lived experiences across their lifespan tied into their role and EMG and how they view themselves as self and group-self when participating in the NMEMG program. Overall, the interview participants expressed how their role as EMG carries a sense of responsibility toward maintaining the reputation because of the collective legacy established and impactful science communication.

Conclusions and Implications

The integration of the phases transcends both the quantitative and qualitative data to gain a deeper understanding of the NMEMGs' motivations and role within social contexts (Younas et al., 2025). The VFI social function, as the fourth highest group mean, stood out among the rest of the volunteer functions because the qualitative findings of this study illustrated that the social component to the NMEMG program had a greater impact as to why EMGs are motivated to continue in the program. Through the storytelling of the EMGs' lived experiences, there is a high likelihood that the social function is multi-faceted and dependent on the context given that can be studied in future research. Furthermore, the deductive findings as EMGs valued the NMEMG program mission with their own personal values, sense of belonging, and perceptions towards their role as an EMG. These findings further explain how the VFI values function received the highest group means for EMGs' motivations. Therefore, values are the primary motivation for EMG volunteers as supported by the quantitative and qualitative findings of this study. It is recommended for other EMG state programs to conduct their own case study to understand the motivation and engagement of their EMG volunteer groups more in-depth.

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