Unlocking Success in NGOs: The Power of Servant Leadership

Chau Ngoc Minh Little[1], Wil Martens[1]

1 National Sun Yat-Sen University

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Abstract

Purpose

The purpose of this study is to explore the complex influences that affect successful project outcomes within Non-Governmental Organizations (NGOs), with a particular focus on understanding the role and impact of Servant Leadership (SL) practices.

Design/Methodology/Approach

The study utilizes Hierarchical Regression to discern mean associations and residual variations and Binary Logistic Regression to analyze categorical data in order to rigorously investigate the relationship between Servant Leadership and project performance while accounting for multiple variables and interaction effects.

Findings

This study confirms a positive and statistically significant correlation between servant leadership practices, like team empowerment and development support, and project success in NGOs. However, team identification moderates this relationship. High team identification amplifies the positive impact of SL, but unexpectedly, a strong interaction with team climate suggests potential downsides if interpersonal relations overshadow task focus.

Practical Implications

The study recommends that NGOs should integrate Servant Leadership principles into their organizational culture and values. This can be achieved by incorporating Servant Leadership criteria in leadership selection processes and providing continuous training to nurture the competencies associated with Servant Leadership. These actions are likely to contribute to optimized project outcomes through the judicious application of Servant Leadership.

Originality/Value

This study illuminates the intricate interplay between Servant Leadership and Social Identity Theory in shaping successful project outcomes across diverse NGOs globally. Utilizing advanced statistical methods, it uncovers nuanced interactions between leadership, team dynamics, and project outcomes. Unlike previous research, this work delves into multiple NGO contexts and regions, expanding the generalizability of findings and offering practical guidance for integrating Servant Leadership principles. By illuminating the link between Servant Leadership and NGO values, the study provides a novel perspective on nonprofit leadership effectiveness and its impact on achieving altruistic goals. This combined contribution marks a significant advancement in understanding leadership dynamics and optimizing team climate for enhanced project success in NGOs.

Chau Ngoc Minh Little[a], and **Wil Martens**[a]

[a]*College of Management - National Sun-Yat Sen University, Kaohsiung, Taiwan*

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1. Introduction

1.1. *The Importance of Leadership in NGOs*

At the forefront of driving change in the challenging landscape of Non-Governmental Organizations (NGOs), servant leadership emerges as a beacon of hope and efficacy. This leadership style diverges sharply from conventional models focused on business-centric achievements; instead, it is characterized by its selfless pursuit of the greater good, placing the welfare and growth of both the organization and its stakeholders at its core (Welty Peachey and Burton 2017). Servant leadership proves particularly vital in NGOs, which often grapple with constraints like scarce resources, diverse stakeholder expectations, and multifaceted socio-economic settings. By fostering qualities like empathy, active listening, and a strong sense of community, servant leadership uniquely positions itself as an effective solution to these prevalent challenges (Mulinge 2020).

Through servant leadership, NGO leaders can foster a culture of collaboration and empowerment, crucial in environments where resource constraints require innovative and collective problem-solving. By prioritizing the development of their teams and focusing on serving their communities, servant leaders in NGOs can effectively navigate the complexities of their work, ensuring sustainable impact and success in their projects. This approach aligns closely with the values and mission of most NGOs, which are centred around service and community development.

In an era of pressing global challenges, NGOs are critical in addressing complex humanitarian and development issues. NGOs, often project-based, aim to improve the lives of communities in need. The success of NGOs is contingent upon various factors, among which leadership emerges as a significant aspect. In the context of NGOs, leadership is pivotal in ensuring effective project management and achieving community development goals. Servant leadership, which emphasizes the growth and well-being of the community and the team, is especially potent in driving success within NGOs. This leadership style aligns with the very essence of NGOs, which is service to the community (Taherdoost 2016).

The servant leadership model, given its emphasis on follower satisfaction and motivation (Brière et al. 2015), may resonate well with the community-centric ethos of NGOs, potentially enhancing their project success in NGOs. The exploration of this synergy forms the rationale for this research, a subject that has not received sufficient attention in the current literature. Moreover, understanding the impact of servant leadership on NGO project success in various cultural contexts presents an intriguing and valuable aspect of this investigation.

Furthermore, the need for leadership that can inspire and empower the NGO workforce is accentuated by the NGOs' quest for credibility and legitimacy among key stakeholders (Cleveland and Cleveland 2020). Effective leadership, reflected in the alignment of initiatives and projects with the organization's core values, emerges as a vital determinant of sustainable outcomes (Abiddin, Ibrahim, and Abdul Aziz 2022; Lamberti, Aluja Banet, and Rialp Criado 2022). Servant leadership aligns well with this requirement as a promising leadership model prioritizing follower development, potentially driving optimal team performance and successful project outcomes in NGOs (Spears 2005).

1.2. *Project Success*

In the NGO context, project success is a multifaceted concept that extends beyond the mere completion of a project to include broader impacts and the achievement of intended objectives (Rose 2013; Ika 2012). It encompasses not only the attainment of defined outcomes within specific timeframes and allocated resources but also the effective solutions for community issues and optimal utilization of limited funds (Kealey et al. 2005). Essential elements contributing to this success are adaptability, knowledge communication, collaboration skills, leadership practices, ethical norms, situational awareness, and change management (Brière et al. 2015). Furthermore, the involvement of the local community and establishing relationships with local corporations are crucial for the successful implementation and sustainability of projects (Diallo and Thuillier 2005). (Ika 2012) expands this definition by considering success in terms of long-term development results, conformity of goods and services, national visibility, project reputation with international development agencies, and the likelihood of securing additional funding (Ika 2012).

Conversely, project management success specifically refers to the effective application of project management methodologies and practices to ensure that the project is completed on time, within scope and budget. This involves planning, organising, and controlling resources to achieve specific project goals and objectives (Rezvani et al. 2016). Inherently unique and complex, projects exhibit a defined lifecycle alongside distinct characteristics, interdependencies, and occasional conflicts (Rose 2013). As a crucial figure, the project manager and the team hold significant sway over the project outcome. It becomes necessary for the project manager to have comprehensive knowledge of project management, particularly in planning, organising, monitoring, and controlling all project aspects. Motivating all involved to achieve the project's objectives also falls within the manager's responsibilities (Rezvani et al. 2016).

It is important to distinguish between project management and project success. While project management success is primarily concerned with the efficient and effective execution of the project through proper management techniques, project success is a broader term that includes not only the completion but also the impact and fulfilment of the project's objectives. Historically, the focus on project success factors has been centred on development projects (Ika 2012; Khang and Moe 2008), construction and infrastructure (Ghazali, Rashid, and Sadullah 2017; Wai et al. 2013; Chan, Scott, and Chan 2004). This focus explains why project management primarily finds application in engineering fields with clearly defined, measurable, and widely accepted criteria for success (Aga, Noorderhaven, and Vallejo 2016). Traditional triangle criteria of time, budget, and project quality are commonly used to evaluate project management success (Ika 2012; Aga, Noorderhaven, and Vallejo 2016; Martens et al. 2021). However, in recent years, additional criteria such as strategic objectives of the organisation, end-user satisfaction, benefit to the organisation, benefit to project personnel and stakeholders, and business success have been utilised to assess project success (Aga, Noorderhaven, and Vallejo 2016).

Projects executed by for-profit organisations aim to provide additional value to the organisation (Hernandez and Cormican 2016), and their results can be assessed using a set of quantitative metrics (Latif and Williams 2017). Conversely, NGO projects generally intend to address and mitigate pressing social, economic, and environmental issues (Latif and Williams 2017). Consequently, such projects face uncertainty and challenges in evaluating outcomes (Ronalds 2012) due to the nature of the project goals and the involvement of divergent stakeholder groups (Latif and Williams 2017). Moreover, NGO project outcomes are often less visible and measurable than projects executed by for-profit organisations (Khang and Moe 2008). Hence, we have employed (Ika 2012)s framework for measuring project success in this study as it aligns closely with the study's objectives.

1.3. *Servant leadership and project success*

Servant leadership (SL), a leadership model first conceptualised by Robert K. Greenleaf in the 1970s, is recognised for its focus on meeting the needs of team members, encouraging their personal development, and fostering a sense of community (R. K. Greenleaf 1977; Robert C. Liden et al. 2008). This style of leadership is especially pertinent in the context of NGOs, where the complex and often challenging operational environment necessitates a leadership approach that motivates and empowers team members (Eva et al. 2019; R. K. Greenleaf 1977). By prioritising the needs and growth of individuals and the community, SL can significantly contribute to project success. Various studies have supported this

notion in different contexts (Hale 2007; &. P. Parris D. L. 2013).

Moreover, the reciprocal relationships between leaders and followers, central to the concept of SL, can positively influence the performance of project teams, boosting their motivation and commitment to project goals (Van Dierendonck 2011). As the success of projects in NGOs largely depends on the performance of these teams, fostering such reciprocal relationships can be a critical factor in achieving project success (Gelbard and Carmeli 2009) However, implementing SL in NGOs can be challenging due to the common issues of resource constraints and high turnover rates that characterise these organisations.

1.4. *Research Aim and structure*

This study embarks on a journey to delve into the multifaceted world of project management practices within NGOs, with a particular focus on the influential role of SL. At its core, the investigation is driven by a desire to unravel the dynamics and mechanisms that lie beneath the surface of project management in NGOs and discern how these elements contribute to the success of their initiatives. Central to this endeavour is three pivotal inquiries: Does a servant leadership approach to management have a positive effect on project success in an NGO setting? Is the climate within the team a contributing factor to the project's success? And, does the team's sense of identity play a significant role in the triumphant outcomes of the projects? As we sift through these queries, the research accentuates the significance of team Identification and climate in project success. These elements, often underappreciated, are posited as critical determinants that can make or break the trajectory of a project within the unique context of NGOs. To dissect the relationships between SL, TC, TI, and project success, this study harnesses the power of hierarchical regression and a binary logistic model. This comprehensive analytical approach is not just a pursuit of academic rigour but a venture in service of practicality.

Through the lenses of hierarchical regression analysis, the goal is to extract solid, evidence-based insights that can serve as invaluable tools for NGOs. These insights aim to inform and steer the helm of project management strategies within NGOs, ensuring that they are anchored in a deep understanding of the intricate tapestry that binds SL, TI, and TC to project success. In essence, this study seeks not just to add to the academic conversation but to arm NGOs with the knowledge and strategies that are finely tuned to the realities of their operational environment, ultimately driving them towards more effective and impactful outcomes. The organisation of the subsequent sections of this research is as follows: Section 2 introduces the fundamental principles of servant leadership theory and social identity theory, emphasising their roles in fostering team identification and team climate and proposing research hypotheses. The methodology and data employed in the study are outlined in Section 3, followed by the presentation of results and study findings in Section 4. Section 5 engages in a discussion of the study findings, while Section 6 addresses limitations and offers directions for future research.

2. Theoretical Framework, Literature Review, and Hypothesis Development

2.1. *Servant Leadership Theory*

Servant leadership (SL) is deeply rooted in the prioritization of followers' needs, wherein leaders are intrinsically motivated to serve, thereby fostering an environment that bolsters autonomy, learning, and growth (Sendjaya and Sarros 2002). This principle, timeless and transcending various religions and philosophies, has been exemplified by renowned figures such as Mother Teresa, Gandhi, and Martin Luther King, Jr. (Keith 2008). SL naturally resonates with the values and mission of NGOs which primarily focus on serving marginalized communities. Through an empathetic and service-oriented approach, SL can significantly enhance NGO effectiveness, inspire and empower employees, cultivate commitment, and maximise team performance (Farling, Stone, and Winston 1999). While other leadership styles also value service and employee development, SL uniquely emphasizes the deep, personal commitment to directly serving the needs of both employees and the community, aligning seamlessly with the core ethos of most NGOs

Furthermore, SL is versatile, encompassing elements of different leadership styles such as autocratic, expert, participative, and referent leadership. Autocratic leaders, for instance, may practice SL by taking the well-being of their followers into account in their decision-making. Expert leaders can serve by leveraging their in-depth knowledge and skills to provide guidance, whereas participative leaders facilitate a servant leadership environment by involving team members in decision-making, valuing their input, and fostering collaboration. This involvement in decision-making fosters a sense of ownership and engagement among followers and in an NGO setting, ensures that interventions and programs are more aligned with the community's needs and aspirations. Referent leaders, who are admired and trusted, can serve as role models embodying the values integral to SL. This aligns with the mission of NGOs in establishing a strong relationship with the communities they serve, fostering trust, and collaboration, particularly in humanitarian efforts, environmental conservation, and social justice initiatives (D. L. Parris and Henrichs 2004).

Empirical research on SL in NGOs, though still emerging (Fischer, Dietz, and Antonakis 2017), distinctively highlights SL's suitability for these organizations. While other leadership styles, as shown in Table 1, share certain attributes with SL, it is SL's comprehensive emphasis on service, altruism, and community well-being that sets it apart (R. K. Greenleaf 1977). Unlike styles such as Entrepreneurial or Transformational Leadership, which are more focused on innovation or motivation, SL's adaptability and ethical orientation align closely with the missions of NGOs. This is particularly critical in resource-constrained environments where empowerment and collaboration are key. Additionally, SL's proficiency in navigating the dynamic challenges typical to NGOs, such as fluctuating donor interests and political landscapes, further underscores its effectiveness. The distinct contrast between SL's community-centric ethos and the more hierarchical or individualistic approaches of other styles underscores its relevance and the necessity for further exploration in the NGO sector.

Table 1. Leadership Styles

Autocratic Leadership (AUT)	AUT leaders exercise complete control and authority over decision-making without seeking input or consensus from others. They often make decisions based on their own judgment and can be directive in their management style (Yukl 2008; Yammarino et al. 2012).
Expert Leadership (EXP)	EXP leaders are highly knowledgeable and skilled in their field. They leverage their expertise to guide and influence their team members, providing guidance and support based on their deep understanding of the subject matter (Amundsen and Martinsen 2014).
Laissez-faire Leadership (LFL)	LFL leaders adopt a hands-off approach and provide significant autonomy to their team members. They trust their employees to make their own decisions and accomplish their tasks without much intervention or supervision (Graen and Uhl-Bien 1995).
Participative Leadership (PAR)	PAR leaders actively involve their team members in the decision-making process. They value input, suggestions, and ideas from their employees and aim to create a collaborative and inclusive work environment (Graen and Uhl-Bien 1995).
Referent Leadership (REF)	REF leaders earn the respect, trust, and admiration of their followers. They inspire and influence others through their personal qualities, character, and values, often serving as role models (Yukl 2008).
Transactional Leadership (TRA)	TRA leaders focus on maintaining clear expectations and establishing a mutually beneficial exchange with their followers. They provide rewards or incentives in return for meeting specified performance targets or objectives (Yukl 2008).
Transformational Leadership (TFL)	TFL inspire and motivate their followers to transcend their self-interests and work towards a collective vision. They promote personal growth, encourage innovation, and create a supportive environment (Bass and Bass Bernard 1985).
Leader-Member Exchange (LMX)	LMX focuses on the dyadic relationships between leaders and followers. It emphasizes the mutual exchange, trust, and respect in these relationships and how they can foster high-quality collaboration (Gerstner and Day 2006).
Empowering Leadership (EMP)	EMP Leadership involves delegating authority and empowering followers to take control of their work. It supports autonomy and self-direction and enables followers to contribute to decision-making processes (Amundsen and Martinsen 2014).
Shared Leadership (SHL)	SHL Leadership is characterized by the distribution of leadership responsibilities among team members. It breaks the traditional hierarchical structure and promotes a more democratic and collaborative approach (Denis, Langley, and Sergi 2012).
Ethical Leadership (ETH)	ETH Leadership emphasizes the moral aspects of leadership. It entails leaders acting with integrity, fairness, and responsibility and promoting ethical behaviours among followers (Bedi, Alpaslan, and Green 2016).

Note: Adapted from (Fries, Kammerlander, and Leitterstorf 2021)

As demonstrated in Table 1, various leadership styles contribute uniquely to organizational success. What distinguishes SL in the context of NGOs is its inherent ability to integrate diverse aspects of these styles—like the decision-making inclusivity of Participative Leadership or the ethical considerations of Ethical Leadership—into a unified approach that places service at the forefront (Dube, Zikhali, and Dube 2019). This synthesis is crucial in the complex and often resource-strained environments of NGOs.

2.2. *Social Identity Theory*

Social Identity Theory (SIT) elucidates how individuals categorize themselves into social groups and the behavioural implications of this identification (Tajfel and Turner 1979). This theory is particularly relevant in the context of NGOs, where employees and volunteers often strongly identify with the organization's mission and values. This identification contributes to their self-concept and influences their commitment, satisfaction, and overall performance within the NGO.

In the realm of NGOs, SIT not only helps in understanding the individual's identification with the organization but also extends to the dynamics within the team. TI, emerging from self-categorization into the "in-group" of team members, leads to the internalization of the team's norms, goals, and values as part of an individual's self-concept. This shared identity fosters cohesion, trust, cooperation, and a collective orientation among team members, enhancing team processes and outcomes (Laukka et al. 2022).

Moreover, SIT is instrumental in understanding team climate, defined as the shared perceptions of behavioural norms in the team environment (Brown and Pehrson 2019). This climate is shaped by interaction patterns and social cues within the team, influenced by the social identification with the group. Such identification promotes adherence to mutually defined norms and expectations, crucial for maintaining a positive and productive team atmosphere.

Thus, understanding the dynamics of social identity in NGOs is crucial, not only for fostering a sense of belonging among employees and volunteers but also for navigating the social landscapes of the communities they serve. In this context, SL plays a vital role by cultivating inclusive, ethical norms that team members internalize, aligning personal and collective identity. This alignment via effective leadership is proposed to impact team processes and outcomes in NGO project teams, demonstrating the multifaceted influence of SIT in these organizations.

2.3. *Influence of Servant Leadership on Team Climate*

In the context of NGOs, the concept of Project Success Climate is pivotal, encompassing vital factors like effective collaboration, clear communication, aligned goals, and a shared sense of purpose. This specific climate type is of significant relevance in the NGO sector, characterized by its project-driven and mission-oriented approach. Research underscores the direct correlation between a healthy project success climate and crucial organizational outcomes such as heightened productivity, increased job satisfaction, and improved employee retention (Vishnubhotla, Mendes, and Lundberg 2020; Sageer, Rafat, and Agarwal 2012; Acuña, Gómez, and Juristo 2008; Bashshur, Hernández, and González-Romá 2011). These elements, fundamentally critical for the successful completion of projects in NGOs, are heavily influenced by the prevailing team climate within the organization.

SL, which emphasizes empathy, listening, and community building, is instrumental in fostering this Project Success Climate. SL is centred around the growth and welfare of team members, creating a conducive environment for open communication, shared responsibility, and collaborative problem-solving (Burton, Peachey, and Wells 2017). This leadership style significantly contributes to developing a climate where team members are deeply invested in and committed to the project's goals. Such a climate is not only conducive to individual members' development but also enhances the overall likelihood of project success in NGOs (Tuan 2020).

However, the effectiveness of SL in creating and maintaining a Project Success Climate can vary based on the specific organizational context within NGOs. Research by (Laukka et al. 2022) and (Shaw et al. 2012) indicates that the impact of SL might differ depending on the organizational culture and settings. These studies suggest that the organizational environment can either amplify or mitigate the influence of SL on project outcomes. In addition, (Agreli, Peduzzi, and Bailey 2017) highlights the critical role of a strong team climate (TC), particularly in fostering communication and mutual support, which are key elements for the success of projects.

The conception of TC, as defined by (West and Richter 2011) and (Ilgen et al. 2005), as the collective perception of team behaviors, is especially crucial in NGOs. When this climate aligns with project objectives, it significantly boosts team effectiveness and project outcomes. This alignment facilitated through SL, is vital for enhancing team dynamics and

ensuring successful project completion. The complex interaction among SL, Project Success Climate, and the NGO-specific context emphasizes the necessity for customized approaches in applying SL principles. Such tailored strategies are essential for fostering a climate that is conducive to project success in NGOs, thus reinforcing the pivotal role of SL in shaping and directing team climates towards achieving organizational goals and objectives.

In addition to fostering a collaborative and empathetic team environment, SL is inherently linked with robust feedback mechanisms and a culture of continuous learning. By encouraging open dialogue and constructive feedback, SL enables NGOs to adaptively refine their strategies and practices, ensuring that the project success climate is responsive to the evolving needs of both the team and the broader organizational mission. This dynamic approach not only sustains a positive climate but also embeds a culture of perpetual improvement and adaptation within the organization.

2.4. *Influence of Servant Leadership Style on Team Identification*

In the context of NGOs, SL is paramount for enhancing team identification, a concept deeply rooted in SIT. SIT posits that a person's sense of self is partly derived from their group memberships, with SL in NGOs fostering a sense of belonging and psychological connection amongst team members (Turner, Reynolds, et al. 2010). This alignment with SIT is evident as SL in multicultural environments nurtures an inclusive climate, strengthening team identification and aiding in overcoming challenges like cultural differences and past conflicts (Randel et al. 2018). By prioritizing service over hierarchy, SL builds trust and collaboration, reinforcing a strong sense of team identification (TI) crucial for effective multinational teamwork (Robert K. Greenleaf 2002).

The choice of TI and team climate as mediators is grounded in their relevance to NGO team dynamics. Team identification, influenced by SL, aligns with SIT's emphasis on group membership shaping individual behaviors and attitudes (Ashforth and Mael 1989). This concept is critical in enhancing team cohesion and collective efficacy, essential elements for NGO team performance (Van Der Vegt, Van De Vliert, and Oosterhof 2003). Research highlights SL's impact on team identification, linking it to outcomes like project success, reduced work withdrawal, and employee creativity (Walumbwa et al. 2011). Cultural dimensions, such as horizontal and vertical collectivism, modulate the SL-team identification relationship, further underscoring the importance of team identification in diverse settings (Fei 2023).

SL extends beyond team dynamics to the broader organizational framework in NGOs. By focusing on team members' needs, shared goals, diversity, and ethical practices, SL fosters a robust sense of team identification (Spears 2005). This approach is crucial for developing cohesive, effective teams equipped to tackle humanitarian challenges with agility (Eva et al. 2019). SL ensures deep engagement with team objectives, successes, and challenges, fostering a unified and purpose-driven work environment, illustrating the practical application of SIT in organizational settings (Robert K. Greenleaf 2002).

2.5. *Hypothesis statements*

Based on the literature discussed above, we aim to examine the following hypotheses [H]:

- **H1:** A servant leadership approach to management will positively affect project success in an NGO setting.
- **H2:** Team climate will mediate the relationship between servant leadership and project success in an NGO setting.
- **H3:** Team identification will mediate the relationship between servant leadership and project success in an NGO setting.
- **H4:** Team climate will positively affect project success in an NGO setting.
- **H5:** Team identification positively affects project success in an NGO setting.

As shown in Figure 1, our study proposes direct and indirect pathways of SL influence on project success. We posit that TC and TI are mediators in this process, in alignment with SIT. SIT indicates that a group's sense of unity and member identification, as seen in NGO teams, directly shapes member behaviour and motivation.

TC, under the influence of SL, engenders an atmosphere of trust, communication, and cooperation, which are vital for nurturing a strong TI and commitment to the NGO's mission. Thus, TC mediates the effect of SL on project success (H2). Likewise, a robust TI, bolstered by SL, fosters a sense of unity and shared purpose, which directly impacts the collective efforts and project results (H3).

In cohesive teams with a unified vision, the moderating role of TC and TI may reduce the direct impact of SL on project success. This accentuates the importance of TC elements such as trust, communication, and cooperation. Moreover, when TI is strong, the team might depend more on the collective climate than on the direct influence of SL, thereby enhancing a sense of belonging and motivation. Accordingly, we hypothesize that a positive TC, developed through SL, will significantly influence project success (H4 and H5).

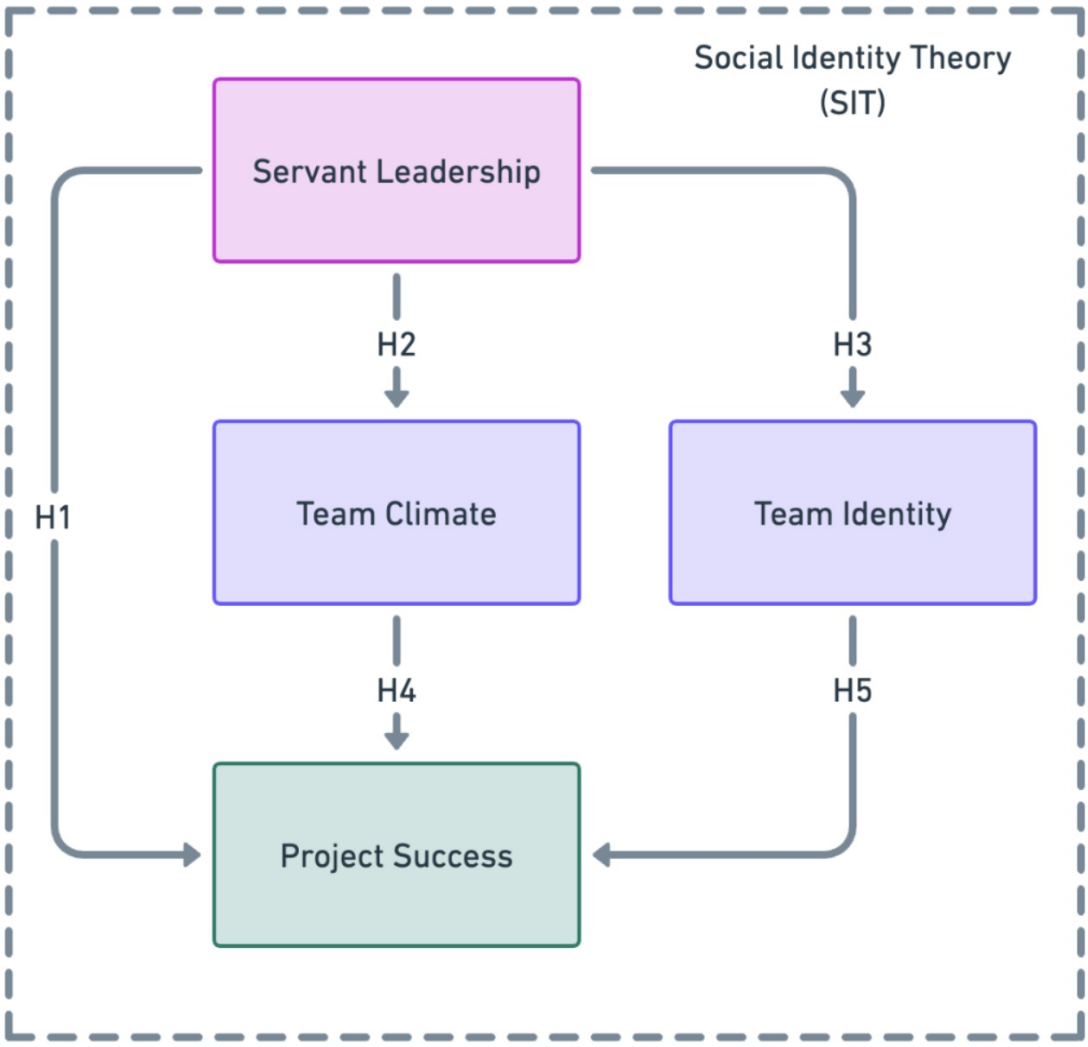

Figure 1. Servant Leadership in NGOs Within A Social Identity Theory Framework

3. Study Data and Methodology

3.1. *Overview of the data*

Our study population consists of individuals with experience implementing projects in NGO settings across diverse regions, including the US, Latin America, Asia, Africa, and Europe. To ensure the representativeness of NGOs engaged in humanitarian and development projects, 25 NGOs were randomly selected from each geographic location based on a comprehensive Google search, following the methodology outlined by (Kotrlik and Higgins 2001). Although the data were analyzed at the individual level to capture the nuances of personal experience and leadership influence, the aggregation of these individual responses to reflect a group-level perspective could offer additional insights and is an avenue for future research. Given the dispersed nature of the target respondents, online versions of the questionnaire were developed, and various restrictions were implemented to avoid repetitive responses from the same individuals. The questionnaire was emailed to NGO representatives, who were instructed to share the link with individuals directly involved in the projects, such as volunteers and paid workers, excluding project managers, to reduce self-response bias.

The quantitative questionnaire consisted of two parts. The first part provided an explanation of the study objectives, guidelines for questionnaire completion, researcher identities and affiliations, and a commitment to confidentiality. This aimed to enhance response accuracy and mitigate response bias issues, as suggested by (Black and Babin 2019). The second part focused on collecting data on independent variables (SL, TI, and TC) and the dependent variable (Project Success, indicating project manager performance). To address common method bias, item measurements were kept simple and concise, utilizing a 7-point Likert scale for different item groups (Podsakoff, MacKenzie, and Podsakoff 2012).

This study employs the Harvard Dataset ((Mombeuil, Diunugala, and Jeune 2023)) to examine the dynamics between SL and project performance, focusing on variables like project success, gender, education, age, and job position across 451 participants involved in various project types and regions. The dataset provides a comprehensive overview, with significant attention to environmental (20.2%), community/family (16.99%), healthcare (14%), and food security projects (12%), and classifies project leaders into seven roles for in-depth analysis. It also rigorously assesses the survey instruments' psychometric properties through confirmatory factor analysis, evaluations of convergent and discriminant validity, and reliability checks using Composite Reliability (CR) and Average Variance Extracted (AVE), further addressing common method bias via Harman's single-factor test and a full collinearity approach (see ((Mombeuil, Diunugala, and Jeune 2023)). These measures significantly bolster the dataset's reliability and validity. While the study primarily adopts an individual-centric perspective, it suggests the potential benefits of aggregating data to the team level for future research to better understand the influence of team dynamics on project success. Additional demographic information is detailed in Table 2, providing a robust basis for our analysis and affirming our methodological rigour.

Table 2. Geographic Region of Data Collection and Project Types

Region	Valid Responses	Pct.	Categories	Pct.
US	170	37.7%	Food Security	11.9%
Latin America	70	15.5%	Water supply, sanitation and hygiene projects	7.9%
Asia	118	26.2%	Environmental Related	20.2%
Europe	48	10.6%	Alternative low cost energy	2.8%
Africa	45	10.0%	Capability Building	3.9%
1-3 Total	451	100.0%	Community/family-based child development	16.9%
			Health Care Service	14.6%
			Post Disaster Relief	4.7%
			Sustainable & Affordable Construction	6.2%
			Others	11.9%

Note: Data was collected from March to June 2021 (Mombeuil, Diunugala, and Jeune 2023). The first month yielded 170 valid responses from US NGOs, the second month obtained 70 valid responses from NGOs in Latin America, the third month collected 118 valid responses from Asian NGOs, the fourth month gathered 48 valid responses from European NGOs, and the fifth month resulted in 45 valid responses from African NGOs.

In examining descriptive statistics, we found participants a mean projects success score of 5.40 and a standard deviation of 0.98, indicating that the data is fairly consistently centred around the mean and that most participants deemed their project a success. Males dominated the participant pool, accounting for approximately 62.2% of the respondents. The participant's education level showed a moderate level of diversity, as noted by the standard deviation of 0.85, The participant age distribution showed a degree of diversity ($\sigma = 0.80$), while job positions among the participants exhibited significant variation ($\sigma = 1.71$) with a mean of 3.08. Overall, these findings highlight the diverse characteristics and perspectives within the participant sample. Descriptive statistics also display the interaction effects between SL, TI and TC. Interaction effects aid in unravelling the intricate relationships and nuanced influences between variables, thereby providing a deeper understanding and avoiding oversimplified conclusions about their interplay. By exploring these interactions, we aim to capture the complex dynamics and uncover practical implications in real-world scenarios. From the interaction effects, we note that the interaction attribute pairs, such as SL*TI, SL*TC, and TI*TC, revealed interesting patterns, with means ranging from 0.7 to 0.8 and standard deviations hovering around 1.5. Notably, the three-way interaction (SL*TI*TC) exhibited a mean of -0.48 and a high standard deviation of 4.13, indicating significant variability and suggesting the presence of complex relationships between these variables. Descriptive statistics can be found in Table 3.

Table 3. Descriptive Statistics

	N	Min	Max	Mean	Std. Error	Std. Dev	Skewness
Project Success (PS)	451	1.33	7.00	5.40	0.047	0.989	-0.828
Education	451	1.00	5.00	3.21	0.040	0.845	-0.304
Age	451	2.00	5.00	3.08	0.038	0.800	0.538
Job Position	451	1.00	7.00	3.69	0.081	1.713	-0.106
Servant Leadership (SL)	451	-4.08	1.69	0.00	0.054	1.139	-0.916
Team Identification (TI)	451	-4.17	1.83	0.00	0.048	1.030	-0.546
Team Climate(TC)	451	-4.51	1.49	0.00	0.050	1.071	-1.011
SL*TI	451	-4.74	13.63	0.72	0.076	1.622	3.670
SL*TD	451	-1.99	16.38	0.88	0.082	1.733	4.451
TI*TC	451	-2.97	11.53	0.75	0.069	1.482	3.766
SL*TI*TC	451	-44.46	9.53	-0.48	0.194	4.127	-6.636
Gender = Male	451	0.00	1.00	0.62	0.023	0.487	-0.48

Note: The education level of the study participants is split as follows: high school (2.7%), college (15.5%), bachelor's (43.7%), masters (34.4%), and Ph.D. (3.5%)

To boost the performance of statistical methods, mean-centring was applied to the three continuous variables (SL, TI, and TC). Mean-centring, a common preprocessing step in statistical analysis, represents a linear transformation of data that shifts it to the origin. A consensus exists among researchers that mean-centring variables X_1 and X_2 reduces their

correlations with the product term X_1X_2 (Iacobucci et al. 2016). As such, mean-centring brought about a close approximation to 5 on a 7-point scale, with standard deviations near 1, as represented visually in Figures 2-4. Affirmation of the nearly normal distribution of these variables is further supported by updated descriptive statistics displayed in Table 4 where the standard deviation is near 1.0.

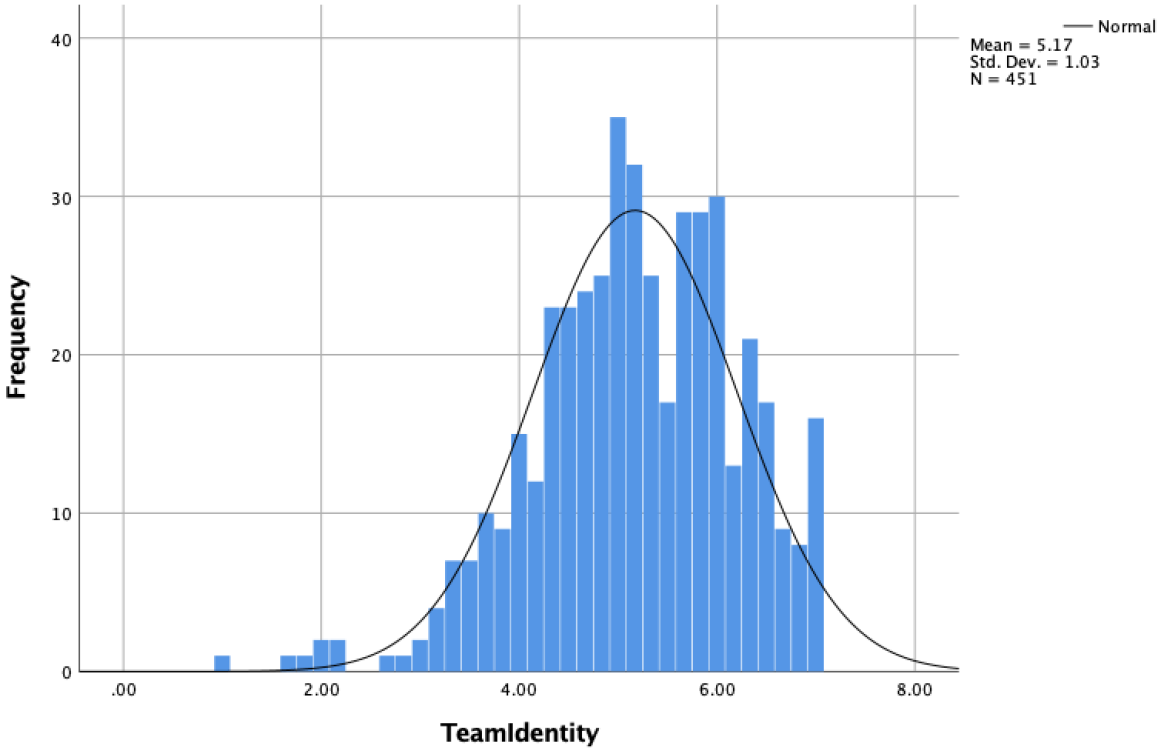

Figure 2. Team Identification

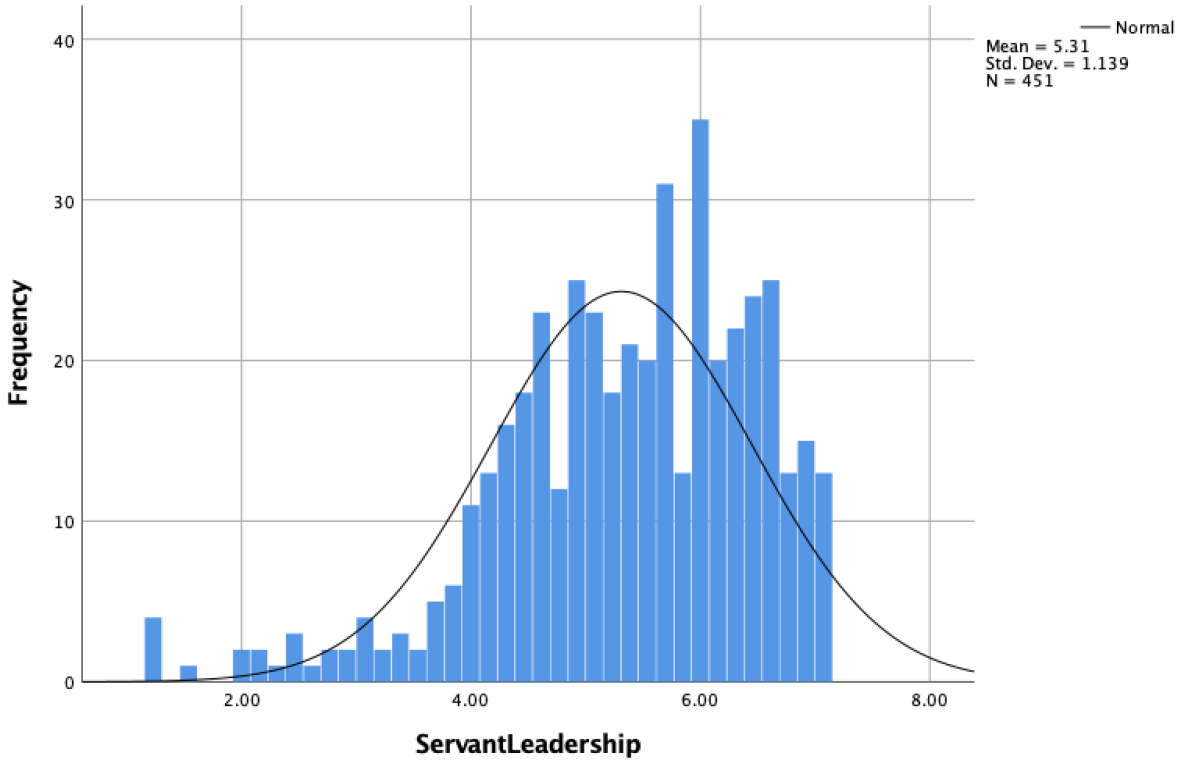

Figure 3. Servant Leadership

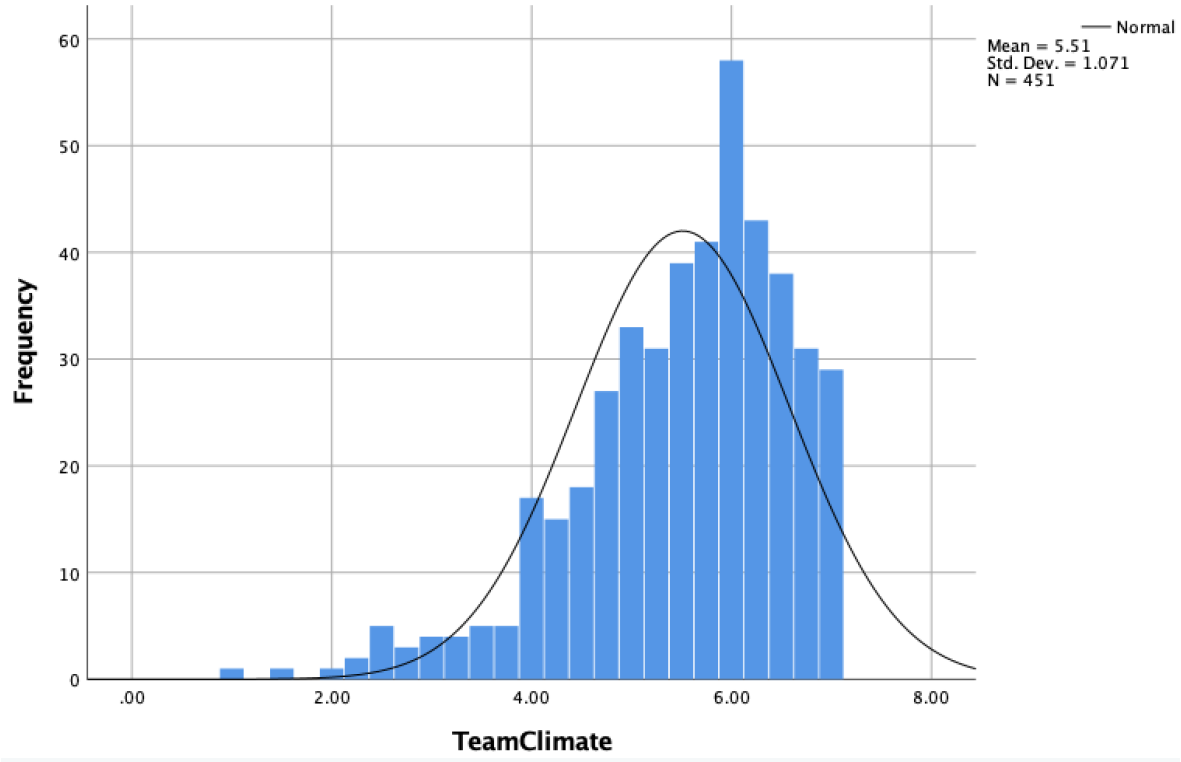

Figure 4. Team Climate

Table 4. Mean-Centered Descriptive Statistics

	N	Min	Max	Mean	& Std. Dev	
Servant Leadership (SL)	451	1.23	7.00	5.31	& 1.139	
Team Identification (TI)	451	1.00	7.00	5.17	0.048	1.029
Team Climate(TC)	451	1.00	7.00	5.512	0.989	0.989

A preliminary analysis was conducted using a Pearson correlation matrix to gain insights into the relationships between the principal variables (Martens et al. 2021). As depicted in Table 5, notable positive correlations were observed between SL and PS ($r = 0.689$), TI and PS ($r = 0.647$), and TC and PS ($r = 0.732$). These statistically significant findings indicate a robust association between the predictor variables and project success.

Table 5. Correlation Matrix

	SL	TI	TC	Pro Suc
Servant Leadership (SL)	1	.616**	.721**	.689*
Team Identification (TI)	.616**	1	.679**	.647**
Team Climate (TC)	.721**	.679**	1	.732**
Project Success (PS)	.689*	.647**	.732**	1

*Note: Asterisks indicate the coefficient significance level: * for 10%, ** for 5%, and *** for 1%.*

3.2. *Variables and Measurement*

Project Success. Adapted from (Ika 2012), this measure utilised nine items in the question set. Project success encompasses various aspects, such as adhering to the project budget, meeting expected timelines, delivering high-quality outputs, and ensuring long-term impact. Additionally, project success involves stakeholder involvement, ownership extension to the local community, effective monitoring and reporting, economic sustainability, and satisfaction of the local community.

Servant Leadership. Adapted from (R. C. Liden et al. 2008), this 13-question set of measurements of leader style strongly emphasises serving and supporting team members. Leaders who exhibit servant leadership prioritise the well-being and development of their team while also upholding high ethical standards. They are effective problem-solvers, thoroughly understand the organisation's goals, and provide opportunities for their team members to acquire new skills. Servant leaders value honesty, care about the well-being of their employees, emphasise the importance of giving back to the community, and actively participate in community activities. They create an environment where employees feel comfortable seeking help and are encouraged to volunteer.

Team Identification. Adapted from (R. C. Liden et al. 2008; Mael and Tetrick 1992). this six-question set focuses on how individuals perceive themselves as members of a particular team. It involves a sense of belonging and identification with the team and its members. Team Identification is reflected in individuals seeing themselves as integral parts of the team,

taking pride in their team membership, and feeling strong ties with other team members. Furthermore, team Identification encompasses the belief that the team's success is also the individual's success, fostering a shared sense of accomplishment and motivation.

Team Climate. Adapted from (West and Altink 1996; Doosje, Ellemers, and Spears 1995; Figl and Saunders 2011), this six-question survey refers to a team's overall atmosphere and working environment. Based on a six-question set, a positive team climate is characterised by open communication, trust, and collaboration. In such a climate, team members are comfortable challenging each other's ideas and providing constructive feedback to enhance team effectiveness. They engage in reflective practices, evaluate their weaknesses, seek different perspectives, and reassess proposed solutions. A supportive team climate encourages continuous improvement and fosters a culture of shared learning and growth. A complete list of questionnaire items making up the study's measures can be found in Table 12.

3.3. *Methodology*

Our study employs Hierarchical Regression and Binary Logistic Regression to analyze the relationship between servant leadership and project performance. These advanced analytical methods allow us to create a robust framework for investigating the influence of SL's effect while controlling for numerous variables. In addition, employing these statistical approaches allows us to uncover potential interaction effects between SL and other key factors, shedding light on how the impact of SL may vary across different contexts.

The usage of a hierarchical model permits the β^j parameters to function as a result of the overall mean association and the residual variation (Richardson et al. 2015). The hierarchical model is presented as per Eq. 1:

$$\beta^j \sim N\left(\delta, \tau^2\right), \quad \text{for } j = 1, \ldots, J$$

where:

β^j	denotes the jth beta coefficient, for $j = 1, \ldots,$
J	corresponds to the influences of each predictor variable
δ	is the mean of the normal distribution and signifies the expected value of beta coefficients.
τ^2	represents the variance of the normal distribution

Binary logistic regression is instrumental for analyzing categorical response variables, particularly when outcomes are dichotomous, and relationships may be non-linear, as noted by (Midi, Sarkar, and Rana 2010). Its widespread application across various fields—including social sciences, and demography—underscores its value in scenarios where binary dependent variables prevail. Importantly, this method facilitates the examination of probabilities related to binary outcomes, such as project success, offering crucial insights for decision-making in project management. Therefore, logistic regression emerges as a critical analytical tool within these disciplines (Martens 2022). The regression model is

detailed in Eq. 2.

$$\log\left(\frac{p}{1-p}\right) = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \ldots + \beta_p x_p$$

where:

Y	represents the dependent variable or the outcome being predicted.
$X_1, X_2, \ldots, X_k$	are the predictor variables in the first block or level of the model.
$\beta_0, \beta_1, \beta_2, \ldots, \beta_p$	are additional predictor variables in subsequent blocks or levels of the model.
$\beta_0, \beta_1, \beta_2, \ldots, \beta_p$	are the coefficients (parameters) associated with each predictor variable.
ε	represents the error term.

These approaches noted above provide valuable tools for conducting rigorous statistical analyses, allowing researchers to delve deeper into the data and evaluate their research hypotheses. However, it is crucial to acknowledge and address the underlying assumption of a normal distribution in the data. The normal distribution assumption is fundamental in numerous statistical tests, and the validity of the conclusions drawn from these tests relies heavily on how well this assumption is met (Ghasemi and Zahediasl 2012). By ensuring the data follows a normal distribution, researchers can enhance the reliability and accuracy of our statistical analyses, thereby strengthening the validity of their research findings (Martens, Yapa, and Safari 2021).

4. Results and Findings

4.1. *Quantitative Findings - Bivariate Analysis*

We begin our analysis with a bivariate analysis of categorical variables to investigate the relationships between variables to understand better if and how these variables are related to each other. Data displayed in Table 6 indicates that 'Job Position' (JP) significantly influences project success, with a higher job position correlating with increased project success. However, many variables, such as Gender, do not significantly impact project success in this model, suggesting that factors other than those listed may be at play.

Table 6. Bivarate Analysis

Variable	Coefficient	t-statistic
Gender = male	-0.048	-1.399
Age	0.009	0.264
Education	0.025	0.748
Job Position	0.400***	20.339
Geographic Region	0.052	1.538
NGO characteristic	-0.014	-0.405
Project Characteristic	-0.051	-1.487
Project Duration	0.430	1.260
Project Size	0.008	0.249
TeamSize	0.000	-0.01
_cons	3.924***	49.003

*Note: Dependent variable is Project Success. Asterisks indicate the coefficient significance level: * for 10%, ** for 5%, and *** for 1%.*

While *JP* is the sole significant variable affecting Project Success in our dataset, the potential influence of other variables should not be overlooked. Studies such as those by (Mullen and Copper 1994) and (Tziner 1985) highlight the impact of team homogeneity on performance, suggesting that similarities in gender, age, and education can enhance productivity. (Wiersema and Bantel 1992) further underscores the importance of demographic homogeneity in fostering effective communication and team Identification.

The Equity Theory proposed by (Jackson et al. 1995) also emphasizes the role of perceived status differences within a team in shaping communication and resource sharing. Given these theoretical frameworks and the empirical model by (Bowers, Pharmer, and Salas 2000), it is crucial to consider variables such as Gender, Age, and Education alongside Job Position. This comprehensive approach allows for a more robust understanding of project outcomes, enhancing the reliability of results and informing decision-making processes.

Table 7. Hierarchical Regression: Effects on Project Success

Variable	Model 1	Model 2	Model 3	Model 4
Gender = male	.092	0.036	0.048	0.047
	(1.307)	(0.061)	(0.779)	(0.765)
Age	.010	0.026	0.030	0.022
	(.241)	(0.037)	(0.818)	(0.607)
Education	.021	0.012	0.016	0.014
	(.503)	(0.035)	(0.447)	(0.385)
Job Position	.400***	9.414E-5	-0.028	-0.040
	(20.327)	(0.041)	(-0.597)	(-0.840)
Servant Leadership (SL)		0.241***	0.234***	0.254***
		(0.038)	(5.978)	(6.348)
Team Identification (TI)		0.203***	0.184***	0.227***
		(0.042)	(4.215)	(4.773)
Team Climate (TC)		0.359***	0.448***	0.457***
		(0.065)	(5.514)	(5.637)
SL*TI			-0.070*	-0.080
			(-2.143)	(-2.431)
SL*TC			0.035	0.020
			(1.297)	(0.711)
TI*TC			0.061	0.028
			(1.634)	(0.699)
SL*TI*TC				-0.032**
				(-2.231)
_cons	3.769***	5.262***	5.307***	5.411***
	(19.508)	(0.215)	(24.238)	(24.272)
n	446	443	440	439
R^2	.482	.614	.619	.623
Adj. R^2	.478	.608	.610	.614
Std. Error	.71516	.619	.617	.614
VIF	1.027	2.706	3.461	3.417

Note: The t-statistics are presented below the coefficients. Asterisks indicate the coefficient significance level: * for 10%, ** for 5%, and *** for 1%.

In Model 1 (Table 7) we examined the categorical variables of Gender, Age, Education, and Job Position via hierarchical regression. The model's findings confirm the Bivariate analysis finding that only Job Position is statistically significant in influencing Project Success. Furthermore, the model's predictive power is low (Adj. R^2 = 0.48). In Model 2, we incorporated SL with TI and TC and TI and TC in addition to the categorical variables. The addition of these variables increases the Adj. R^2 60.08% , indicating a significant increase of 13.2% in explanatory power. Interestingly, in Model 2,

JP fails to maintain a statically significant effect on project success. Rather, only SL, TC, and TI positively influence Project Success and support the study hypotheses.

In Model 3, three interaction effects are incorporated: SL and TI, TC and TI, and TC. The inclusion of SL and TI is premised on the proposition that servant leaders, by fostering a positive team climate, can elevate trust, cooperation, and motivation among team members, thus potentially enhancing Project Success. Concurrently, the SL and TC interaction is integrated based on a similar rationale. Additionally, the TI and TC interaction is included under the supposition that when team members harbour a strong sense of identity and belonging, they are more likely to align their aspirations and efforts toward project objectives. However, it is notable that these interaction effects do not yield statistical significance, except SL and TI. Counter to initial expectations; this interaction is negatively associated with Project Success, indicating that the combination of SL and TI does not positively contribute to the project's success.

Model 4 demonstrates a three-way interaction involving SI, TI, and TC. Of note, Adj. R^2 increased from 0.608 (Model 2) and 0.610 (Model 3) to 0.614. However, the results suggest that it has a negative coefficient despite the significant interaction. This negative coefficient could be attributed to a complex interplay between the variables where the combined effect of SL, TI, and TC does not align synergistically and may even counteract each other in certain contexts, leading to a decrement in Project Success. The negative sign could also reflect unforeseen moderating variables or interactions that attenuate the expected positive relationships among SL, TI, and TC. It is further suppositions that when individuals incorporate the values and beliefs of the group, such as SL's promotion of a serving culture, into their own identities, it can influence their behaviour and attitudes (Pratt 1998). However, there may be conflicts and inconsistencies between servant leadership ideals and team Identification in a heterogeneous group with disparate perspectives and approaches. These interactions are visualized in Figure 7 and Figure 8 of the Appendix.

In the regression analysis, the Variance Inflation Factor (VIF) values were scrutinized to ascertain the presence of multicollinearity among the variables encompassed in the four models. The literature posits that VIF values below 10 indicate the absence of multicollinearity (Martens, Yapa, and Safari 2020). The empirical findings reveal that all four models manifest VIF values below this threshold, implying the absence of any significant multicollinearity issues. Consequently, the regression analysis buttressing the positive impact of SL, TI, and TC on Project Success is fortified by the diminished correlation among the predictor variables within the models.

4.1.1. *Binary Logistic Regression*

Hierarchical regression, a critical tool in model selection, often grapples with the challenge of accurately gauging success due to subjective metrics. This predicament can be navigated using Binary Logistic Regression, which evaluates the intricate interplay between predictor variables and binary outcomes, thereby enhancing precision in estimating success probabilities. To quantify project success, surrogate variables, represented on a refined 0-7 scale with four as the midpoint, have been introduced to bolster the analytical robustness, enabling clear differentiation of successful projects.

In our regression, we note that (*JP*) was significantly influential on project ($p < 0.05$) when assessed without SL, TI, and TC. Incorporating *JP* as a control variable augments our understanding of its role in the interplay between main variables

and project outcomes. Despite the preponderance of *JP*, it is vital to recognize the influence of other variables, such as Project Characteristics.

Our Binary Logistic Regression analysis, presented in Table 8, reveals that the model holds a Nagelkerke R^2 value of 0.588, indicative of its significant explanatory capacity in mediating and assessing a wide range of variables influencing project outcomes. In the analysis, while categorical variables exhibit no significant impact on Project Success, three key variables – SL ($p < 0.01$), TI (p – *value* < 0.03), and TC ($p < 0.08$) – are found to substantially influence project outcomes. The positive interactions among these variables imply a collective synergy that enhances Project Success. These observations are congruent with Model 2 of the Multivariable Regression analysis, which bolsters the consistency of the Binary Logistic Regression results and corroborates the initial hypothesis (H1) posited in the study.

Moreover, despite the non-significance of Job Position, it is noteworthy that specific roles, namely the Chief Technology Officer (CTO) and Project Management, appear to impact project success negatively. Such adverse effects may stem from the CTO's potential misalignment with project goals or ineffective communication leading to resource discrepancies and from inefficiencies in Project Management such as poor risk handling. The heightened responsibilities and decision-making authority attributed to these roles could amplify the consequences of any shortcomings. Additionally, the organizational culture, if not conducive to collaboration, could further hinder the positive contributions of these roles. Concurrently, a χ^2 test statistic of 7.46 with 8 degrees of freedom ($p > 0.488$) attests to the model's excellent fit to the data.

Table 8. Binary Logistic Regression: Effects on Project Success

Variable	Coefficient	t-statistic
ProjectCharacteristic = Sustainable & Affordable Construction	-1.086	0.53
JobPosition = Project Management Office	-0.142	0.797
JobPosition = Project portfolio manager	-0.448	0.499
JobPosition = Chief Technology Officer	-0.433	0.489
JobPosition = Volunteer Team member	0.236	0.553
JobPosition = Team leader/Project Manager	0.116	1.186
JobPosition = other	-1.247	1.229
Servant Leadership	0.654***	0.181
Team Identification	0.655***	0.22
Team Climate	1.077***	0.405
Constant	-11.47***	2.702

*Note: Asterisks indicate the coefficient significance level: * for 10%, ** for 5%, and *** for 1%.*

In this analysis, categorical variables within the model demonstrate no significant impact on Project Success. Nevertheless, three essential variables – Servant Leadership ($p < 0.01$), Team Identification ($p < 0.03$), and Team Climate

($p < 0.08$) – significantly influence project outcomes, underscoring their crucial role in assessing project feasibility. Additionally, observed positive interaction among these variables suggests collective impact enhancing Project Success. These findings align with Model 2 of the Multivariable Regression analysis, validating the consistency of the Binary Logistic Regression results and thereby reinforcing the initial hypothesis (H1) put forth in the study.

4.2. Robustness Check: Resolving Outliers

In pursuit of further insights into the determinants of Project Success, this section examines residuals and outliers to enhance our understanding of Project Success determinants. Analyzing substantial standardized residuals revealed potential model limitations in capturing the relationship's full scope (Table 9 - Panel A). To address this, we standardized predicted values for clearer interpretation. Panel B's Kolmogorov-Smirnov and Shapiro-Wilk tests indicated significant deviations from normality ($p < 0.001$), suggesting underlying complexities or outliers. Through data transformations and robust statistical methods, we addressed these deviations, refining our dataset from 451 to 435 observations by removing outliers. The effectiveness of our outlier remediation is visually supported by the post-remediation Box-Plot (Figure 6), demonstrating a marked reduction in outliers and enhancing the dataset's suitability for detailed analysis (Figures 5-6). The refined dataset's descriptive statistics are detailed in Table 10, confirming the data cleansing's success.

Table 9. Statistical Analyses on Predicted Values and Normality Tests

Metric	Panel A: Standardization and Predicted Values				Panel B: Normality Tests			
	Minimum	Maximum	Mean	Std. Dev	Test	Statistic	df	Sig.
Predicted Value	3.037	6.564	5.402	0.781	Kolmogorov-Smirnov	0.067	451	< .001
Residual	-2.427	2.459	0.000	0.607	Shapiro-Wilk	0.962	451	< .001
Std. Predicted Value	-3.028	1.488	0.000	1.000				
Std. Residual	-3.947	4.000	0.000	0.980				

Table 10. Descriptive statistics

Variable	N	Mean	SD
ProSuc	435	5.436	0.916
Gender=male	435	0.628	0.484
Education	435	3.200	0.843
Age	435	3.070	0.797
JobPosition	435	3.730	1.691
SL	435	0.000	1.102
TI	435	0.000	1.001
TC	435	0.000	1.017
SL*TI	435	0.669	1.573
SL*TC	435	0.789	1.567
TI*TC	435	0.700	1.379
SI*TI*TC	435	-0.419	3.862

Following outlier adjustments, we reassessed our models to gauge robustness. Model 1 showed that key variables maintained their significance, with model fit improving (R^2 from 0.48 to 0.55), indicating a refined explanatory power of control variables without revealing new insights. Model 2's variables—SL, TI, and TC—continued to significantly predict Project Success, with Adjusted R^2 rising from 0.614 to 0.700, reflecting a better understanding of underlying patterns and affirming the primary variables' importance in success determinants.

Model 3 introduced two-way interaction terms, enhancing the analysis of variable interplays and uncovering significant positive interactions between TI and TC, a new insight not evident in initial models. Model 4, incorporating control variables, main effects, two- and three-way interactions, explained 70.7% of the variance in project success, highlighting the complexity captured by three-way interactions. However, the negative and marginally significant three-way interaction among SL, TI, and TC indicates a reduced likelihood of success under specific conditions, adding depth to our understanding of project dynamics.

Table 11. Robustness Check: Unstandardized Coefficients

Variable	Model 1	Model 2	Model 3	Model 4
(Constant)	3.793***	5.358***	5.384***	5.484***
	(22.342)	(29.569)	(29.433)	(29.484)
Gender=male	0.038	0.002	0.015	0.013
	(0.612)	(0.046)	(0.289)	(0.259)
Education	0.042	0.025	0.034	0.033
	(1.162)	(0.853)	(1.147)	(1.104)
Age	-0.003	0.008	0.013	0.006
	(-0.068)	(0.246)	(0.438)	(0.196)
JobPosition	0.400***	-0.007	-0.037	-0.049
	(22.677)	(-0.215)	(-0.957)	(-1.260)
SL		0.279***	0.271***	0.290***
		(8.707)	(8.321)	(8.729)
TI		0.208***	0.207***	0.245***
		(5.750)	(5.555)	(6.136)
TC		0.357***	0.436***	0.445***
		(6.333)	(6.430)	(6.597)
SL*TI			-0.043	-0.054*
			(-1.590)	(-1.987)
SL*TC			0.006	0.013
			(0.239)	(0.515)
TI*TC			0.080*	0.053
			(2.479)	(1.562)
SL*TI*TC				-0.031*
				(-2.545)
n	430	427	424	423
F Change	128.948	77.204	2.371	6.475
R^2	0.545	0.705	0.71	0.71
Adj. R^2	0.541	0.700	0.703	0.707
Std. Error	0.621	0.502	0.499	0.496
F-Change	128.948	77.204	2.371	6.475
Sig.F-Change	< .001	< .001	0.070	0.011

*Note: The t-statistics are presented below the coefficients. Asterisks denote the coefficient significance level: * for p<0.05, ** for p<0.01, and *** for p<0.001.*

5. Discussions

The findings of this study contribute to a greater comprehension of the factors influencing successful project outcomes within NGOs' context. The primary objective was to examine the effect of SL on project success, with results affirming a

positive relationship. These findings resonate with prior research by (Ellahi et al. 2022), (Irving and Longbotham 2007), and (Gotsis and Grimani 2016), underscoring the pivotal role of SL in enhancing project performance within NGOs.

SL practices, such as empowering team members, fostering a sense of ownership, and supporting their personal and professional growth, have shown a positive impact on project success. By nurturing an environment that bolsters team members' commitment, motivation, and engagement, SL significantly enhance NGO project performance. Given that SL promotes effective communication, knowledge sharing, and collaborative problem-solving, it emerges as crucial for project management in NGOs.

Regarding the H2, exploring the impact of TI on the SL-project success relationship revealed nuanced insights. The data suggests that a strong TI might moderate the SL's positive effect on project success. In environments with high team unity and shared goals, the reliance on collective identity and norms might diminish the prominence of individual SL traits, suggesting a complex interaction between TI and SL. This unexpected finding highlights the need for further research to elucidate the dynamics at play and define the conditions under which TI influences the SL-project success linkage.

Moreover, the investigation into H3, focusing on TI's direct effect on project success, provided evidence that SL's beneficial impact is significantly enhanced by high TI. A team environment characterized by trust, mutual support, and open communication, when coupled with SL, promotes collaborative synergy and cooperation, essential for project success. Additionally, a positive TC alongside high TI creates a conducive atmosphere for effective communication and decision-making, leading to better project outcomes. This aligns with findings from (Nauman et al. 2022) and (Yoshida et al. 2014). However, the unexpected negative interaction between SL, TI, and TC suggests potential overemphasis on interpersonal relations and internal dynamics at the expense of focusing on essential project tasks. High TI and TC might also lead to complacency, reducing the urgency or critical evaluation needed for project success. This indicates that the relationship between SL, TI, and TC is more intricate than previously thought, pointing towards the possibility of unexplored moderating variables or interactions.

6. Contributions. Limitations and Future Research

6.1. *Theoretical Contribution*

This study uniquely contributes to theoretical knowledge by exploring the interplay between Servant Leadership Theory (SLT) and Social Identity Theory (SIT) in shaping TC within NGOs. While previous research has examined the individual effects of SL and SIT on various outcomes, this study delves deeper by investigating how these theories interact to influence the specific context of team climate. The research reveals the unique interplay between intrinsic motivation and collective action, an aspect not thoroughly explored in existing literature on NGO leadership and organizational behaviour.

Furthermore, the study enriches SL theory by illustrating its profound alignment with NGO principles, moving beyond its characterization as a mere leadership style. It highlights a unique congruence between the service-oriented behaviours inherent in SL and the altruistic objectives of NGOs, which significantly bolsters employee commitment and satisfaction,

thereby driving organizational effectiveness. This research, therefore, offers a comprehensive framework for integrating SL into NGO cultures, emphasizing its role not just as a leadership approach but as an embodiment of the core values of NGOs. This perspective opens new avenues for practical application in NGO management and suggests fertile ground for future research to explore the nuanced intersections of SIT, SL, and NGO performance.

6.2. *Practical Contribution*

This study illuminates pathways for NGOs striving to achieve successful project outcomes by underlining the pivotal roles of team dynamics, leadership development, and organizational culture. NGOs must foster a supportive and inclusive team environment steeped in trust, collaboration, and SL qualities; these attributes serve as the bedrock for efficient knowledge exchange, adept problem-solving, and, consequently, the enhancement of project outcomes. The cornerstone of cultivating such an enriching environment lies in seamlessly integrating SL principles within leadership selection processes, training regimens, and the fabric of organizational culture.

A linchpin in this integration process is the incorporation of SL principles in leadership selection. This requires a focus on behavioural interview questions to critically assess a candidate's propensity for empathy, active listening, and altruism. Through tangible examples, candidates must demonstrate occasions where they have prioritized team needs. To supplement this, NGOs should leverage personality and skills assessment tools, which act as litmus tests for ascertaining the congruence between a candidate's values and the tenets of SL. This calibrated approach ensures the recruitment of inherently service-oriented leaders who foster a charitable ethos.

Building upon the foundation of astute leadership selection, it is imperative that the nurturing of SL principles permeates the organization. This can be realized through the creation of robust educational workshops that augment employee competencies while ingraining an indelible understanding and application of SL principles. The establishment of mentorship programs is also instrumental, forging channels for seasoned servant leaders to bequeath their wisdom and experiences to neophytes, thereby bolstering the internal SL culture. Moreover, the SL ethos should transcend organizational boundaries; employees must be galvanized to partake in community service and social responsibility endeavours, which affirms the organization's commitment to societal upliftment and equips employees with practical SL experiences. Project managers, the torchbearers of this SL culture, should exemplify SL behaviours, such as empowerment and stewardship, to engender a salubrious team climate. Through a holistic amalgamation of SL in the selection, training, and organizational culture, NGOs stand poised to remarkably elevate project outcomes and employee satisfaction, culminating in a dedicated and efficacious workforce that is harmonized with the difficulties and dynamism of the NGO landscape.

6.3. *Limitations and Future Research*

TWhile our study offers insights into the influence of servant leadership and team climate on NGO project success, its reliance on questionnaires introduces potential response bias, and its focus on specific success criteria limits its generalizability. Future research should broaden the definition of project success to include effectiveness, impact, and

sustainability. Additionally, employing mixed methods, such as interviews and observations, could reduce bias and provide deeper understanding of the interplay between leadership, team climate, and project success. Lastly, exploring differences in how volunteer and paid workers react to leadership styles and team climates might yield valuable management insights. Through these improvements, future studies can build on our findings, offering richer guidance for effective NGO project management and sustainable impact.

Appendix

Table 12. Measurements of the variables via quantitative questionnaire

Dependent Variable	**Questionnaire Items**
Project Success **(Ika 2012)**	(1) Comply with the budget
	(2) Comply with the expected time
	(3) Comply with the quality
	(4) Obtain long-term project impact
	(5) Stakeholder/partner involvement
	(6) Ownership extension to the local community
	(7) Monitoring and reporting to stakeholders
	(8) Economic sustainability after the project end
	(9) Satisfaction of the local
Independent Variable	**Questionnaire Items**
Servant Leadership **(Robert C. Liden et al. 2008)**	(1) My manager can effectively think through complex problems
	(2) My manager has a thorough understanding of our organization and its goals
	(3) My manager provides me with work experiences for skill development
	(4) My manager holds high ethical standards
	(5) My manager is always honest
	(6) My manager would not compromise ethical principles for success
	(7) My manager values honesty more than profits
	(8) I would seek help from my manager for personal problems
	(9) My manager cares about my well-being
	(10) My manager emphasizes the importance of giving back to the community
	(11) My manager is interested in helping people in our community
	(12) My manager is involved in community activities
	(13) I am encouraged by my manager to volunteer in the community
Team Identification **(Doosje, Ellemers, and Spears 1995)** **(Luhtanen and Crocker 1992)** **(Mael and Tetrick 1992)**	(1) I see myself as a member of this team
	(2) I am pleased to be a member of this team
	(3) I feel strong ties with members of my team
	(4) identify with other members of my team
	(5) I feel proud to be a member of the project team
	(6) The success of the project team is also my success

Team Climate **(Doosje, Ellemers, and Spears 1995)** **(West and Altink 1996)** **(Figl and Saunders 2011)**	(1) We always look for different interpretations and perspectives to confront a problem
	(2) In our project team, we criticize each other's work in order to improve team effectiveness.
	(3) In our project team, we are prepared to reflect on the way we act.
	(4) In our project team, we engage in evaluating our weak points in attaining effectiveness.
	(5) In our project team, we openly challenge each other's opinions.
	(6) In our project team, we reassess any proposed solution.
Socio-demographic	(1) Age
	(2) Education
	(3) Job tenure
	(4) Project Size
	(5) Team size
	(6) Project Type
	(7) NGO type (international or local)

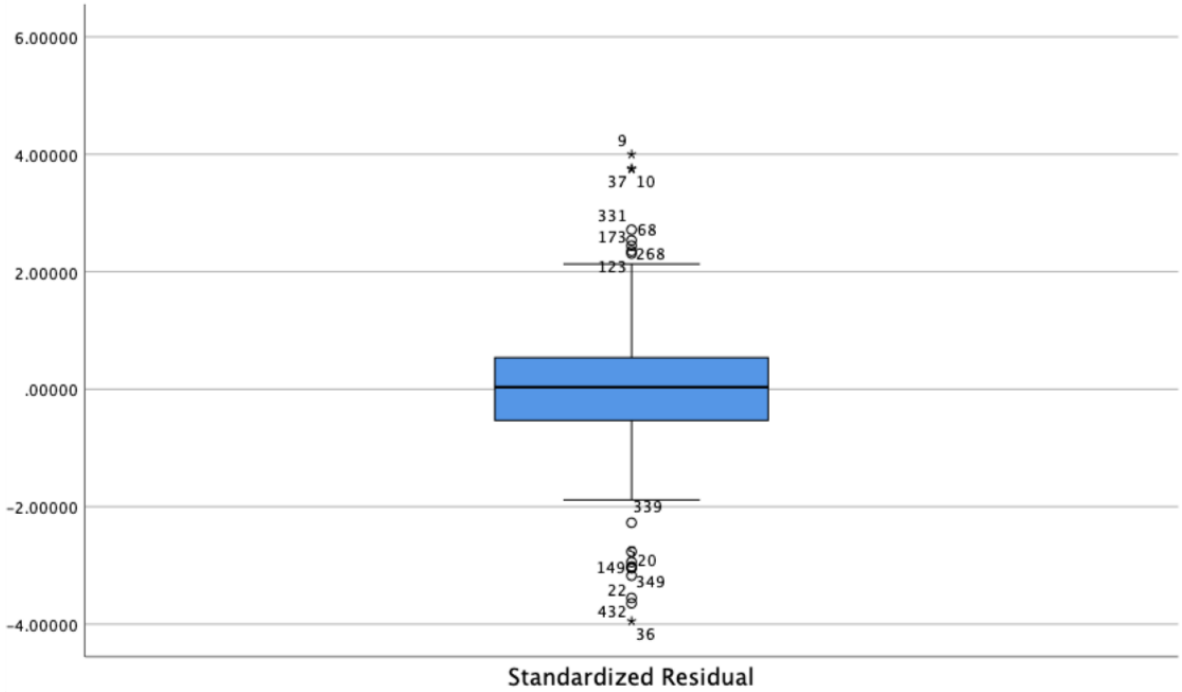

Figure 5. Pre-Remedy Project Success Box Plot

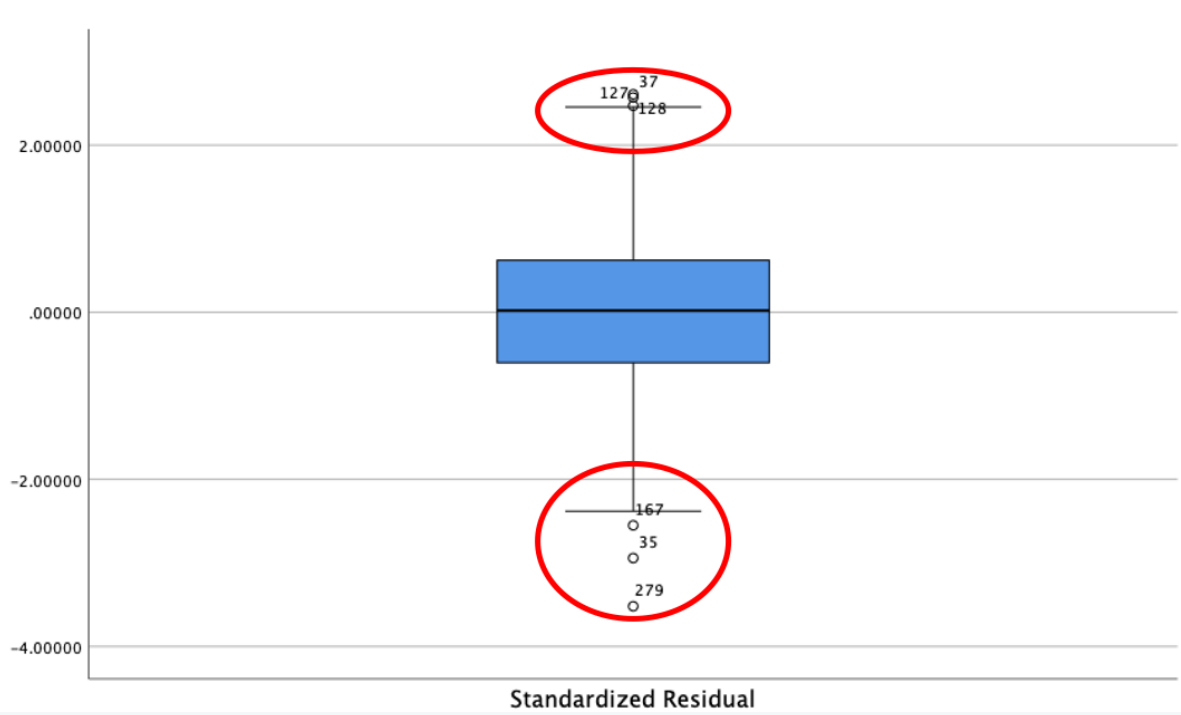

Figure 6. Post-Remedy Project Success

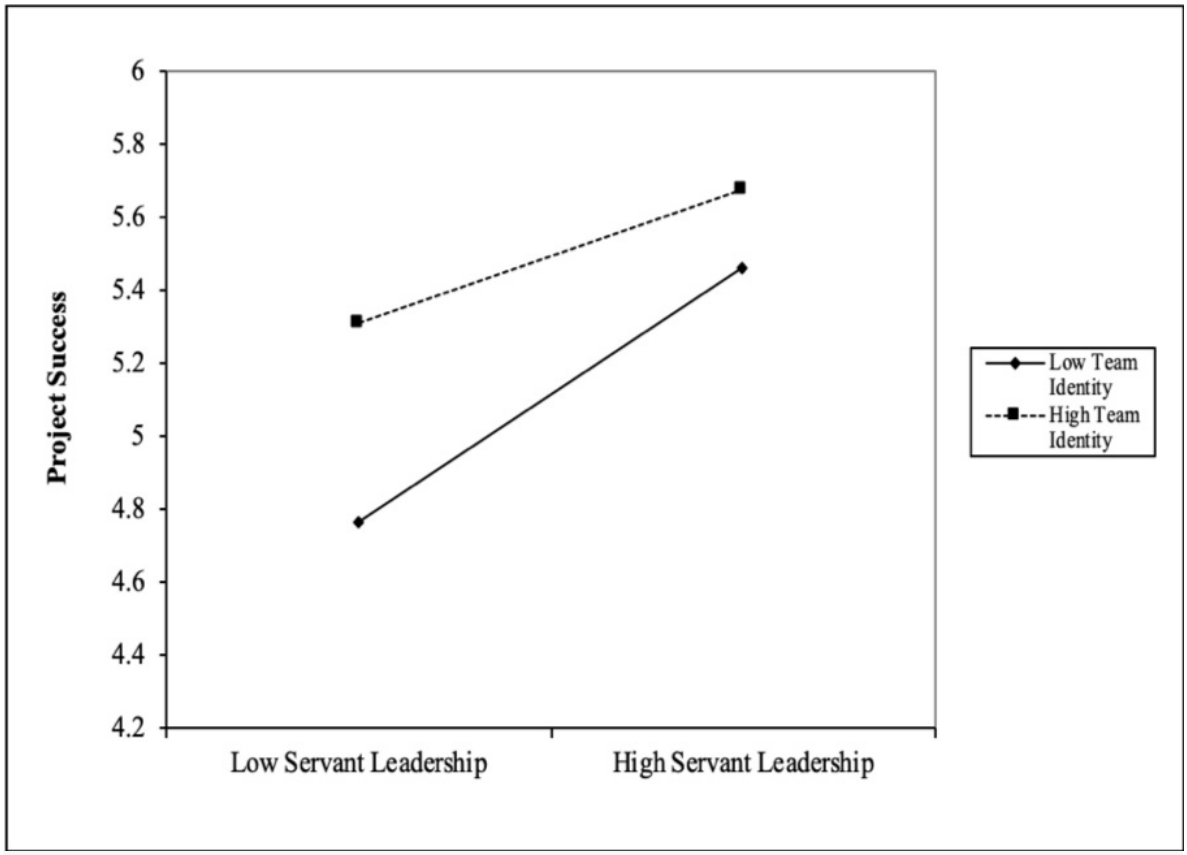

Figure 7. Two-way Interactions

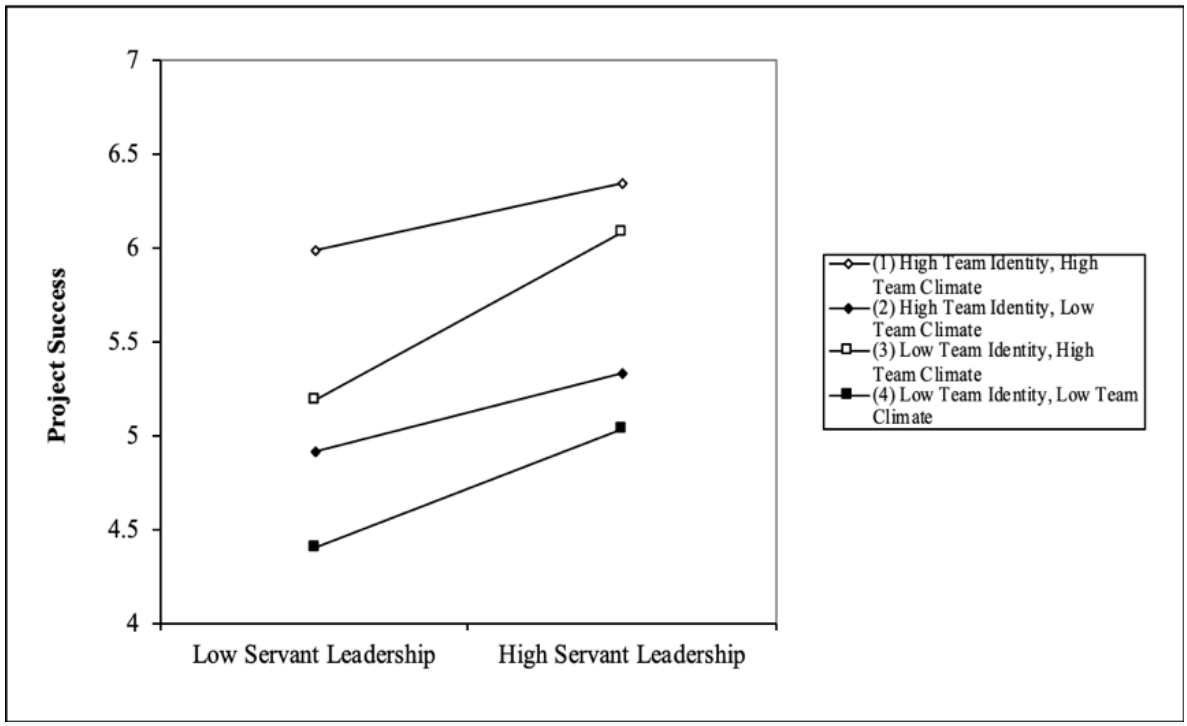

Figure 8. Three-way Interactions

References

- Abiddin, Norhasni Zainal, Irmohizam Ibrahim, and Shahrul Azuwar Abdul Aziz. 2022. "Non-Governmental Organisations (NGOs) and Their Part Towards Sustainable Community Development." *Sustainability* 14 (8): 4386.
- Acuña, Silvia T, Marta Gómez, and Natalia Juristo. 2008. "Towards Understanding the Relationship Between Team Climate and Software Quality—a Quasi-Experimental Study." *Empirical Software Engineering* 13: 401–34.
- Aga, David A, Niels Noorderhaven, and Boris Vallejo. 2016. "Transformational Leadership and Project Success: The Mediating Role of Team-Building." *International Journal of Project Management* 34 (5): 806–18.
- Agreli, Heloise F, Marina Peduzzi, and Christopher Bailey. 2017. "Contributions of Team Climate in the Study of Interprofessional Collaboration: A Conceptual Analysis." *Journal of Interprofessional Care* 31 (6): 679–84.
- Amundsen, S., and Ø. L. Martinsen. 2014. "Empowering Leadership: Construct Clarification, Conceptualization, and Validation of a New Scale." *The Leadership Quarterly* 25 (3): 487–511.
- Ashforth, Blake E, and Fred Mael. 1989. "Social Identity Theory and the Organization."*Academy of Management Review* 14 (1): 20–39.
- Bashshur, Michael R, Ana Hernández, and Vicente González-Romá. 2011. "When Managers and Their Teams Disagree: A Longitudinal Look at the Consequences of Differences in Perceptions of Organizational Support." *Journal of Applied Psychology* 96 (3): 558.
- Bass, Bernard M, and M Bass Bernard. 1985. "Leadership and Performance Beyond Expectations."
- Bedi, Akanksha, Can M Alpaslan, and Sandy Green. 2016. "A Meta-Analytic Review of Ethical Leadership Outcomes and Moderators." *Journal of Business Ethics* 139: 517–36.
- Black, William, and Barry J Babin. 2019. "Multivariate Data Analysis: Its Approach, Evolution, and Impact." In*The Great*

Facilitator: Reflections on the Contributions of Joseph f. Hair, Jr. To Marketing and Business Research, 121–30. Springer.

- Bowers, Clint A, James A Pharmer, and Eduardo Salas. 2000. “When Member Homogeneity Is Needed in Work Teams: A Meta-Analysis.” *Small Group Research* 31 (3): 305–27.
- Brière, S., D. Proulx, O. N. Flores, and M. Laporte. 2015. “Competencies of Project Managers in International Ngos: Perceptions of Practitioners.” *International Journal of Project Management* 33 (1): 116–25.
- Brown, Rupert, and Samuel Pehrson. 2019. *Group Processes: Dynamics Within and Between Groups* John Wiley & Sons.
- Burton, Laura J, Jon Welty Peachey, and Janelle E Wells. 2017. “The Role of Servant Leadership in Developing an Ethical Climate in Sport Organizations.” *Journal of Sport Management* 31 (3): 229–40.
- Chan, Albert P, David Scott, and Ada P Chan. 2004. “Factors Affecting the Success of a Construction Project.” *Journal of Construction Engineering and Management* 130 (1): 153–55.
- Cleveland, Simon, and Marisa Cleveland. 2020. “Leadership Competencies for Sustained Project Success.” *International Journal of Applied Management Theory and Research (IJAMTR)* 2 (1): 35–47.
- Denis, Jean-Louis, Ann Langley, and Viviane Sergi. 2012. “Leadership in the Plural.” *Academy of Management Annals* 6 (1): 211–83.
- Diallo, A., and D. Thuillier. 2005. “The Success of International Development Projects, Trust and Communication: An African Perspective.” *International Journal of Project Management* 23 (3): 237–52.
- Doosje, Bertjan, Naomi Ellemers, and Russell Spears. 1995. “Perceived Intragroup Variability as a Function of Group Status and Identification.” *Journal of Experimental Social Psychology* 31 (5): 410–36.
- Dube, Tomson, Whitehead Zikhali, and Sithobile Priscilla Dube. 2019. “An Analysis of the Application of Servant-Leadership Model in the Educational Development Programmes of Selected Non-Governmental Organizations in Zimbabwe.” *International Journal of Innovative Business Strategies* 5 (2): 332–40.
- Ellahi, Abida, Mobashar Rehman, Yasir Javed, Fahd Sultan, and Hafiz Mudassir Rehman. 2022. “Impact of Servant Leadership on Project Success Through Mediating Role of Team Motivation and Effectiveness: A Case of Software Industry.” *SAGE Open* 12 (3): 21582440221122747.
- Eva, Nathan, Mulyadi Robin, Sen Sendjaya, Dirk Van Dierendonck, and Robert C Liden. 2019. “Servant Leadership: A Systematic Review and Call for Future Research.” *The Leadership Quarterly* 30 (1): 111–32.
- Farling, M. L., A. G. Stone, and B. E. Winston. 1999. “Servant Leadership: Setting the Stage for Empirical Research.” *Journal of Leadership Studies* 6 (1-2): 49–72.
- Fei, Wang Yun. 2023. “The Relationship Between Service-Oriented Leadership, Organizational Identity, and Job Performance of the New Generation of Employees: A Case Study of Chinese Internet Companies.” *International Journal of Science and Business* 27 (1): 129–50.
- Figl, Kathrin, and Carol Saunders. 2011. “Team Climate and Media Choice in Virtual Teams.” *AIS Transactions on Human-Computer Interaction* 3 (4): 189–213.
- Fischer, Thomas, Joerg Dietz, and John Antonakis. 2017. “Leadership Process Models: A Review and Synthesis.” *Journal of Management* 43 (6): 1726–53.

- Fries, Alexander, Nadine Kammerlander, and Max Leitterstorf. 2021. “Leadership Styles and Leadership Behaviors in Family Firms: A Systematic Literature Review.” *Journal of Family Business Strategy* 12 (1): 100374.
- Gelbard, Roy, and Abraham Carmeli. 2009. “The Interactive Effect of Team Dynamics and Organizational Support on ICT Project Success.” *International Journal of Project Management* 27 (5): 464–70.
- Gerstner, C. R., and D. V. Day. 2006. “Meta-Analytic Review of Leader–Member Exchange Theory: Correlates and Construct Issues.” *Journal of Applied Psychology* 82 (6): 827–44.
- Ghasemi, A., and S. Zahediasl. 2012. “Normality Tests for Statistical Analysis: A Guide for Non-Statisticians.” *International Journal of Endocrinology and Metabolism* 10 (2): 486.
- Ghazali, Faizal Mohamad, Shahrul Nizam Rashid, and Abdul Sadullah. 2017. “The Critical Success Factors for Public-Private Partnership Highway Construction Project in Malaysia.” *Journal of Engineering and Technology* 8 (1): 69–84.
- Gotsis, George, and Katerina Grimani. 2016. “The Role of Servant Leadership in Fostering Inclusive Organizations.” *Journal of Management Development* 35 (8): 985–1010.
- Graen, George B, and Mary Uhl-Bien. 1995. “Relationship-Based Approach to Leadership: Development of Leader-Member Exchange (LMX) Theory of Leadership over 25 Years: Applying a Multi-Level Multi-Domain Perspective.” *The Leadership Quarterly* 6 (2): 219–47.
- Greenleaf, R. K. 1977. *Servant Leadership: A Journey into the Nature of Legitimate Power and Greatness* Paulist Press.
- Greenleaf, Robert K. 2002. “A Journey into the Nature of Legitimate Power and Greatness.”*Servant Leadership*.
- Hale, & Fields, J. R. 2007. “Exploring Servant Leadership Across Cultures: A Study of Followers in Ghana and the USA.” *Leadership* 3 (4): 397–417.
- Hernandez, Yaheli, and Kathryn Cormican. 2016. “Towards the Effective Management of Social Innovation Projects: Insights from Project Management.” *Procedia Computer Science* 100: 237–43.
- Iacobucci, Dawn, Matthew J Schneider, Deidre L Popovich, and Georgios A Bakamitsos. 2016. “Mean Centering Helps Alleviate ‘Micro’ but Not ‘Macro’ Multicollinearity.” *Behavior Research Methods* 48: 1308–17.
- Ika, Lavagnon A. 2012. “Project Management for Development in Africa: Why Projects Are Failing and What Can Be Done about It.” *Project Management Journal* 43 (4): 27–41.
- Ilgen, Daniel R, John R Hollenbeck, Michael Johnson, and Dustin Jundt. 2005. “Teams in Organizations: From Input-Process-Output Models to IMOI Models.” *Annu. Rev. Psychol.* 56: 517–43.
- Irving, Justin A, and Gail J Longbotham. 2007. “Team Effectiveness and Six Essential Servant Leadership Themes: A Regression Model Based on Items in the Organizational Leadership Assessment.” *International Journal of Leadership Studies* 2 (2): 98–113.
- Jackson, Susan E, Karen E May, Kristina Whitney, Richard A Guzzo, and Eduardo Salas. 1995. “Understanding the Dynamics of Diversity in Decision-Making Teams.” *Team Effectiveness and Decision Making in Organizations* 204: 261.
- Kealey, D. J., D. R. Protheroe, D. MacDonald, and T. Vulpe. 2005. “Re-Examining the Role of Training in International Business Performance.” *International Journal of Intercultural Relations* 29 (5): 681–700.
- Keith, K. M. 2008. *The Case for Servant Leadership*. Greenleaf Center for Servant Leadership.

- Khang, Do Ba, and Tun Lin Moe. 2008. “Success Criteria and Factors for International Development Projects: A Life-Cycle-Based Framework.” *Project Management Journal* 39 (1): 72–84.
- Kotrlik, JWKJW, and CCHCC Higgins. 2001. “Organizational Research: Determining Appropriate Sample Size in Survey Research Appropriate Sample Size in Survey Research.” *Information Technology, Learning, and Performance Journal* 19 (1): 43.
- Lamberti, Giuseppe, Tomas Aluja Banet, and Josep Rialp Criado. 2022. “Work Climate Drivers and Employee Heterogeneity.” *The International Journal of Human Resource Management* 33 (3): 472–504.
- Latif, Kausar Fatima, and Neil Williams. 2017. “Team Effectiveness in Non-Governmental Organizations (NGOs) Projects.” *Evaluation and Program Planning* 64: 20–32.
- Laukka, Elina, Tarja Pölkki, Tarja Heponiemi, and Outi Kanste. 2022. “Finnish Primary Care Leaders’ Perceptions of Leadership in Digital Health Services: An Inductive Content Analysis.” *International Journal of Healthcare Technology and Management* 19 (3-4): 280–302.
- Liden, R. C., S. J. Wayne, H. Zhao, and D. Henderson. 2008. “Servant Leadership: Development of a Multidimensional Measure and Multi-Level Assessment.” *The Leadership Quarterly* 19 (2): 161–77.
- Liden, Robert C, Sandy J Wayne, Hao Zhao, and David Henderson. 2008. “Servant Leadership: Development of a Multidimensional Measure and Multi-Level Assessment.” *The Leadership Quarterly* 19 (2): 161–77.
- Luhtanen, Riia, and Jennifer Crocker. 1992. “A Collective Self-Esteem Scale: Self-Evaluation of One’s Social Identity.” *Personality and Social Psychology Bulletin* 18 (3): 302–18.
- Mael, Fred A, and Lois E Tetrick. 1992. “Identifying Organizational Identification.”*Educational and Psychological Measurement* 52 (4): 813–24.
- Martens, Wil. 2022. “Loan Loss Provisioning and Efficiency: A Study of Frontier Market Banks.”*VNU University of Economics and Business* 2: 11–11. https://doi.org/10.25073/2588-1108/vnueab.4830.
- Martens, Wil, Prem WS Yapa, and Maryam Safari. 2020. “The Impact of Financial Statement Comparability on Earnings Management: Evidence from Frontier Markets.” *International Journal of Financial Studies* 8: 73. https://doi.org/10.3390/ijfs8040073.
- Martens, Wil, Prem Yapa, and Maryam Safari. 2021. “Earnings Management in Frontier Market: Do Institutional Settings Matter?” *Economies* 9: 17. https://doi.org/10.3390/economies9010017.
- Martens, Wil, Prem Yapa, Maryam Safari, and Sean Watts. 2021. “The Influence of Earnings Management on Bank Efficiency: The Case of Frontier Markets.” *Heliyon* 7 (10).
- Midi, Habshah Bt, Shakuntala Sarkar, and Sohel Rana. 2010. “Collinearity Diagnostics of Binary Logistic Regression Model.” *Journal of Interdisciplinary Mathematics* 13 (3): 253–67.
- Mombeuil, Claudel, Hemantha Premakumara Diunugala, and Lissbird Jeune. 2023. “Relationships between servant leadership, team identity, team climate, and project success in NGO settings.” Harvard Dataverse. https://doi.org/10.7910/DVN/CHJHL5.
- Mulinge, Peter N. 2020. *The Essence of Political Skill in Community Development from a Servant Leadership Perspective in Rural Kenya: A Hermeneutic Phenomenology Study*. Gonzaga University.
- Mullen, Brian, and Carolyn Copper. 1994. “The Relation Between Group Cohesiveness and Performance: An

Integration." *Psychological Bulletin* 115 (2): 210.

- Nauman, Shazia, Ata Ul Musawir, Sania Zahra Malik, and Hina Munir. 2022. "Servant Leadership and Project Success: Unleashing the Missing Links of Work Engagement, Project Work Withdrawal, and Project Identification." *Project Management Journal* 53 (3): 257–76.
- Parris, & Peachey, D. L. 2013. "A Systematic Literature Review of Servant Leadership Theory in Organizational Contexts." *Journal of Business Ethics* 113 (3): 377–93.
- Parris, D. L., and J. Henrichs. 2004. "Servant Leadership in Project Management: A Theoretical Framework for Future Research." *Project Management Journal* 35 (4): 19–31.
- Podsakoff, Philip M, Scott B MacKenzie, and Nathan P Podsakoff. 2012. "Sources of Method Bias in Social Science Research and Recommendations on How to Control It." *Annual Review of Psychology* 63: 539–69.
- Pratt, Michael G. 1998. "Central Questions in Organizational Identification."*Identity in Organizations* 24 (3): 171–207.
- Randel, Amy E, Benjamin M Galvin, Lynn M Shore, Karen Holcombe Ehrhart, Beth G Chung, Michelle A Dean, and Uma Kedharnath. 2018. "Inclusive Leadership: Realizing Positive Outcomes Through Belongingness and Being Valued for Uniqueness." *Human Resource Management Review* 28 (2): 190–203.
- Rezvani, A., A. Chang, A. Wiewiora, N. M. Ashkanasy, P. J. Jordan, and R. Zolin. 2016. "Manager Emotional Intelligence and Project Success: The Mediating Role of Job Satisfaction and Trust." *International Journal of Project Management* 34 (7): 1112–22.
- Richardson, David B, Ghassan B Hamra, Richard F MacLehose, Stephen R Cole, and Haitao Chu. 2015. "Hierarchical Regression for Analyses of Multiple Outcomes." *American Journal of Epidemiology* 182 (5): 459–67.
- Ronalds, Paul. 2012. *The Change Imperative: Creating the Next Generation NGO* Kumarian Press.
- Rose, K. H. 2013. *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)–Fifth Edition* Project Management Institute.
- Sageer, Alam, Sameena Rafat, and Puja Agarwal. 2012. "Identification of Variables Affecting Employee Satisfaction and Their Impact on the Organization." *IOSR Journal of Business and Management* 5 (1): 32–39.
- Sendjaya, S., and J. C. Sarros. 2002. "Servant Leadership: Its Origin, Development, and Application in Organizations." *Journal of Leadership & Organizational Studies* 9 (2): 57–64.
- Shaw, Jake, Philip Minoudis, Veronica Hamilton, and Jackie Craissati. 2012. "An Investigation into Competency for Working with Personality Disorder and Team Climate in the Probation Service." *Probation Journal* 59 (1): 39–48.
- Spears, Larry C. 2005. "THE UNDERSTANDING AND PRACTICE OF SERVANT-LEADERSMP."*The International Journal of Servant-Leadership* 1 (1): 29–45.
- Taherdoost, H. 2016. "A Review of Technology Acceptance and Adoption Models and Theories."*Procedia Manufacturing* 22: 960–67.
- Tajfel, H., and J. C. Turner. 1979. "An Integrative Theory of Intergroup Conflict." Edited by W. G. Austin and S. Worchel. *The Social Psychology of Intergroup Relations*, 33–47.
- Tuan, Luu Trong. 2020. "Environmentally-Specific Servant Leadership and Green Creativity Among Tourism Employees: Dual Mediation Paths." *Journal of Sustainable Tourism* 28 (1): 86–109.
- Turner, John C, Katherine J Reynolds, et al. 2010. "The Story of Social Identity." In*Rediscovering Social Identity: Key*

Readings. Psychology Press, Taylor & Francis.

- Tziner, Aharon. 1985. “How Team Composition Affects Task Performance: Some Theoretical Insights.”*Psychological Reports* 57 (3_suppl): 1111–19.
- Van Der Vegt, Gerben S, Evert Van De Vliert, and Aad Oosterhof. 2003. “Informational Dissimilarity and Organizational Citizenship Behavior: The Role of Intrateam Interdependence and Team Identification.” *Academy of Management Journal* 46 (6): 715–27.
- Van Dierendonck, D. 2011. “Servant Leadership: A Review and Synthesis.”*Journal of Management* 37 (4): 1228–61.
- Vishnubhotla, Sai Datta, Emilia Mendes, and Lars Lundberg. 2020. “Investigating the Relationship Between Personalities and Agile Team Climate of Software Professionals in a Telecom Company.” *Information and Software Technology* 126: 106335.
- Wai, Soo, Ahmad Mhd Yusof, Sazli Ismail, and Choon Peng Ng. 2013. “Exploring Success Factors of Social Infrastructure Projects in Malaysia.” *International Journal of Engineering Business Management* 5 (Godište 2013): 5–4.
- Walumbwa, Fred O, David M Mayer, Peng Wang, Hui Wang, Kristina Workman, and Amanda L Christensen. 2011. “Linking Ethical Leadership to Employee Performance: The Roles of Leader–Member Exchange, Self-Efficacy, and Organizational Identification.” *Organizational Behavior and Human Decision Processes* 115 (2): 204–13.
- Welty Peachey, Jon, and Laura Burton. 2017. “Servant Leadership in Sport for Development and Peace: A Way Forward.” *Quest* 69 (1): 125–39.
- West, Michael A, and Wieby MM Altink. 1996. “Innovation at Work: Individual, Group, Organizational, and Socio-Historical Perspectives.” *European Journal of Work and Organizational Psychology* 5 (1): 3–11.
- West, Michael A, and Andreas W Richter. 2011. “Team Climate and Effectiveness Outcomes.”*Handbook of Organizational Culture and Climate*, 249–70.
- Wiersema, Margarethe F, and Karen A Bantel. 1992. “Top Management Team Demography and Corporate Strategic Change.” *Academy of Management Journal* 35 (1): 91–121.
- Yammarino, Francis J, Eduardo Salas, Andra Serban, Kristie Shirreffs, and Marissa L Shuffler. 2012. “Collectivistic Leadership Approaches: Putting the ‘We’ in Leadership Science and Practice.” *Industrial and Organizational Psychology* 5 (4): 382–402.
- Yoshida, Diah Tuhfat, Sen Sendjaya, Giles Hirst, and Brian Cooper. 2014. “Does Servant Leadership Foster Creativity and Innovation? A Multi-Level Mediation Study of Identification and Prototypicality.” *Journal of Business Research* 67 (7): 1395–1404.
- Yukl, Gary. 2008. “How Leaders Influence Organizational Effectiveness.” *The Leadership Quarterly* 19 (6): 708–22.