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Civic and Community Engagement among Poor Rural Women in Bihar: A Pilot Study

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ABSTRACT

Civic and community engagement is often crucial for the successful development of rural areas and a catalyst of personal transformation. This article examines changes in civic and community engagement among women in rural Bihar, India. Using an exploratory factor analysis of survey data from *n* = 815 respondents who participated in Heifer's Values-Based Holistic Community Development [VBHCD] training, the study identifies three factors that constitute civic and community engagement. Next, the study assesses the efficacy of VBHCD's impact on participants' civic and community engagement relative to participants' duration in the program and type of self-help group. The results indicate that pass-on groups are more civically active in their community than original groups. However, civic and community engagement wanes over the course of participation in Heifer's intervention.

RÉSUMÉ

L'engagement civique et communautaire est souvent crucial pour le développement de zones rurales tout en étant un catalyseur de transformation personnelle. Cet article examine les changements dans l'engagement civique et communautaire parmi des femmes en milieu rural dans l'État du Bihar en Inde. Au moyen d'une analyse factorielle exploratoire de données provenant de *n* = 815 répondantes ayant participé à une formation au développement communautaire holistique fondé sur des valeurs éthiques crée par Heifer, cette étude identifie trois facteurs sous-tendant l'engagement civique et communautaire. Ensuite, elle évalue l'impact de la formation suivie par les participantes sur leur engagement civique et communautaire relatif au temps passé à suivre la formation et au type de groupe d'entraide. Les résultats indiquent que les groupes ayant suivi cette formation jouent un plus grand rôle civique dans leurs communautés que les groupes originaux. Cependant, plus les participantes passent de temps dans l'intervention de Heifer, plus leur engagement civique et communautaire s'amoindrit.

Keywords / Mots clés : civic engagement, community engagement, self-help groups, women's empowerment / engagement civique, engagement communautaire, groupes d'entraide, autonomisation des femmes

INTRODUCTION

As an international non-governmental organization (INGO), Heifer International's mission is to end poverty and hunger in partnership with the local community (Heifer International, 2024). Its approach to poverty alleviation is grounded in a framework called Values-Based Holistic Community Development (VBHCD).[1] Heifer's work worldwide rests on the assertion that INGOs cannot address systemic poverty and hunger by providing a "cup of milk" for short-term relief, but rather the entire cow to a source of food and income. The VBHCD framework is a holistic framework grounded in the principle that poverty alleviation is more than providing resources such as food, water, and animals, but also includes building connections within the community that foster sustainable impact and transformation (Mahato & Bajracharya, 2009). The framework is a development philosophy that is participatory and asset-based and builds on the strengths and values available in each community (De Vries, 2012; Dierolf, Kern, Ogborn, Protti, & Schwartz, 2002; Mahanto & Bajracharya, 2009). Not only are short-term immediate relief needs addressed, but a foundation is created for civic and community engagement.

De Vries (2011, 2012) points out that Heifer's work exists at the intersection of economic empowerment and community connection. For Heifer, the VBHCD framework represents a holistic approach, where change involves and affects "all aspects of a person and community, including the physical, mental, social, spiritual and ecological" (DeVries, 2012, p. 374). To implement the VBHCD model, Heifer supports community members—primarily local women—to organize and form self-help groups (SHGs), which are small voluntary groups whose participants gather to address a problem of mutual concern and create social and personal change (Katz & Bender, 1976; Murria & Verma, 2013). The SHG model has been touted as a promising tool to enhance the capacity and agency of rural women in India (Tiwari & Thakur, 2007). The Government of India's National Rural Livelihoods Mission, launched by the Ministry of Rural Development, and numerous INGOs have supported and incentivized the proliferation of SHGs as a platform to foster rural women's engagement in civic life (Ministry of Rural Development, 2024). The ministry estimates there are over eight million SHGs with 86 million women members (Ministry of Rural Development, 2024).

Self-help groups "encourage self-management and self-regulation of the groups' activities" (Tiwari & Thakur, 2007, p. 177), and thus facilitates active engagement to address collective goals and build a more robust civil society. De Vries (2008) notes, "[SHGs] can nurture common values and mutual support, which are the glue that binds people together and allows them to overcome many constraints" (p. 223). Although empirical literature is mixed, several examples of SHG-based initiatives in Bihar illustrate the positive impact on women's agency and empowerment. For example, Tiwari and Thakur (2007, p. 177) point out that SHGs empower poor rural women by providing "an opportunity to make decisions involving themselves" and their communities. Datta's (2015) analysis of JEEViKA, an initiative of the Bihar Rural Livelihoods Promotion Society started in 2006 to promote social and economic empowerment of rural women through self-help-groups found that JEEViKA participants engaged more in decisions regarding their own employment and household political preference than non-participants. An assessment of the Do Kadam Barabari Ki Ore program, an initiative focused on preventing violence against women and girls in Bihar, showed increased agency among participants, specifically in terms of their ability to move freely and have

more control over household finances (Jejeebhoy & Santhya, 2018). The findings from these programs provide initial empirical support for the impact of SHGs on rural women's empowerment.

Building on established SHG initiatives, Heifer's approach supports forming initial self-help groups called original groups (OGs), whose participants are then encouraged to start pass-on groups (POGs) (Fitzpatrick & Akgungor, 2020; Janzen, Magnan, Sharma, & Thompson, 2021; Kafle, Michelson, & Winter-Nelson, 2019). The SHGs are the organizational mechanism that promotes self-reliance and collective action in rural communities. Forming SHGs, whether OGs or POGs, is a critical way for rural women to engage in civic life. Self-help groups can facilitate civic and community engagement (Barakso, 2005) among participants who act to enhance the wellbeing of their communities. In the context of Heifer International, SHGs are formed with inclusivity in mind and designed to address gender inequality in their training. For instance, Desai and Joshi (2014) found that women participants in SHGs as part of the Self-Employed Women's Association (SEWA)[2] were more likely "to be engaged in community affairs" and exercise greater personal autonomy over household decision-making (p. 494). Women who are members of SHGs also were more likely to be aware of local issues and to address issues that affected the village (Desai & Joshi, 2014). In a meta-analysis, Brody, Hoop, Vojtkova, Warnock, Dunbar, Murthy, and Dworkin. (2016) found strong evidence that women SHG participants were more comfortable collaborating with stakeholders to achieve change in their community.

Prior research has documented the positive economic impact of Heifer's VBHCD on participants (Mahato & Bajracharya, 2009), including improved human and social capital (De Vries, 2012), improved sustainable livestock production, and improved disaster resiliency (Preciados, Cagasan, & Gravoso, 2022). Other studies have assessed the social and personal impact of VBHCD. For instance, Mirivel, Thombre, ten Bensel, Leach, and Wood (2023) examined the impact of VBHCD on female participants' communication skills and found that they experience positive changes in their degree of expressiveness, assertiveness, and persuasiveness. Another study of female participants in Bihar, Mirivel, Fuller, Thombre, ten Bensel and Leach (2023) found that Heifer's VBHCD had a significant and positive impact on women's interpersonal and positive communication skills.

However, there are limited empirical assessments of the impact of VBHCD on participants' civic and community engagement relative to duration of participation in the program and group type. This exploratory study is designed to identify the factors that comprise civic and community engagement and then assess the aggregate changes in civic and community engagement among Heifer's VBHCD beneficiaries. This article therefore proposes the following research question:

> RQ: How does Heifer's VBHCD intervention impact civic and community engagement among women in Bihar, India?

The authors also examine two interrelated sub-questions: first, what are the differences in civic and community engagement by group type (OG or POG)?; and second, what are the differences in civic and community engagement by the length of participation in Heifer's VBHCD from baseline (0 months) to 24 months among 815 participants? The authors conducted ANOVAs with post-hoc tests to capture the between-group differences in civic and community engagement.

Desai and Joshi (2014) argue that it is difficult to precisely assess the causal mechanisms driving civic and community engagement among women-only SHGs in rural India. The difficulty is due to the "bundled nature of the initiative" (Desai & Joshi, 2014) that includes the formation of SHGs, educational and animal husbandry training, and discussions of gender inequality. Additionally, the unique local context impacts the outcomes of initiatives such as VBHCD (World Bank, 2012; Eliasoph, 2016). This article builds on previous research (cf. Casini, Vandewalle, & Wahhaj, 2017; Datta, 2015) to assess variation in civic and community engagement across participant duration and group type within the broader VBHCD intervention. This study contributes to a growing body of literature on rural women's civic and community engagement centred on participation in SHGs.

This article first provides an overview of Heifer's VBHCD framework and the research context in Bihar, India. Next, the study is grounded in the civic and community engagement literature, paying particular attention to the rural context. Following the methodology, the article reveals the findings and reflects on the study's limitations and future research and closes with implications for practitioners.

THE VBHCD FRAMEWORK

Heifer's approach to poverty alleviation and community development is rooted in the VBHCD framework. Developed in the 1990s, the VBHCD framework is guided by a set of principles called the 12 Cornerstones, enabling the community to assess and realize its potential for sustainable development (De Vries, 2012). The 12 Cornerstones include: 1) Passing on the Gifts; 2) Accountability; 3) Sharing and Caring; 4) Sustainable and Self-Reliance; 5) Improved Animal Management; 6) Nutrition and Income; 7) Gender and Family Focus; 8) Genuine Need and Justice; 9) Improving the Environment; 10) Full Participation; 11) Training, Communication, and Education; and 12) Spirituality. Overall, Heifer's VBHCD training attempts to mitigate the impacts of poverty, foster sustainable development, and redress historical caste and gender power disparities shaping the participants' lives. Participants in Heifer's VBHCD receive training by Heifer country staff on the 12 Cornerstones, which cover agricultural techniques, project management, leadership, communication skills, and gender equity (De Vries, 2012).

A unique aspect of VBHCD is the formation of OGs and POGs in locations identified by Heifer. First, at the early stage of the intervention, Heifer International invites individuals (primarily women) to form a self-help group. Members of the group are elected to serve as chair, vice-chair, or secretary, giving the group a formal structure to operate under. At this initial stage, the group collaborates on saving money to build some economic power, and every group member is asked to contribute what they can. In some areas, Heifer contributes a culturally appropriate productive asset, such as a goat, cow, or chicken. The group that received the initial asset—the OG—is then encouraged to pass on the offspring from that productive asset and to mentor another project group in a process called "Passing on the Gift." The receiving group is therefore called a POG (Fitzpatrick & Akgungor, 2020; Janzen et al., 2021; Kafle, 2018). The process takes place over 24 months, with OGs receiving training and animals aged 6–12 months and POGs being formed and mentored around one-year post Heifer intervention. Heifer begins to scale back its formal ground presence around 24 months post-initial intervention. Although many OGs and POGs work together for decades, the focus of this research assesses changes from baseline to 24 months.

Context: Bihar, India

Bihar, in eastern India, is bordered by Nepal to the north, Jharkhand to the south, Uttar Pradesh to the west, and West Bengal to the east. Based on the 2011 census data, Bihar has a population of over 104 million people making it the third most populous state in India (Government of Bihar, Finance Department, 2022). Approximately 52 percent of Bihar's population is male and 48 percent female (Office of the Registrar General and Census Commissioner, 2021). Forty-nine percent of Bihar's population is illiterate, the majority of who (51.7%) are women who live in rural Bihar (Office of the Registrar General and Census Commissioner, 2021).

Additionally, 51.9 percent of residents are multidimensionally poor[3] (NITI Aayog, 2021), making Bihar one of the most deprived states in India. The per capita income for Bihar in 2020–2021 is currently estimated at Rs 46,300 compared with Rs 128,800 for India as a whole (Government of Bihar, Finance Department, 2022). Bihar has the second lowest per capita income among the states in India. Bihar also has the lowest female workforce participation rate in India at 2.7 percent according to 2018–2019 data (Mitra & Rajput, 2020; Chakraborty, Joshi, Singh, Priyadarshini, & Choudhary, 2020). Moreover, 59.9 percent of males were self-employed in 2019–2020 and 76 percent of the total number of people migrating to find employment is male (Government of Bihar, Finance Department, 2022; Government of Bihar, Finance Department, 2020).

In addition, given the patriarchal socioeconomic context—where men dominate all forms of political, economic, and social life including decision-making regarding women's travel, employment, and household responsibilities (Mitra & Verick, 2013)—women are unlikely to be employed outside of the household nor engage in civic life. Moreover, the India Patriarchy Index (Singh et al., 2021) presents empirical evidence that Bihar consistently ranks as one of the most patriarchal states in India and gender disparities are particularly high among Scheduled Caste classes (SCs) and Other Backward Classes (OBCs). Indeed, robust Dalit feminist scholars, including Paik (2021), Rege (1998), and Arya and Rathore (2020) have shed light on these oppressive structures.[4] The participants in this study live in a historically rigid social structure where male domination, oppression, and exploitation of women is normalized and institutionalized through laws, customs, and rituals (Singh et al., 2021).

The participants' lives are challenging in other ways. For instance, Mirivel, Thombre, ten Bensel, Leach, and Wood, (2023a) found that baseline participants have little if any expectations for the future and noted being harassed because they live in poverty. Study participants also have few income options and routinely have no assets (Datta, 2015), experience high levels of interpersonal violence (Jejeebhoy & Santhya, 2018), and persistently face poor health outcomes including high rates of acute respiratory illnesses and infant mortality, all coupled with a lack of access to safe drinking water (Government of Bihar, Finance Department, 2020).

In addition, caste and gender differences constrain the lives of participants. Sanyal, Rao, and Majumdar (2015, p. 4) point out that "oppressive gender and caste hierarchies" make addressing women's agency, empowerment, and civic engagement difficult. Indeed, the lives of the participants are contingent on intergenerationally reinforced cultural norms and systems. For example, within rigid gender norms, males exclusively maintain household economic decision-making and control

mobility of their partners (Jejeebhoy & Santhya, 2018). Traditionally defined gender roles also result in participants being the primary caregiver, a role reinforced through the threat and pervasiveness of intimate partner violence (Sanyal, Rao, & Majumdar, 2015). Study participants also experience caste-based inequalities. Due to their caste status, participants do not participate in political life or public service (Sanyal, Rao, and Majumdar (2015) and therefore have little political power (Desai & Joshi, 2014). Further descriptive data on participants is provided in the methodology.

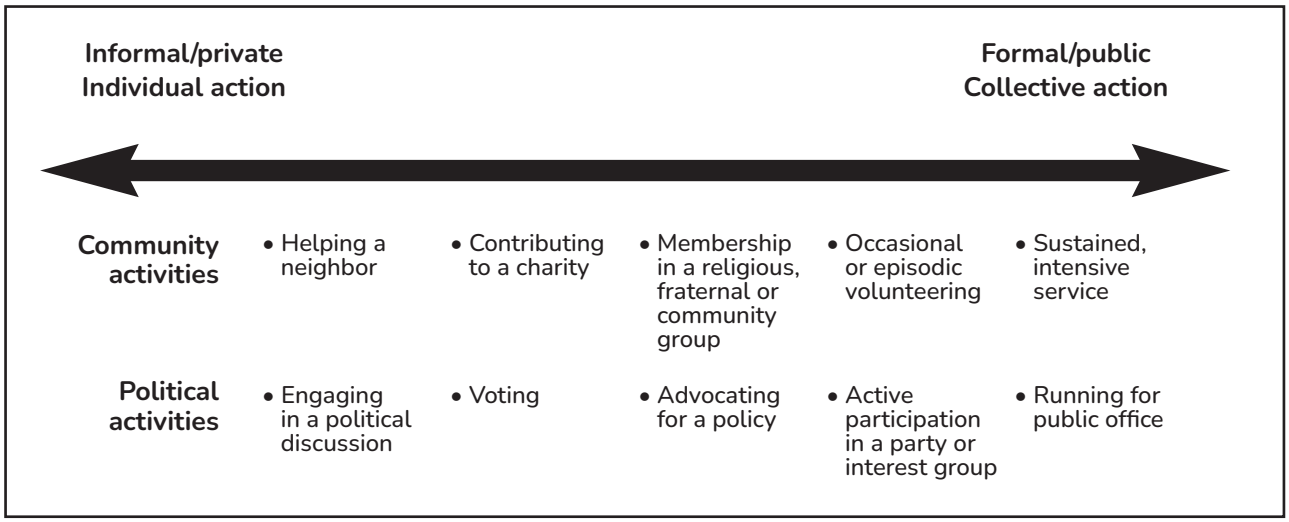
THEORETICAL BACKGROUND

Civic engagement

In rural communities, civic and community engagement often catalyzes [re]development efforts. For the purposes of this study, the authors define civic engagement as an "individual's duty to embrace the responsibilities of citizenship with the obligation to actively participate, alone or in [collaboration] with others, in volunteer service activities that [pursue community issues] that strengthen the local community" (Diller, 2001, p. 211; also see Adler & Goggin, 2005; McBride, Sherraden, & Pritzker, 2006). Civic engagement aims to create positive change in the community, and there are many ways for individuals to be civically engaged.

Civic engagement encompasses both social and political dimensions (see Figure 1). The political dimension of civic engagement includes voting, advocating for policies, and other behaviors that "influence the legislative, judicial, or electoral process, and public decision-making" (Adler & Goggin, 2005; McBride, Sherraden, & Pritzker, 2006, p. 153). The social dimension of civic engagement includes helping neighbours, contributing to charity, volunteering, and contributing resources to religious and community groups, associations, or organizations (Adler & Goggin, 2005; McBride, Sherraden, & Pritzker, 2006). However, civic engagement's social and political dimensions are intertwined. For instance, volunteering at a community-based voter drive, a form of civic engagement, can be a form of political participation (Mazzoleni, 2000). Nonetheless, for the purposes of this project, this empirical and analytical focus is on the social dimension of civic engagement.

Figure 1: Continuum of civic engagement



Source: Adapted from Adler & Goggin, 2005, p. 240

This research assesses changes in civic and community engagement among VBHCD beneficiaries. The civic engagement process is conceptualized as occurring along a continuum from an individual to a collective action such as helping a neighbour or ongoing sustained service (organizing to address an identified community need) (Nuñez-Alvarez, Clark-Ibáñez, Ardón, Ramos, & Pellicia, 2018; Adler & Goggin, 2005). The authors focus on participants' movement along the social dimension of civic engagement and acknowledge that individual progression and regression are both possible (Eliasoph, 2016).

Civic engagement as a mechanism to address rural development has a rich tradition in civil society and development literature. It is routinely seen as an outcome of international development efforts, particularly in rural and marginalized communities. Civic engagement in rural India is especially valuable given local norms and institutional arrangements in which women are routinely excluded from participation in civic life. The challenges these women face are compounded by historically contingent patriarchal economic, social, and cultural norms that create barriers to full participation in civic life (cf. Desai & Joshi, 2014; Pande & Astone, 2007). For instance, women in rural India are routinely the most impoverished (Srivastava & Srivastava, 2010), over-represented in illiteracy rates, and have limited or no access to educational opportunities (Kingdon, 2007). In addition, they "are subject to household and interfamilial relations" that restrict their civic engagement (Malhotra & Schuler, 2005, p. 71). Thus, many community development initiatives attempt to facilitate civic engagement among this target population.

Several studies suggest that participation in bundled community development initiatives such as VBHCD[5] enhances civic engagement among poor rural women. For example, Casini, Vandewalle, and Wahhaj (2017) found that women-only SHGs, similar to the groups that form the basis of this analysis, foster engagement in community activities to address "women's issues." Women-only SHGs also experience a time lag in their participation in civic engagement activities (Casini et al., 2017), which suggests a temporal nature regarding changes in civic engagement. Similarly, Datta (2015) analyzed survey data from 400 villages (200 treatment villages that are beneficiaries of JEEViKA and 200 villages where JEEViKA was not yet implemented) and found that women participants in the SHGs experienced a positive and significant change in civic engagement activities. Building on this work, qualitative analysis by Sanyal, Rao, and Majumdar (2015, p. 42) found that women participants in SHGs "took matters into their own hands" regarding the provision of social support services for community members and local community problem-solving. These findings support that bundled community development initiatives, such as the VBHCD framework, have a positive impact on women's civic engagement.

Community engagement

Although community and civic engagement are often used interchangeably, the Center for Disease Control defines community engagement as "a process of working collaboratively with and through groups of people affiliated by geographic proximity, special interest, or similar situations to address issues affecting the well-being of those people" (CTSA Community Engagement Key Function Committee, 2011, p. 7). The focus is on collaborative activity by people who share similar socio-economic status and locations within the socio-political hierarchy. Building on this definition, we

contend that community engagement expressly incorporates "those who are excluded and isolated" from participation in community life (Nexus Community Partners, 2014, p. 1). Therefore, for this project's purposes, community engagement is an inherently localized process where marginalized residents collectively work toward addressing the community problems they face. This perspective is important to our project for several reasons. First, Heifer's intervention in the Bihar region is geographically bound to specific locations, with the intent of benefiting those areas. Moreover, the intervention targets those who have been marginalized within Bihari society.

Much like civic engagement, community engagement also serves as the catalyst for developing rural communities. Previous works on community engagement argue that SHGs are often the formal mechanism for fostering and implementing community engagement in rural areas. Initiatives that foster community engagement are particularly relevant in rural India, especially initiatives that target women, because women in provinces such as Bihar are routinely isolated from social networks, tending to focus primarily internally on the family, and are historically excluded from participation in decision-making related to community issues (Desai & Joshi, 2014; Lahiri-Dutt & Samanta, 2006).

Similarly, the research on facilitating community engagement through SHGs is generally positive. As Datta (2015) found, on average, more women participants from JEEViKA's SHG program collaborated to solve problems at the community level. In a study assessing the effect of a neonatal health intervention in rural India, Saggurti, Atmavilas, Porwa, Schooley, Das, Kande et al. (2018) provided initial evidence that SHG participants "began advocating for their own, and their fellow members' and community needs with administrative authorities" (p. 11). They further note that this process required constant and concerted efforts over time to be sustainable. They point to the newness of the group as one possible factor restraining concerted community engagement.

As SHG members work together and become more engaged in their community, they experience several benefits. Research has shown that civic and community engagement enhances an individual's wellbeing and life satisfaction (Wray-Lake, DeHaan, Shubert, & Ryan, 2019). When engaged, individuals often also realize other intrinsic benefits, such as satisfaction in the positive aspects of their work, knowledge of having contributed to a greater cause (Meier & Stutzer, 2008), and a sense of belonging and purpose (Sagiv, Goldner, & Carmel, 2022). Therefore, the intrinsic value of civic and community engagement impacts how an individual is transformed in or during these activities. Attree, French, Milton, Povall, Whitehead, and Popay (2011), for instance, document several positive impacts of community engagement, including expanded social networks and social relationships, more self-confidence, and increased positive perceptions about themselves.

Similarly, Bracht, Kingsbury, and Rissel (1999) point out that engaged individuals within their communities see increased value in their contributions to solving community problems. In addition, individuals participating in community engagement initiatives are also more confident (Stirling, O'Meara, Pedler, Tourle, & Walker, 2007) and develop a sense of pride from having decision-making power in their communities (Kagan, Castile, & Stewart, 2005). The VBHCD model presents the opportunity for women in rural India to enhance their social, economic, health, and spiritual needs to become empowered members of their community and enhance their quality of life. By supporting the creation of SHGs and providing training on the 12 Cornerstones values and principles, VBHCD

provides a mechanism to enhance participants' civic and community engagement. Self-help groups are an organizational form that can facilitate civic and community engagement. Although acknowledging the lack of empirical evidence on SHG's overall performance, Lahiri-Dutt and Samanta (2006) argue that SHGs are widely accepted as the go-to organizational form that facilitates civic engagement among rural women. Desai and Joshi (2014) similarly found that women in SHGs were more engaged civically in community life. Their analysis focused more on the political dimensions of engagement, that is, participation in local government and direct engagement with public officials.

METHODOLOGY

To assess civic and community engagement changes, the authors collected survey data from female participants (n = 815) across two districts in rural Bihar, India. Survey data was gathered from participants at baseline (0 months) to 24 months of participation in Heifer's VBHCD initiative. This survey is part of a larger collaborative project with Heifer International designed to assess individuals' personal transformation as they participate in Heifer International's VBHCD program. A conceptual framework of Personal Transformation was developed that includes seven dimensions along which individuals experience transformation: Identity, Self-perception & Perception of Others; Communication Competency; Empowerment; Leadership State; Civic & Community Engagement; and Intercultural Sensitivity. The dimensions represent areas where the authors posit individuals experience transformation as they participate in Heifer's VBHCD intervention. Each element of the model was assessed by several variables in the survey; however, discussing all these elements in the transformation model is beyond the scope of this article. The authors drew on the civic and community engagement literature to develop the survey tool. Given many variables, an exploratory factor analysis (Pett, Lackey, & Sullivan, 2003) was conducted first to identify the primary components of the civic and community engagement dimensions measured by the survey. The factor analysis helped identify the components that constitute civic and community engagement and reduce the number of survey questions to simplify future deployment in the field. The goal of factor analysis is to identify the variables that contribute to the primary components of each dimension that comprise our personal transformation model. The survey instrument is adapted from Grootaert (2004)[6] and Adler and Goggin's (2005)[7] Civic Engagement Framework and refined using Heifer's 12 Cornerstones training to ensure it focused on areas of concern related to VBHCD.

Civic and community engagement were assessed via 17 survey questions (see Table 3). The cross-sectional survey was translated into Hindi and administered by third-party enumerators[8] between October and December 2020. The survey was conducted during the COVID-19 pandemic via local enumerators who recorded participant survey responses using the survey CTO data collection tool, a reliable and secure data collection platform for researchers. A total of 814 survey responses were received from across the region of Bihar, India.

Data collection

The authors partnered with Heifer International and a third-party agency that used enumerators to visit local villages across the Bihar region to recruit participants for the survey and interviews. Data for this exploratory study were collected from participants in two large districts—Vaishali (n = 701) and Muzzafarpur (n = 114)—across three blocks—Bidupur (n = 608), Desri (n = 95), and

Kurhanni (*n* = 112)—and included numerous villages. However, to protect the anonymity and confidentiality of respondents, village level differences were not analyzed.

To conduct the surveys and baseline interviews, participants' contact information was provided to the third-party enumerators by Heifer International. The approach using third-party enumerators is consistent with other research (Mwambari et al., 2022; Hershfield et al., 1993; Quetulio-Navarra et al., 2015) who relied on third parties to collect data during the COVID-19 pandemic, or with hard-to-reach populations in rural contexts as part of a culturally appropriate research team. The third-party agency is a professional research organization with trained enumerators with expertise in data collection in low-income rural areas in India. The authors also provided virtual training to the third-party enumerators on how to effectively conduct the survey data using our instrument and follow appropriate data collection protocols, such as consent, confidentiality, and ethical standards as approved by the UALR Institutional Review Board (Protocol # 20–154-R3). In addition, the authors set up a number of virtual data quality sessions to debrief progress and address any concerns or questions as data were collected. The third-party enumerators produced a random sample from the given list to recruit study participants for the project. The third-party enumerators visited randomly selected respondents at their homes with the logistical support of the local Heifer India field team to ask for their participation. Given the rural geography, illiteracy among participants, and limited internet accessibility, this is a context-appropriate means of approaching study participants (Ellard-Gray, Jeffrey, Choubak, & Crann, 2015).

For follow-up surveys (six, 12, and 24 months), enumerators walked door to door to contact previous participants who provided the baseline data. They asked respondents whether they would like to participate in the follow-up survey and/or in the follow-up interviews. Data was collected using the Survey CTO tool. Verbal consent was obtained prior to beginning data collection and recorded with the Survey CTO tool for each respondent, which was monitored by Heifer.

Participants were asked to complete a survey that included questions on a four-point Likert scale (ranging from 1 = strongly agree to 4 = strongly disagree), with lower scores representing a higher presence of the attribute being measured. Participants were asked questions about relationships, self-identity, communication, leadership, civic engagement, empowerment, community engagement, and training (see Appendix A for the survey instrument). Enumerators recorded participant responses using the survey CTO data collection tool, and the de-identified survey data was provided to the research team in Excel.

For data analysis, the authors compiled descriptive statistics on the respondents to identify changes from baseline to 24 months. A series of exploratory factor analyses—a statistical technique to identify clusters of variables (Field, 2005)—were then conducted. The purpose of conducting a factors analysis is threefold: "1) to understand the structure of a set of variables … 2) to construct a questionnaire to measure an underlying variable … [and] 3) to reduce a data set to a more manageable size while retaining as much of the original data as possible" (Field, 2005 p. 619). A series of factor analyses were used to identify which survey questions were the most relevant for the civic and community engagement concepts the authors were trying to measure, and to help reduce the number of questions in the survey. Finally, a series of ANOVAs were conducted to understand group differences in civic and community engagement.

Sample

The sample included participants of Heifer's SHGs and potential (i.e., baseline) participants from a community Heifer identified as in need of support. Table 1 provides an overview of the study participants' characteristic and demographics; Table 2 provides descriptions of participants based on their duration in VBHCD and the type of SHG.

As shown in Table 1, all the respondents in this study are female (*n* = 815; 100%). Most have no formal education (*n* = 498; 61%), followed by primary (*n* = 187; 23%) and secondary education (*n* = 106; 13%). The majority (*n* = 774; 95%) are Hindu, and 5 percent are Muslim (*n* = 40). Most respondents are in the Scheduled Caste (SC) class (*n* = 394; 48%) or Other Backward Class (OBC) (*n* = 384; 47%). Finally, most of the respondents were in a POG (*n* = 475; 58%). In Bihar, there are approximately 22 Schedule Castes and 131 Backward Castes (Government of Bihar, Finance Department, 2020). For the purposes of this exploratory research, the analysis was not disaggregated by specific castes.

As shown in Table 2, participants were almost evenly distributed across beneficiary duration: baseline (*n* = 212; 26%), 6 months (*n* = 186; 22.8%), 12 months (*n* = 204; 25%), and 24 months (*n* = 213; 26.2%). However, there were only five OG participants at a six-month duration, and 81 POG participants at a 12-month duration. The crosstab shows that 58.3 percent of participants are from POGs (*n* = 475) across all durations. There were 128 OG participants (15.7%) and 212 participants (26%) at baseline.

Table 1: Sample characteristics and demographics

Characteristics/demographics	Frequency	%
Sex		
Female	815	100
Education		
No formal education	498	61
Primary & middle school	187	23
Secondary school	106	13
Graduate school	24	3
Religion		
Hindu	774	95
Muslim	40	5
Other	1	0
Social Class		
SC	394	48
OBC	384	47
Schedule Tribe [ST]	8	1
General	29	3.6
Other	2	.02
Program Duration		
Baseline	212	26
Six months	186	23
12 months	204	25
24 months	213	26
Participant Type		
Original group	128	16
Pass on group	475	58
Baseline	212	26

Note: N = 815

Table 2: Participant type by duration in the Heifer VBHCD program

		Participant type						Total	
		OG		POG		Baseline			
		N	%	*N*	%	*N*	%	*N*	%
Beneficiary duration	0 months	0	0.0	0	0.0	212	100.0	212	26.0
	6 months	5	3.9	181	38.1	0	0.0	186	22.8
	12 months	123	96.1	81	17.1	0	0.0	204	25.0
	24 months	0	0.0	213	44.8	0	0.0	213	26.1
Total		**128**	**100.0**	**475**	**100.0**	**212**	**100.0**	**815**	**100.0**

Finally, Table 3 summarizes participants based on social class and duration in Heifer's VBHCD program. Of participants in the SC class (*n* = 394; 48% of total participants), the majority *n* = 169 (42.9%) are at baseline; 39 (9.9%) are at six months of participation; 118 (29.9%) are at 12 months participation; and 68 (17.3%) are at 24 months participation. Of those classified as OBC (*n* = 384; 47% of total participants), 30 (7.9%) are at baseline, 133 (34.8%) are at six months of participation, 86 (22.5%) are at 12 months participation, and 133 (35.8%) are at 24 months participation. The participants are among the most disadvantaged groups in Bihar, and the data were aggregated by social class for the current analysis.

Table 3: Factor structure

Item	Factor		
	Civic engagement	Community engagement I	Community engagement II
5.11 I believe that it is important to financially support charitable organizations	.768		
5.17 I contribute to charitable organizations within the community	.685		
E_5.14 I help members of my community	.591		
E_5.6 I believe that I have a responsibility to help the poor and the hungry	.584		
E_5.10 I believe that it is important to volunteer	.544		
E_5.5 I believe I should make a difference in my community	.421		
E_5.4 I feel responsible for my community		.699	
E_5.7 I am committed to serve in my community		.658	
E_5.8 I believe that all citizens have a responsibility to their community		.649	
E_5.9 5.9 I believe that it is important to be informed of community issues		.538	
E_5.16 I participate in discussions that raise issues of social responsibility			.773
E_5.12 I am involved in structured volunteer position(s) in the community			.704
E_5.13 When working with others, I make positive changes in the community			.577
E_5.15 I stay informed of events in my community			.516
Extraction Method: Principal Component Analysis Rotation Method: Varimax with Kaiser Normalization			

RESULTS

Exploratory factor analysis

Civic and community engagement are complex concepts that are intricately connected and hard to disentangle in rural development practice. To get an understanding of civic and community engage-

ment among participants in Bihar, the authors conducted an exploratory factor analysis (EFA) (n = 815) to determine the underlying factor structure (Pett, Lackey, & Sullivan, 2003). We used exploratory factor analysis for three reasons. First, given the exploratory nature of our work, EFA with Varimax rotation (Yong & Pearce, 2013) is used to identify the items that cluster together into meaningful factors that comprise civic and community engagement. Next, the survey instrument is grounded on the civic and community engagement literature and adapted and modified from the World Bank Social Capital Initiative (Grootaert et al., 2004) to capture and provide a better understanding of the nature of civic and community engagement in the rural context. Thus, EFA allows us to establish the validity of the modified instrument (Pett, Lackey, & Sullivan, 2003). Additionally, we had no a priori suppositions (or only implicit hypotheses) (Costello & Osborne, 2005; see also Sindik, 2013) to test whether and how civic and community engagement varies, particularly among study participants. Finally, limited empirical attention has been paid to the impact of Heifer's VBHCD program on participants' civic and community engagement. Exploratory factor analysis, therefore, furthers the discussion by exploring the underlying processes of how VBHCD is associated with civic and community engagement, which, this article argues as part of the authors' larger study, is integral to a participant's personal transformation journey.

The factor analysis extracted three scales that comprise civic and community engagement based on Eigenvalues larger than one and above the breakpoint in the scree plot (Costello & Osborne, 2005). We dropped freestanding and cross-loading items to clarify the factor structure (Costello & Osborne, 2005). Initial Eigenvalues indicated that the first three factors explained 32 percent, 8.4 percent, and 7.9 percent of the variance, respectively, and in sum, explained 48.46 percent of the total variance. The fourth through fourteenth factors were dropped because they had Eigenvalues less than one, and the leveling off of values below the breakpoint on the scree plot made the fourth through fourteenth factors uninterpretable (Costello & Osborne, 2005; Yong & Pearce, 2013).

The Kaiser-Meyer-Olkin (KMO) measure (0.875) indicated the data were suitable for exploratory factor analysis, and Bartlett's Test of Sphericity was significant ($\chi 2$ (91) = 2573, p <.001), indicating that there is a patterned relationship between the items. All commonalities, except E5.5, were above 0.3, indicating that the selected items shared some common variance.

Internal consistency

Once we identified the primary factors of civic engagement and community engagement, we assessed if the factors were internally consistent and reliable. Six items loaded to factor I, labelled *Civic Engagement*, with a Cronbach's Alpha α = 0.735, suggesting that the selected variables are internally consistent. Four variables loaded onto the second factor, labelled *Community Engagement I*, with a Cronbach's Alpha α = 0.651. The third factor, labelled *Community Engagement II*, is composed of four variables with a Cronbach's Alpha α = 0.669. Both *Community Engagement* factors are moderately reliable, with Cronbach's Alphas α = 0.651 and α = 0.669 suggesting that the selected variables are modestly internally consistent. The items that comprise each factor are presented in Table 3.

Cronbach's Alpha is an indication of inter-item homogeneity measuring the proportion of variance due to common factors, with low scores suggesting that items in the factor do not measure the same dimension (Cronbach, 1951). Although Cronbach (1951) argued that a "higher alpha is desir-

able, a test need not approach the perfect scale to be interpretable … and the pure scale should not be viewed as ideal" (pp. 331–332). Given the exploratory nature of the research and the modest Cronbach's Alpha scores, it would be logically meaningless (Cronbach, 1951) to have separate *Community Engagement* factors. Community engagement is an inherently localized process where marginalized residents collectively work toward addressing their community problems. For this research, the authors did not seek to unpack the specific elements of community engagement per se (e.g., contributing to charity or engaging in volunteer activities), but rather how participants' descriptions community engagement activities changed as they participated in Heifer's VBHCD. Therefore, consistent with Pett, Lackey, and Sullivan (2003) and Cronbach (1951), the authors combined *Community Engagement I* and *Community Engagement II* into an interpretable *Community Engagement* factor based on the mean of all eight items that comprised both factors with Cronbach's Alpha $\alpha = 0.750$. The *Civic Engagement* and *Community Engagement* factors provide the basis for assessing how engagement in civic life varies across beneficiaries at different timeframes (0 months to 24 months) and group types (OG or POG).

Dependent variables

To continue this analysis, the authors created two dependent variables based on the mean scores for the items that comprise the *Civic Engagement* ($\alpha = 0.737$) and *Community Engagement* ($\alpha = 0.750$) factors. Creating the dependent variables *Civic Engagement* and *Community Engagement* allowed the authors to assess if there was variation between 1) beneficiaries at different exposure levels and 2) participant types. First, a dependent variable was created called *Civic Engagement* based on the mean scores from the six items (5.5, 5.6, 5.10, 5.11, 5.14, 5.17) that loaded onto the factor. Next, the two factors, *Community Engagement I* (variables 5.4; 5.7; 5.8; 5.9) and *Community Engagement II* (variables 5.12; 5.13; 5.15; 5.16), were combined into an interpretable composite *Community Engagement* factor based on the mean of the eight items that comprised both factors. Table 4 presents the descriptive statistics for the two composite scores *Civic Engagement* and *Community Engagement*.

Table 4: Descriptive statistics for *Civic Engagement and Community Engagement* composite scores

Descriptive Statistics									
	N	Range minimum	Range maximum	Mean		Std. deviation	Variance statistic	Skewness	
				Statistic	Std. error			Statistic	Std. error
Community engagement	815	1.00	3.25	1.9587	.01169	.33367	.111	-.546	.086
Civic engagement	815	1.00	3.00	1.8135	.01210	.34534	.119	-.449	.086
Valid *N* (listwise)	815								

Results of one-way ANOVA

To further the analysis, ANOVA Omnibus tests were performed using the *Civic Engagement* and

Composite Community Engagement dependent variables to assess if there is a statistically significant difference in the means of the beneficiary groups (0 months to 24 months) and the group type (POG or OG].

The comparison of the means for civic engagement ($\alpha<0.05$) shows significant differences for both participant duration in the project ($F[3, 811] = 2.668$, $p = 0.047$) and participant group type ($F[2, 812] = 4.434$, $p = 0.012$), respectively. Specifically, post-hoc comparisons using the Tukey HSD test indicated that the mean score for participants at baseline (M = 1.8699, SD = .342) was significantly different than the participants at 12 months (M = 1.7289, SD = .361). However, participants at baseline (M = 1.8699, SD = .342) did not significantly differ from participants at six-months and 24-months duration, nor did participants at six months significantly differ from participants at 24 months of participation. Additionally, post-hoc comparisons for *Civic Engagement* and participant type using the Tukey HSD test indicated that the mean score for POGs (M = 1.7859, SD = .346) was significantly different than for participants who were not yet part of a group (M = 1.8699, SD = .342). However, OGs (M = 1.8225, SD = .337) did not significantly differ from POGs or those not assigned to self-help groups. Based on our four-point Likert scale survey, where 1 = strongly agree and 4 = strongly disagree, the statistically significant lower scores for participants at 12 months (M = 1.7289, SD = .361) and POGs (M = 1.7859, SD = .346) represent a higher presence of the *Civic Engagement* attribute.

As discussed above, the factor analysis initially identified two factors: *Community Engagement I* and *II* with Cronbach's Alphas of 0.653 and 0.670, respectively. Due to the exploratory nature of this study, the authors combined these two factors and reassessed the factors internal consistency for ongoing analysis (Pett, Lackey, & Sullivan, 2003). The resulting Cronbach's Alpha for the composite *Community Engagement* factor (0.750) suggests that the selected variables are internally consistent. ANOVA Omnibus tests assessed if there is a statistically significant difference in the mean composite *Community Engagement* score based on beneficiary groups (0 months to 24 months) and group type (POG or OGs). The results for the composite *Community Engagement* factor are presented below.

The analysis indicated that there were statistically significant differences in the means for *Community Engagement* at ($\alpha<0.05$) for both participant duration in the project ($F[3, 811] = 4.996$, $p = 0.002$) and group type ($F[2, 812] = 4.651$, $p = 0.010$). Specifically, post-hoc comparisons using the Tukey HSD test indicated that the *Community Engagement* mean score for participants at baseline (M = 2.018, SD = .323) was significantly different than that at 12 months (M = 1.892, SD = .365). Participants at baseline (M = 2.018, SD = .323) did not significantly differ from participants at six months or 24 months. With regards to participant type, post-hoc comparisons using the Tukey HSD test indicated that the *Community Engagement* mean score for participants that were not yet part of a group (M = 2.018, SD = .323) was significantly different than mean scores for both POGs (M = 1.940, SD = .339) and OGs (M = 1.929, SD = .319). Based on our four-point Likert scale survey, the statistically significant smaller community engagement scores for participants at 12 months (M = 1.892, SD = .365), POGs (M = 1.940, SD = .339), and OGs (M = 1.929, SD = .319) represent a higher presence of the *Community Engagement* attribute among participants in each of those categories.

DISCUSSION

This exploratory study aimed to understand the impact of Heifer's VBHCD intervention on civic and community engagement among women in Bihar, India. The study focused on civic and community engagement by length of participation (baseline and six, 12, and 24 months) and participant group type (OG vs POG). Specifically, the mean *civic engagement* scores for participants at 12 months duration in the program and participants who were part of a POG were significantly different than those at baseline or those who were not part of a group. The results suggested that duration of participation in Heifer's VBHCD program did affect participants' civic engagement for those who have participated for at least 12 months. Baseline participants new to VBHCD expressed lower attitudes toward civic engagement. Practically, given the context, this indicates that participants new to VBHCD were not as civically engaged within their community. This is consistent with previous research in resource constrained contexts (c.f. Aiyede, 2016) where individual survival strategies mediate civic engagement.

Similarly, baseline participants new to VBHCD had lower mean *community engagement* scores overall. The analysis indicates a statistically significant difference in community engagement activities between baseline and participants at 12 months in the project and between those not assigned to groups compared with those who are either part of a POG or OG. This makes sense given that participants would not have received most of the training within the first six months of participation as they were beginning to receive Heifer Cornerstones training, while the majority of participants are likely to have received all of their training by 12 months. On average, training seemed to be the most effective around 12 months, then declined thereafter. By 24 months, there was no statistical difference between baseline, six months, and 12 months for both civic and community engagement factors. Further research is needed to understand at what point civic and community engagement begins to wane post-VBHCD training, with particular attention to the interval between 12 and 24 months.

These civic and community engagement findings are consistent with other findings in the literature. For instance, participants at 12 months and those who are part of OGs or POGs were more civically engaged, consistent with findings from Casini et al. (2015) and Datta (2015). Moreover, the finding that improved mean civic engagement scores for participants at 12 months duration in the program were significantly different than those at baseline but not at 24 months duration aligns with findings by Casini et al. (2015). These findings support the changes in civic and community engagement activities among study participants over time. The results suggest that POGs may be more civically active in their community than OG members or those who have not yet formed groups.

LIMITATIONS AND FUTURE RESEARCH

As with any research, this study has some limitations that should be considered. First, the data for this research was collected during the COVID-19 pandemic. Given the virus' widespread and infectious nature, the research team could not collect the data in person; therefore, a third-party local research team (enumerators) was hired to collect the survey and interview data. Although this local team was made up of trained professionals with previous experience in collecting survey and interview data, the authors held a series of training workshops via Zoom focused on collecting the data with integrity and anonymity. In addition, the authors held several debriefing sessions with the local

enumerators during the data collection period to address any field issues and to provide clarification on data collection procedures. Given these extra measures, the authors were confident with the quality of the data collected.

The VBHCD program started before the COVID-19 pandemic; however, data collection occurred during the COVID-19 pandemic, so participants would have faced lockdown challenges and limitations in engaging civically in their community. The COVID-19 pandemic is a critical event that created structural shifts in civic life that are just beginning to manifest. It is anticipated that COVID-19 increased poverty, limited economic activities, and created food shortages (UNICEF, 2020). Thus, a longitudinal analysis comparing this data collection timeframe to prior and subsequent timeframes would shed more light on how a critical environmental event may have influenced civic and community engagement among women-only SHGs. For instance, it is unknown if COVID-19 would have been the catalyst for enhanced civic and community engagement among this and other populations post-pandemic.

In addition, given the cross-sectional nature of the data, the comparisons between baseline and six, 12, and 24 months in this study only reflected changes at a single point in time. Additionally, the authors aggregated data based on duration of participation in the program and group type and could not compare participants at the individual level. Longitudinal data could not be collected due to a limited timeframe and issues with attrition. Future research should focus on collecting data over time across participants to understand changes in civic and community engagement at the individual level versus the group level. Ongoing research (see Mirivel, Thombre, ten Bensel, Leach, & Wood, 2023) attempts to disaggregate the data and analyze an individual's personal transformation journey.

Second, the research did not expressly address changes in civic and community engagement based on participants' caste. Given the rigid caste and gender disparities faced by the participants, future research will examine the impact of VBHCD on civic and community engagement by caste (SC and OBC). Specifically, research in that area will contribute to our understanding of how caste-based social hierarchy intersects with INGOs initiatives to shape outcomes for participants. This future line of inquiry will expressly integrate Dalit feminist literature (c.f. Rege, 2000; Arya, 2020) to illuminate "the complexities of Dalit women's experiences" (Paik, 2021, p. 127), and build on work by Soundararajan, Sharma, and Bapuji (2024), who argue that SC or Dalits continue to be excluded from participating in civic and community life. We acknowledge that the historical isolation and oppression of Dalits prevented them from collectively engaging to improve the local community. This future research will unpack the power differentials at the intersection of caste and gender, building on the interview data collected as part of the larger project.

Third, this research focused on women's only SHGs in a rural context. Thus, the findings may not be generalizable to the broader population. For example, the research could not say whether participants in mixed-gender SHGs or male-only SHGs would have different levels of civic and community engagement. Further comparison of the differences in civic and community engagement between mixed-gender SHGs or male-only SHGs could help uncover, as Desai and Joshi (2014) and others (cf. Lahiri-Dutt & Samanta, 2006) point out, through what mechanisms women remain historically excluded from civic life.

This exploratory research aimed to assess the efficacy of VBHCD's impact on participants' civic and community engagement relative to duration in the program and group type. Further research is necessary to confirm the factorial validity (Yong & Pearce, 2013) of the three factors that comprise civic and community engagement. Consistent with Costello and Osborne (2005), confirmatory factor analysis can ascertain if our factor structure is consistent across population subgroups and time-frames. For example, how is civic and community engagement mediated based on caste, and at what point between 12 and 24 months in the program does civic and community engagement begin to wane? Also, do subsequent groups started by POG members show the same variation in civic and community engagement activities?

Fourth, this research project takes an etic rather than an emic perspective. However, future research is needed to further explore Bihari women's phenomenological experience with civic and community engagement, including what counts as community engagement and what does not. Future research will explore this line of enquiry using in-depth interviews with women across the Bihar region. In addition, a historicized understanding of how SC or Dalits continue to be excluded from civic and community engagement activities needs further examination. Subsequent analysis that integrates Mezirow (1978) with Dalit feminism, could ask how personal transformation is mediated by caste, and therefore be sensitive to the nuance and complexity of power differentials among women.

Finally, future research needs to investigate the differences across castes more closely. In this study dataset, which is a cross-sectional sample, it is difficult to explain those differences with meaningful results. Longitudinal studies, however, can more accurately reveal the possible oppression and power dynamics across castes and time. The authors are currently analyzing longitudinal data from Bihar to shed light on those differences.

IMPLICATIONS

There are several theoretical and practical implications of this study. To date, no empirical research has focused on the impact of Heifer's VBHCD training on civic and community engagement, especially among women living in rural impoverished areas. This is the first study to examine VBHCDs impact on women across time and specific SHG groups. The findings indicate that civic and community engagement increases over time once Heifer participants undergo training on the 12 Cornerstones. Although further research is needed, Heifer field trainers and administrators need to note that participants demonstrate increased civic and community engagement.

Theoretically, the study contributes to understanding the conceptual connection between civic and community engagement and personal transformation. Personal transformation is the process by which individuals create profound change in themselves (Mezirow, 1978). These findings suggest that what may positively contribute to the individuals' degree of personal transformation is the extent to which they are engaged in civic life. This research initiates the theoretical conversation regarding whether increased civic and community engagement is the source or an outcome of personal transformation.

Second, nonprofit humanitarian organizations are increasingly under pressure to measure and demonstrate their effectiveness and impact (Carnochan, Samples, Myers, & Austin, 2014). Organizational

effectiveness typically includes improved service delivery for clients, increased efficiency and effectiveness for the organization, and increased judicious use of stakeholders' time and money. Research on nonprofit organizational effectiveness has tended to emphasize financial measures (Liket & Maas, 2015) while underemphasizing other factors, such as the social and community capabilities created and supported. This study offers an additional way for nonprofit organizations to measure the impact of their programming on their beneficiaries. On the face of it, Heifer's approach may resemble an economic transaction. Yet, the transactional approach, such as training in animal management and product processing, is complemented by a humanistic approach, including training in gender equality and women's empowerment, which facilitates civic and community engagement over time. Researchers know much less about nonprofit organizations' impact on beneficiaries' civic and community engagement, particularly those from marginalized communities or impoverished individuals. This study fills this gap by a) providing a framework for measuring impact and b) documenting an approach (VBHCD) that is having an impact on beneficiaries' civic and community engagement.

A first practical implication is related to the impact of the training. Based on the authors' analysis, the effects of the training wane after 12 months. Specifically, participants at 24 months show no significant group differences between participants at baseline and six months. The findings suggest that practitioners should offer additional training past 12 months to continue seeing positive results in civic and community engagement. Broadly, INGOs should assess when to withdraw from hands-on training to see whether additional time on the ground is necessary.

Second, international community development professionals can learn from VBHCD's holistic approach, which combines economic development with personal empowerment. VBHCD's approach offers several economic and income-generating trainings, such as animal and agricultural management, combined with support for gender equality and women's empowerment, which facilitates civic and community engagement. The holistic approach is in line with wrap-around services that include addressing multiple factors, such as caste and gender-based discrimination, that place families and women at risk (Carson & Chowdhury, 2018).

CONCLUSION

This study explored the impact of Heifer's VBHCD on civic and community engagement. Using data collected in Bihar, India, one of India's most impoverished districts, the results show that our instrument is valid and that VBHCD has a positive and significant impact on Heifer beneficiaries' civic and community engagement activities. In addition, Heifer's intervention leads to personal transformation. This article shows that civic and community engagement is integral to beneficiaries' personal transformation. As beneficiaries participate in VBHCD, they improve their lives and the lives of their community.

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ETHICS STATEMENT

Ethics approval was obtained by research ethics boards at the University of Arkansas at Little Rock (# 20-154-R3).

NOTES

1. Cf. Aaker (2007) and De Vries (2011, 2012).
2. SEWA is an NGO based in India that utilizes the SHG model to help women achieve economic independence. SEWA, like other NGO programs, provides employment training and facilitates access to credit and other health and social services (Desai & Joshi, 2014).
3. Multidimensional poverty is a non-monetary measure of poverty used by the United Nations Development Programme (UNDP) to capture overlapping deprivations in education, health, and overall living standards (NITI Aayog, 2021). It is used to account for biases in measures of poverty based solely on income. Alkire, Kanagaratnam, and Suppa (2018) argue that "poor people themselves define their poverty much more broadly to include lack of education, health, housing, empowerment, employment, personal security and more" (p. 4). The measure has been broadly applied in the international development context by the UNDP (NITI Aayog, 2021) in the Human Development Report (Alkire, Kanagaratnam, & Suppa, 2018).
4. The goal of this exploratory study is to assess aggregate changes in civic and community engagement among study participants. We acknowledge the significant contribution that Dalit Feminist Theory [QA: Theory?] has made to addressing gender-based inequality and power disparities among our participants. See for example the excellent writings of Paik (2021), Rege (2000), and Arya (2020).
5. SEWA is another example of a bundled rural community development activity.
6. The World Bank working paper "Measuring Social Capital: Integrated Questionnaire" was developed and designed to measure social capital at the national level. The instrument was piloted in different country settings with a focus on developing countries, making it applicable to our research project.
7. Adler and Goggin (2005) distinguish between the dimensions of civic engagement and community engagement, and outline several common indicators the measure the constructs.
8. We did not collect data on the caste of our enumerators; however, enumerators were both men and women.

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