

Article

Institutionalization of Organizational Change Outcomes in Development Cooperation Projects: The Mediating Role of Internal Stakeholder Change-Related Beliefs

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Abstract: This paper investigated how change outcomes of development cooperation projects can be institutionalized within the beneficiary organization. While a lot of attention has been paid to sustainability in scientific research on issues, projects, and policies related to environmental, industrial, and agricultural production and sustainability management, there are limited studies on the sustainability of organizational-level change outcomes of aid-based project interventions. Using the lens of organizational change institutionalization models, we examined how internal stakeholders' change-related beliefs, organizational characteristics, and project characteristics relate to the institutionalization process of project outcomes. Data were collected using a questionnaire returned by 130 respondents from a university in the Global South implementing institutional development cooperation projects. Using partial least squares structural equation modeling (PLS-SEM) to analyze the data, we found that organizational characteristics and change-related beliefs both had direct positive effects on the institutionalization process, while project characteristics had negative effects. Additionally, this study reveals that stakeholder change-related beliefs mediated the relationship between organizational and project characteristics and the institutionalization process. The findings support the continual engagement of organizational internal stakeholders in institutionalization efforts throughout the project life cycle, rather than waiting for the project to end. In contrast to the mechanistic, linear result chain approaches that dominate development project discourses, there is a need for more iterative approaches that allow the development of necessary attitudes and behaviors among the beneficiary organization's internal stakeholders to sustain the project-induced changes.

Keywords: change-related beliefs; change institutionalization; internal stakeholders; organizational characteristics; project characteristics; development cooperation projects



Citation: Mugenyi, Andrew Ronnie, Charles Karemera, Joshua Wesana, and Michaël Doms. 2022.

Institutionalization of Organizational Change Outcomes in Development Cooperation Projects: The Mediating Role of Internal Stakeholder Change-Related Beliefs.

Administrative Sciences 12: 60.

<https://doi.org/10.3390/admsci12020060>

Received: 23 March 2022

Accepted: 2 May 2022

Published: 11 May 2022

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1. Introductions

Within the development field, actors are increasingly interested in channeling development assistance through development cooperation programs and projects involving organizations in the Global North and South (Boeren 2012; Hartvigson and Heshmati 2022; Nakabugo et al. 2011; Teferra 2016). Despite variations in scope and structure (Raetzell et al. 2018), the primary temporal and spatial impacts of these North–South development interventions, particularly in the areas of technology transfer and capacity building in the Global South, have been well documented (Boeren 2012; Craveiro et al. 2020; Raetzell

et al. 2018; Van der Veken et al. 2017). Encouraged by the potential and actual benefits of these and similar development interventions, development stakeholders are increasingly demanding that development initiatives demonstrate impact while raising concerns about the sustainability of interventions (Maier et al. 2016). According to Hartvigson and Heshmati (2022), the delivery of sustainable development outcomes is a primary concern in development cooperation initiatives, but it has proven difficult to achieve as many development projects face sustainability challenges (Aga et al. 2018; Harsh and Jobe 2020; Samara et al. 2020). As Wilson and Kurz (2008) have argued, many grant-funded and externally sponsored interventions, despite displaying beneficial outcomes, are not always sustained, resulting in a decline or stoppage of function when external funding is withdrawn or ceases. Sustainability in this context is viewed in terms of interventions meeting the needs of stakeholders beyond the project implementation phase (Johnson et al. 2004) or the long-term success of a development intervention (Maier et al. 2016). While a lot of attention has been paid to sustainability in scientific research on issues, projects, and policies related to environmental management and industrial and agricultural production (Ruggerio 2021), in addition to sustainability management (Samara et al. 2020), there are limited studies on the sustainability of organizational-level change outcomes of aid-based project interventions.

Studies on organizational development and change identify institutionalization as a strategy for sustaining change in organizations by integrating the change intervention into the host organization's systems and culture, so that the new practices are accepted, sustained, and normalized (Armenakis et al. 1999; Stouten et al. 2018). The concept of organizational change institutionalization can be traced back to Lewin's (1947) refreezing change concept, which contends that the changed state must be protected from further change or regression to the previous state. Other scholars have argued that institutionalization is related to the persistence of change over time (Jacobs 2002), and Maes and Van Hootegem (2019) have argued that institutionalization is possible if change is incorporated into the organization's systems, or if there is "interiorization of what is learned during change into cognitive schedules and routines" of the organization. While Lewin's change theory and related models have been beneficial in understanding the unfreezing of behavior and the creation of a willingness to change (Burnes and Cooke 2013), less attention has been paid to the processes of sustaining (refreezing) changes in organizations.

In the project context, institutionalization entails the long-term sustainability and integration of project outcomes into an organization (Goodman and Steckler 1989), or what Johnson et al. (2004) refer to as "integration into business as usual." Without institutionalization, the organization struggles to maintain the benefits of the project interventions (Goodman and Steckler 1989; Wilson and Kurz 2008). Development projects that are planned and implemented using a linear activity–output–outcome–impact logic while being constrained by strict time frames, donor guidelines, and budgets (McEvoy et al. 2016) prioritize project activity implementation over the institutionalization and sustainability of project outcomes (Chambers et al. 2013). As a result, beneficiary organizations can carefully implement donor-funded projects strictly adhering to the established implementation guidelines, but fail to bridge the implementation–sustainability gap. Consequently, project outcomes may be short-lived and never integrated into the organization's normal operations (Wilson and Kurz 2008), resulting in frustration and demotivation among the project actors, with evidence of no value for money and effort expended during implementation (Clausen and Kragh 2019).

According to Goodman and Dean (1982) and Jacobs (2002), the persistence and impact of any organizational change intervention are determined by the extent to which the associated behaviors persist within the organization after the implementation phase. It is believed that institutionalization occurs when two or more people consistently act in a certain way and their behavior becomes ingrained in the daily operations of the organization. In this context, project outcomes are individual behavioral responses to project outputs triggered by project implementation actions and mechanisms in a specific context (Buller

and Mcevoy 1989). Individual behavior and social interaction within an organization in relation to project intervention are thus critical aspects of the institutionalization process. Because internal project stakeholders are individuals or organizations that are affected by or can influence the project and its outcomes (PMI 2013), their beliefs, attitudes, and behaviors are important in the institutionalization of project outcomes. Project outcomes will be institutionalized in the organization if the internal stakeholders consistently engage in project-targeted behaviors to the point where they become “social facts” (Goodman and Dean 1982), rooted in social norms and shared values within the organization (Kotter 1996). These behavioral aspects, being important in the delivery of project outcomes, are conspicuously absent in the project management literature (Khan et al. 2017). For example, while Burgan and Burgan (2014) investigated the change beliefs associated with the adoption of project management practices as an approach to organizational management, and Purvis et al. (2015) investigated the role of self-valence in the direction and intensity of stakeholder participation in the implementation of systems and software technology projects, no study has been conducted for projects in the development cooperation context.

The current study explored the factors influencing the process of the institutionalization of development cooperation project change outcomes within the beneficiary organization. We incorporated internal project stakeholders’ change-related beliefs into an institutionalization model (Buchanan et al. 2005) that considers organizational characteristics and intervention characteristics, aware that beliefs influence stakeholder attitudes toward the project. Positive attitudes toward a project’s outcomes are likely to translate into commitment by stakeholders to maintain project-related behaviors. Hence, institutionalization can be viewed as involving deliberate steps to integrate project outcomes into the operations, processes, and culture of the organization, occurring concurrently throughout the project implementation phase rather than afterwards. Unfortunately, there has been little empirical research into what these institutionalization actions and processes involve.

The next section begins with a review of the relevant literature on change institutionalization and the development of the study hypotheses, followed by a description of the methods. Then, the study’s empirical findings are presented and discussed, and conclusions are drawn.

2. Literature Review and Hypothesis Development

2.1. Projects and Change Institutionalization

The goal of projects is to change the behavior of beneficiaries in the medium term, rather than simply delivering planned project outputs (Lehtonen and Martinsuo 2009). In aid-based development projects, such changes are classified as the project’s short- and medium-term effects on direct project beneficiaries (outcomes) or the project’s long-term effects (impact) (Raetzell et al. 2018). To have the desired impact in the organization, the project’s outcomes or targeted behavioral changes must be integrated into the organization’s culture, structure, systems, and processes, which involves the change institutionalization process.

Studies on organizational change institutionalization are not only scarce but also context-dependent, relying primarily on Goodman and Dean’s (1982) institutionalization framework and Ledford’s (1985) process model of persistence. Despite their popularity, these foundational models have received little empirical support to explain how institutionalization occurs within organizations (Cummings and Worley 2009; Sillince et al. 2001). Subsequent studies treated change institutionalization as one of the stages, particularly the final stage, in an extended change implementation process (Brisson-Banks 2010; Buchanan et al. 2005; Stouten et al. 2018). According to these studies, before a change is institutionalized, it is associated with predictable elements grouped into three phases: mobilization, implementation, and institutionalization (Curry 1992; Kezar 2007). Beddewela et al. (2020) also proposed a six-stage model for change institutionalization that comprises the jolt, theorization, mobilization, sense-making, diffusion, and institutional establishment. According to these authors, the sixth stage, institutional establishment, entails complete diffusion

of changes across the organization and is concerned with formalizing and integrating the changes into the organization's formal policies. Reay et al. (2013) argued that the institutionalization process follows a linear path that begins with the destabilization of established practices and ends with the institutionalization of new practices in the organization. Other studies have looked at change institutionalization as a distinct process, delving into its various facets, antecedents, and outcomes (Cummings and Worley 2009; Curry 1992; Goodman and Dean 1982; Reay et al. 2013). Armenakis et al. (1999), for example, identified the role of individual commitment and argued that institutionalization is the process of building commitment to the changed state in an organization. The authors created a change institutionalization model that includes key elements such as the change message, change agent attributes, organizational member attributes, and reinforcing strategies. Cummings and Worley (2009) and Jacobs (2002) drew on Goodman and Dean's (1982) earlier work to identify five processes that determine the degree to which an intervention can be institutionalized in an organization: (1) socialization, or the transmission of information about beliefs, preferences, norms, and values about the intervention within the organization; (2) management commitment across all levels as a dimension binding people to intervention-related behaviors; (3) management commitment as a dimension that binds people to intervention-related behaviors; (4) diffusion, or the transfer of changes from one subsystem to another in order to reinforce the changes; and (5) sensing and calibration, which entails detecting deviations from desired intervention behaviors and taking corrective action. Buchanan et al. (2005) categorized institutionalization factors into seven categories in their synthesis of factors influencing the sustainability of change in organizations, including substantial, individual, managerial, financial, leadership, organizational, cultural, political, processual, contextual, and temporal factors, and argued that these factors are dependent on the type and context of change. On the other hand, Reay et al. (2013), based on the micro-level perspective of the organization, identified habituation as a key component of how ideas are transformed into new practices. Change institutionalization occurs when change-related actions and human interactions are frequently repeated and developed into patterns within an organization. Similarly, Yetano (2013) used the structuration model to add rules and routines, characteristics of social systems, and continuous interactions as key components of the institutionalization process. However, Stouten et al. (2018) further noted that, even though the focus of change institutionalization has always been on altering the organization's culture, not all changes require fundamental shifts in culture and beliefs and hence may only require managerial action to institutionalize.

To date, a number of studies have used current change institutionalization frameworks to investigate various change scenarios in diverse organizational contexts, with varying results and recommendations: for example, the institutionalization of project interventions in local governments (Waiswa 2020), responsible management education (Beddewela et al. 2020), natural resource-based innovations in universities (Cinar 2020), transdisciplinarity in university policy (Baptista et al. 2019; Riveros et al. 2022), responsible innovation (Owen et al. 2021), community engagement in higher education institutions (Murrach-Hanson and Sandmann 2021), and enterprise resource planning (ERP) (Pishdad and Haider 2013), to mention but a few. Our synthesis of these studies identifies a number of important elements and actions for change institutionalization in different contexts: (i) changes in organizational structure, reward or incentive systems, and behavioral norms; (ii) mandatory top leadership support and championship; (iii) alignment of the change intervention with the existing organizational structure; (iv) participation of internal and external stakeholders; (v) integration into organizational values; (vi) strategic and operational planning. In this study, we drew from the processual approach to change institutionalization based on the models by Armenakis et al. (1999), Beddewela et al. (2020); Buchanan et al. (2005), and Cummings and Worley (2009) to develop the study's conceptual framework. The processual approach is a useful lens for the examination of change institutionalization because it emphasizes the "flow of events in a wider spatial, temporal, and political context" (Buchanan et al. 2005). As a result, we investigated how broad organizational

factors and project characteristics (Cummings and Worley 2009; Jacobs 2002) as well as individual-level factors and internal stakeholder change-related beliefs (Armenakis et al. 1999; Reay et al. 2013) influence the change institutionalization process.

We examined the institutionalization process by the occurrence of positive perceptions towards project interventions, as evidenced by increased project favorable actions among internal stakeholders at the beneficiary organization's strategic, management, and operational levels. Based on the literature reviewed, we posit that institutionalization should be a praxis with actions in three categories: (1) *Explicit commitment-related actions*. These are unequivocal and routine actions by the organization's senior leadership to send a message throughout the organization that the administration is committed and fully supports, and advocates for, the project interventions (Murray-Hanson and Sandmann 2021; Pishdad and Haider 2013). Examples of these actions include commitment of funds to support project interventions that are outside the donor funding limits but critical in sustaining the project, and communication that promotes the project's products by leaders at different levels within the organization. (2) *Integration-related actions*. These are actions geared towards embedding the project into the organization. These actions are related to the legitimacy dimension of institutionalization (Baptista et al. 2019). These actions may include integrating project management, project activities, and outputs in strategic and operational planning processes; active participation by internal stakeholders in project activities; standardization of language, policies, procedures, and communication that promotes project-targeted behavior changes; continuous monitoring and information gathering about project-targeted behavior and taking corrective action where deviations are detected. (3) *Implicit structural-related actions*. We argue that this category involves more subtle and indirect actions that are linked to what Baptista et al. (2019) refer to as the formal set-up dimension of institutionalization. It may involve defining the project manager's position within the current organization, developing new project-related units, functions, and positions in the organizational structure, and establishing incentive structures that favor project-targeted behaviors. We view the institutionalization process as involving these three categories of actions occurring concurrently with project implementation. Thereby, we imply that institutionalization is not a post-implementation phase of the project. Processes, structures, policies, and operating procedures could simultaneously be put in place during project implementation to ensure that project-related behavior/practices, project-promoted values, and norms are incorporated into the host organization's culture (Baptista et al. 2019; Curry 1992; Riveros et al. 2022).

2.2. Factors Influencing the Institutionalization Process

The process of institutionalizing change involves the interaction of multiple factors at various levels of analysis and time frames (Buchanan et al. 2005). At the organizational macro-level, Cummings and Worley (2009), Goodman and Dean (1982), and Jacobs (2002) argued that organizational characteristics influence the institutionalization process. These authors specifically mentioned three dimensions: congruence, environmental and technological stability, and formal staff grouping and cohesion. Highly congruent interventions, stable organizational environments, and less rigid staff groupings promote the persistence of change interventions (Cummings and Worley 2009). According to Clausen and Kragh (2019), existing organizational structures can inhibit proper organizational change anchoring, while Alänge and Steiber (2009) argued that a strong and committed organizational governance (board) can support the change sustainability process by providing the required resources. The question is whether the identified organizational characteristics influence institutionalization processes in the same manner across different types of organizations. Do context-specific features such as ownership and managerial flexibility apply, for example, in the context of a university development cooperation? Universities have distinct organizational characteristics such as normative missions of preserving high academic standards and academic freedom (de Lange 2013; Patria 2012). These characteristics lead to structural and operational complexity, which limits change implementation (Brown 2012), and change

institutionalization may not be handled the same way as in other organizations (Patria 2012). Furthermore, when the intervention characteristics are aligned and congruent with the organizational characteristics, the institutionalization process is catalyzed (Cummings and Worley 2009; Jacobs 2002). The premise here is that because the projects are meant to accomplish specified organizational change outcomes, the enduring characteristics of the host organization should determine the characteristics of the project interventions designed to create the desired change in the organization.

As a result, we hypothesized that

Hypothesis H1a. *Organizational characteristics have a direct positive effect on the institutionalization process (IP).*

Hypothesis H1b. *Organizational characteristics (OC) are positively related to project characteristics (PC).*

According to Stouten et al. (2018), specific features of change interventions have the potential to influence change processes and outcomes, but these features are frequently overlooked in the literature that focuses on general behavioral constructs. Equally, Cummings and Worley (2009) and Goodman and Dean (1982) suggested that easily institutionalized interventions have novel characteristics such as goal specificity, programmability, the aim of targeting the whole organization, strong internal support systems, and a strong sponsor. Similarly, Tornatzky and Klein (1982) argued that interventions should: produce a relative advantage; be more compatible with an organization; be less complex; be less expensive; and allow for trial implementation. Clausen and Kragh (2019) supported the argument of specific goals and active sponsorship, arguing that upfront goal setting and implementation design for specific interventions should include active ownership and competent leadership, which enable intervention sustainability. In this context, we looked at the characteristics of development cooperation project interventions and how their outcomes can be institutionalized within a university setting. Development cooperation projects differ from non-international development projects in several ways, including their intangible and even conflicting objectives that are difficult to measure, and external funding (grant or aid financing), which creates multi-level principal-agent dynamics, resulting in unclear roles for both the project manager and project supervisor (Gajic and Palcic 2019; Tekinel 2013). Because of these distinctive characteristics of international development projects compared to non-international development projects, there has been calls for different management approaches (Munro and Ika 2020). From these characteristics, we hypothesized that

Hypothesis 2. *Project characteristics (PC) have a direct negative effect on the institutionalization process (IP).*

Fishbein and Ajzen (2011) defined beliefs as a person's subjective probable judgments of a relationship between an object and its related attribute, whereas Armenakis et al. (2007) defined a belief as an "opinion or a conviction about the truth of something that may not be readily obvious or subject to systematic verification". Simply, a belief is an individual's conception about a specific behavior or an object (Kin and Kareem 2016). Internal stakeholders experience project interventions in unique ways during implementation (Bouckenooghe 2010) and form beliefs about the project (Lines 2005). The beliefs formed determine the attitudes of stakeholders toward the project, which in turn determines whether stakeholders will be hostile or supportive of the project (Lines 2005). To sustain the changes, it is necessary to recognize the stakeholders' beliefs, attitudes, and behaviors, which, when reinforced, can develop into shared values, and build consensus towards the project (Buller and Mcevoy 1989), which serves as the foundation for change institutionalization. Rahn et al. (2020) summarized five change-related beliefs based on a model by Armenakis et al. (2007), including: (a) discrepancy, a belief that there is a need for change; (b) appropriateness, a belief that the change will be effective and that the right actions were chosen;

(c) principal support, a belief that management will provide the required resources and be committed to the change; (d) efficacy, a belief that employees can perform the new tasks and duties the change will bring; and (e) valence, a belief that the change will bring positive outcomes for employees. According to [Morin et al. \(2016\)](#), the first three beliefs (a–c) are related to change management practices, whereas the last two beliefs (d–e) are conceptually related to affective commitment to change and psychological empowerment of change recipients. According to [Armenakis et al. \(1999\)](#), institutionalizing change within an organization necessitates crafting and continuously delivering a core message about the change intervention covering the five beliefs to the organization's members to build commitment to the intervention. As a result, we hypothesized that

Hypothesis H3a. *Change-related beliefs (BEL) of internal project stakeholders have a direct positive effect on the institutionalization process (IP).*

There is also strong support for the possibility of change-related beliefs mediating the relationship between project characteristics, organizational characteristics, and change institutionalization processes. Change commitment, as previously stated by [Armenakis et al. \(1999\)](#), is the foundation for the institutionalization of change. Other research has discovered a strong relationship between change-related beliefs and affective commitment to change ([Antoni 2004](#); [Morin et al. 2016](#)) as well as change-positive emotions, change readiness, and change-supportive behaviors ([Rafferty and Minbashian 2019](#)). In their comprehensive review, [Oreg et al. \(2018\)](#) presented change beliefs as mediators between the change content (characteristics), the internal organizational context features, and change consequences, of which organizational commitment is part. We, therefore, hypothesized that

Hypothesis H3b. *Internal project stakeholders' change-related beliefs (BEL) will mediate the effect of project characteristics (PC) on the institutionalization process (IP).*

Hypothesis H3c. *Internal project stakeholders' change-related beliefs (BEL) will mediate the effect of organizational characteristics (OC) on the institutionalization process (IP).*

3. Materials and Methods

3.1. Study Context and Sample

Our research focused on universities in sub-Saharan Africa, with a Ugandan case study implementing development cooperation projects. Mountains of the Moon University (MMU), a community university at the time of this study (currently taken over by the government), is located in the relatively rural western region of the country. MMU, which was founded in 2005, operated between private and public institutions, putting it in a precarious operating position that meant the university attracted fewer students and had limited resources (both financial and human resources). Even though MMU did get some government support, it was always insufficient and inconsistent. To solve this financing constraint, the university leveraged its community focus to attract project funding from the Netherlands, Belgium, South Korea, Austria, Northern Ireland, the United Kingdom, the United States, and other funding agencies. As a consequence, the university's observable growth and development during the previous decade can indeed be attributable solely to development cooperation funds and project interventions. This unique context makes MMU an interesting case to study the organizational development and change outcomes of development cooperation projects. Context-specific approaches that ask "what actually takes place" are promoted by both academics and scholars in development cooperation projects ([Ika and Hodgson 2014](#)). This case study was therefore appropriately selected to study the complex processes of change institutionalization ([Yin 2003](#)) within the context of development cooperation projects. Similarly, [Clausen and Kragh \(2019\)](#) argued that the "best time to study the sustainability of change depends on the characteristics of the change

initiatives being studied, and the researcher must determine timing on a case-by-case basis.”

Since 2013, MMU has been implementing a broad-based development cooperation program with two project components: one focuses on wider community development outcomes through conducting research, community engagement, and extension services; the other focuses on institutional capacity strengthening with organizational-level outcomes in the areas of staff research capacity training, upgrading the ICT infrastructure, systems, and processes, developing a library information system, supporting the university access to library e-resources, developing an online learning management system, staff development at the Ph.D. level and short-term skill training workshops for administrative staff in critical areas of finance, human resources management, etc., and supporting the establishment of a university FM radio station. Our study focused on the institutional strengthening component, the results of which have had a wide-ranging impact on almost every aspect of the university. Staff and other internal stakeholders have been faced with a myriad of changes in the organizational environment brought about by the different project interventions which have affected nearly every aspect of the organization. In such an environment, attention may be drawn to the technical aspects of project implementation, overshadowing the focus on the project’s long-term outcomes. In contrast to the post-implementation study, exploring the change institutionalization processes during the project implementation phase allows for a systematic exploration of the phenomenon.

The sample respondents for the study were purposefully selected from 234 members of university staff. We screened the staff lists to identify staff who qualify as internal stakeholders, specifically those whose work has been directly affected by the project, or whose positions have a significant impact on the project’s implementation. The final list of staff included project team members, the university’s top management, faculty deans and heads of departments and units, and other full-time (academic and administrative) and fixed-term contract employees who have been direct or indirect beneficiaries of the project interventions. Additionally, we only considered staff who had been with the university for 2 years and above to avoid new staff who might have yet to interact with and experience the project’s impact. We excluded part-time contract staff, because of their limited interaction with other staff, and their limited knowledge about the operations of the university. A total of 167 members of staff were identified and asked to complete a paper-based questionnaire, and a total of 134 questionnaires were returned, representing a response rate of 80.2%. Four of the returned questionnaires were excluded from the final usable sample due to incomplete responses.

The first section of the questionnaire elicited from respondents their type of work, job position in the organization, experience, and demographics (age and gender). From the 130 usable questionnaires, 10.6%, 32.5%, and 56.9% were from senior management, middle management, and other stakeholders, respectively. Academic, administrative, and support staff accounted for 64.0%, 24.8%, and 11.2%, respectively, of the sample. The experience of the respondents was important in this study to assess the level of knowledge about the program and its projects. Thereby, 48.3% of the respondents had been working at the university for at most 5 years, 37.3% for 6–10 years, and 14.4% for more than 10 years. Most respondents (54.0 %) had a master’s degree, 26.2 % had a bachelor’s degree, 10.3 % had a Ph.D., and 9.6 % had other qualifications. Male respondents were more (69.3 %) prominent than their female counterparts (39.7 %). Most of the respondents were aged between 31 and 40 years (55.2 %), with similar portions for under 30 years (17.6 %) and 41–50-year-olds (17.6 %). Respondents aged over 50 were the least represented.

3.2. Measures

Respondents completed the questionnaire with constructs anchored on a 7-point Likert scale ranging from “1” (“strongly disagree”) to “7” (“strongly agree”), with higher values representing high values of each construct. A pilot study was undertaken involving 15 respondents with experience in implementing university projects to refine the questionnaire.

The questionnaire was also shared with the program management to assess the sequence and contextual relevance of the items.

3.3. Independent Variables

To measure the internal stakeholder change beliefs, we adopted the 24-item Organizational Change Recipients’ Beliefs Scale (OCRBS) developed by Armenakis et al. (2007) with slightly altered wording to fit this study (e.g., “There is a need for the university to improve its operations in teaching, research, and community engagement” (discrepancy), “The project outputs are relevant to the current situation of the university” (appropriateness), “My immediate supervisor encourages me to take advantage of project interventions at work” (principal support)). Organizational characteristics were assessed using a 7-item scale developed from institutionalization models by Armenakis et al. (1999) and Cummings and Worley (2009), e.g., “The university’s structure and leadership is flexible to enable smooth project implementation”, “The university environment is stable, allowing changes to take root.” We included other specific characteristics related to the context of the university as an organization (Brown 2012; Patria 2012). Project characteristics were measured using a 6-item scale developed using the Cummings and Worley (2009) model but also including items representing characteristics of development cooperation projects (Gajic and Palcic 2019; Ika and Hodgson 2014; Tekinel 2013) (e.g., “The project interventions have clear goals understood by all stakeholders,” “There is clear coordination and sponsorship of the projects at the level of top management”). Tables 1 and 2 present the reliability and validity of the measures for the independent variables.

Table 1. Measurement model evaluation results.

Variables	Original Items	Final Items	Mean	SD	α	rho_A	CR
Beliefs (BE)	23	15	5.147	1.151	0.953	0.957	0.958
Institutionalization Process (IP)	12	10	4.613	1.228	0.923	0.930	0.935
Organizational Characteristics (OC)	10	7	4.499	1.313	0.877	0.912	0.899
Project Characteristics (PC)	10	6	3.513	1.379	0.823	0.849	0.868

Table 2. Latent variable correlations (left) and HTMT ratios (right).

Constructs	AVE	BEL	IP	OC	PC	BEL	IP	OC	PC
Stakeholder Change Beliefs (BEL)	0.606	0.798^a							
Institutionalization Process (IP)	0.591	0.683	0.769^a			0.708 ^b			
Organizational Characteristics (OC)	0.561	0.545	0.720	0.749^a		0.526 ^b	0.710 ^b		
Project Characteristics (PC)	0.523	−0.366	−0.379	−0.184	0.723^a	0.392 ^b	0.411 ^b	0.227 ^b	

^a Diagonal bold figures are square roots of each construct AVE (Fornell and Larcker 1981); ^b HTMT ratios less than 0.85 (Henseler et al. 2015).

3.4. Dependent Variables

The internal stakeholder perceptions of the project or change institutionalization process were assessed using a 10-item scale developed from models and studies by Armenakis et al. (1999), Buchanan et al. (2005), and Cummings and Worley (2009). The items covered the actions identified above. For example, “There is a visible commitment to the outcomes of the project from the bottom to the top levels of the university” (explicit commitment-related actions), “New university policies have been formulated and adopted to support project interventions” (implicit structural-related actions), and “project interventions are integrated into the strategies and processes of schools, departments, and units” (integration-related actions). Tables 1 and 2 show the reliability and validity measures for the dependent variable.

3.5. Analytical Techniques

We used SPSS (IBM) version 25 to analyze the demographic data and generate descriptive statistics for the variables in our model, and we used SmartPLS 3.3.3 software to determine the statistical relationships between the latent variables in the model. According to [Hair et al. \(2019\)](#) and [Sarstedt et al. \(2019\)](#), PLS-SEM is a reliable analytical tool for complex models and small samples. This was chosen as an appropriate approach for this study, in which we had a small sample drawn from a small population of respondents, and the model consisted of three exogenous variables, one endogenous variable, and a mediator variable. In project management, for example, this analytical technique has been used to investigate the relationship between project management capabilities and project success ([Irfan et al. 2019](#)), to determine how project management self-efficacy predicts project performance ([Blomquist et al. 2016](#)), to investigate the impact of stakeholder attributes on disaster recovery project performance ([Mojtahedi and Oo 2017](#)), etc. We performed PLS-SEM analysis in two steps, first assessing the measurement model by determining indicator loadings, internal consistency reliability, convergent validity, and discriminant validity. The PLS-SEM algorithm calculates item loadings for each latent variable iteratively, with low-loading items eliminated until an acceptable set is reached. Step two involved evaluating the structural model by determining model parameters and direct and indirect effects, and assessing the significance levels of the parameters and relationships using a bootstrapping procedure with 5000 subsamples ([Hair et al. 2019](#)).

4. Results

4.1. Measurement Model

Table 1 shows the means and standard deviations (SDs) of each scale. The beliefs (BEL) construct had the highest mean (mean 5.147, SD 1.151), while the project characteristics (PC) construct had the lowest mean (mean 3.513, SD 1.379). These results indicate that respondents were generally positive about their change-related beliefs, organizational characteristics, and institutionalization processes, but less so about the project characteristics. To determine construct reliability and validity, indicator loadings were evaluated, with loadings greater than 0.7 ([Götz et al. 2010](#)) considered acceptable, as items with loadings of 0.6 or greater are considered acceptable ([Hulland 1999](#)) in cases where new scales are developed. After assessing their potential practical significance, seven items from the beliefs construct (Ps2, Ps3, Ps4, Ps5, Ps6, Va4, Ef3), three items from the organizational characteristics (Oc3, Oc8, Oc10), four items from the project characteristics (Pc7, Pc8, Pc9, Pc10), and two items from the institutionalization process (Ip6, IP7) were removed due to low loadings (Appendix A Table A1 shows all the construct items that were retained). The composite reliability (CR) statistics for all constructs in the model ranged from 0.958 for change-related beliefs to 0.868 for project characteristics, which were significantly higher than the recommended 0.70 ([Hair et al. 2019](#)). The internal consistency of each construct, as measured by Cronbach's alpha (α), was greater than the recommended minimum of 0.7 ([Hair et al. 2019](#)).

We used the average variance extracted (AVE) to determine the convergent validity of the measured constructs. The AVE measures the amount of variance that a construct obtains from its indicators relative to the amount due to measurement errors ([Fornell and Larcker 1981](#)). Table 1 shows that the AVEs for all the study constructs were higher than the recommended 0.5 ([Hair et al. 2019](#)). Discriminant validity was assessed using the method of [Fornell and Larcker \(1981\)](#) by computing the square roots of the construct AVEs and checking whether the square root was larger than the correlation between constructs (Table 2). We also used the heterotrait–monotrait (HTMT) approach, where HTMT values lower than 0.85 for all constructs establish discriminant validity ([Henseler et al. 2015](#)).

The results in Tables 1 and 2 show that the measurement model presents satisfactory indicator reliability, convergent validity, and discriminant validity, hence demonstrating satisfactory robustness needed to test the relationship between the constructs.

4.2. Structural Model

The structural model, or inner model, shows the associations between the constructs being studied. Table 3 summarizes the results for the hypothesis tests by presenting the path coefficients (β), R^2 -adjusted values, t-values, and model cross-validated redundancy (Q^2) value. Variance inflation factors (VIFs) between the variables were first computed to determine any possible multicollinearity, and the results indicate that the VIFs were all less than the threshold of 3.0 (Hair et al. 2019). Our first prediction was that organization characteristics (OC) have a significant effect on the institutionalization process of project outcomes and the project characteristics. The results reveal a significant positive effect ($\beta = 0.502, p < 0.001$). However, the relationship between organizational characteristics and project characteristics was non-significant, and hence hypothesis H1a was supported, while H1b was rejected. The results also confirm our hypothesis (H2) that the characteristics of the project have a negative effect on the institutionalization process ($\beta = -0.156, p < 0.05$). Similarly, the findings confirm our hypothesis (H3a) that stakeholder change-related beliefs would have a positive significant effect on the institutionalization process for project outcomes ($\beta = 0.352, p < 0.000$). The overall institutionalization process model was significant with an adjusted $R^2 = 0.651$ ($p < 0.000$). The cross-validated redundancy (Q^2) value tests the predictive relevance of the model and shows how well the path model can predict the observed values. The computed $Q^2 = 0.375$ for the institutionalization process model is greater than zero, showing the predictive relevance of the model (Sarstedt et al. 2017).

Table 3. Summary of the structural model.

Hypothesis	VIF	β	t-Statistic	R^2 Adjusted	Q^2	Decision
H1a: Organizational Characteristics → Institutionalization Process	1.407	0.502 ***	6.072	0.651 ***	0.375	Supported
H2: Project Characteristics → Institutionalization Process	1.161	-0.156 **	2.704			Supported
H3a: Beliefs → Institutionalization Process	1.578	0.352 ***	4.154			Supported
H1b: Organizational Characteristics → Project Characteristics	1.000	-0.184 ns	1.933	0.026	0.011	Rejected

** $p < 0.01$; *** $p < 0.000$; ns—non-significant.

We also predicted that the relationships between organizational characteristics (OC) and project characteristics (PC) and the institutionalization process (IP) would be mediated by the internal stakeholder's change-related beliefs. Mediation effects exist when a third variable plays an intermediate role in the relationship between the independent and dependent variables (Carrión et al. 2017; Sarstedt et al. 2020). According to Carrión et al. (2017) and Zhao et al. (2010), the only requirement to establish mediation between two variables is to test whether the indirect effect between the variables is significant even when the direct effect is not significant. Table 4 shows the mediation effects.

Table 4. Analysis of mediating effects.

Path	Total Direct Effects	Total Indirect Effects	Specific Indirect Effects		Total Effects	Mediation
	β	β	Path	β		
H3 _b : Organizational Characteristics → Institutionalization Process	0.502 ***	0.218 ***	Organizational Characteristics → Beliefs → Institutionalization Process	0.171 ***	0.720 ***	Partial mediation
H3 _c : Project Characteristics → Institutionalization Process	-0.156 **	-0.099 *	Project Characteristics → Beliefs → Institutionalization Process	-0.099 *	-0.255 ***	Partial mediation

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.000$.

The results reveal that the total effects of both organizational characteristics and project characteristics on institutionalization processes are significant (i.e., $\beta = 0.720$, $p < 0.000$, and $\beta = -0.255$, $p < 0.000$, respectively). These observed effects persist when the change-related beliefs variable is included as a mediator, and the specific indirect effects are significant. This indicates partial mediation of change-related beliefs, thereby partially confirming hypotheses H3b and H3c. Figure 1 below summarizes the structural model indicating the relationships between the dependent and independent variables of this study.

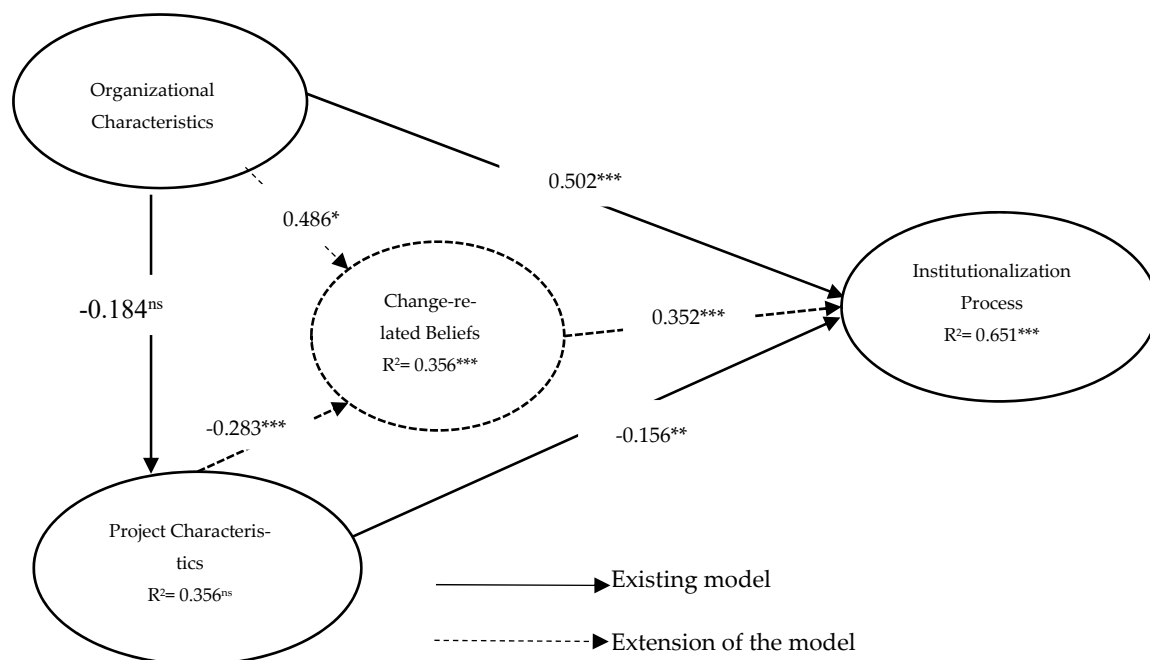


Figure 1. Structural model exhibiting the relationship between study constructs. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.000$; ns—non-significant.

5. Discussion

The purpose of this study was to investigate whether micro-level project internal stakeholder change-related beliefs and macro-level organizational and project characteristics influence the institutionalization process of outcomes of a development cooperation project in an organization. Drawing insights from the organizational development, change management, and development project management literature, we tested a mediation model using survey data from a sample of 130 respondents drawn from a university implementing long-term development cooperation projects in Uganda. The study findings reveal that both organizational characteristics and internal stakeholder change-related beliefs have a positive effect on the institutionalization process, while the project characteristics have a negative effect. Additionally, internal stakeholder change-related beliefs partially mediate the relationships between organizational and project characteristics and the institutionalization process.

While a few previous studies (Buchanan et al. 2005; Cummings and Worley 2009; Jacobs 2002) developed theoretical frameworks for organizational-level change institutionalization, the current study presented an empirical examination of the institutionalization model. Consistent with our findings, Murrah-Hanson and Sandmann (2021) argued that the institutionalization process involves changes occurring both at the individual and organizational levels. At the individual level, the results suggest that institutionalization actions are likely to be enhanced as long as the internal stakeholders have positive beliefs about the project. Therefore, the more stakeholders perceive the need for change (discrepancy) and believe the project interventions match the identified organizational needs (appropriateness), the more they will explicitly commit to the project and engage in actions to integrate project

outcomes into the organization. Additionally, discrepancy beliefs are likely to reduce arbitrary perceptions of the project objectives and outcomes, among the stakeholders, and thus help legitimize the need for project-initiated changes, while perceived positive valence and self-efficacy beliefs towards the projects are expected to trigger actions that will perpetuate the project outcomes (Armenakis et al. 2007). As Murreh-Hanson and Sandmann (2021) argued, people within an organization possess beliefs and mindsets to accept and support a change intervention, which could be translated into actions to sustain the change. This means that project initiation, planning, and implementation practices must account for the non-linearity of these behavioral elements and incorporate strategies into the project cycle to nurture and constantly reinforce the identified change-related beliefs among project stakeholders. Stakeholder commitment, for example, is less linear (Murreh-Hanson and Sandmann 2021) and thus contradicts the time-constrained, mechanistic, linear outcome chain techniques that dominate development project practice (McEvoy et al. 2016). In such a case, a more iterative approach to project implementation (Baptista et al. 2019) is more appropriate to allow the targeted project internal stakeholders to interact with the project interventions and acquire the necessary beliefs, attitudes, and behaviors to sustain the changes.

Internal stakeholder views, attitudes, and behaviors regarding projects develop within the context of the organization. The organization's characteristics provide a platform for individuals to interact, develop, and express their experiences and meanings about the project. The more deeply and widely internal stakeholders exchange their beliefs and interpretations of project outcomes, the more firmly the outcomes are embedded in the organizational social system, preventing the change from decaying (Alshehhi 2014). Three illustrations follow to further explain this suggestion. First, an organization characterized by a culture that values transparency will more likely enact clear project implementation practices and processes that continuously update stakeholders about the progress of the project. As a result, the stakeholders will develop trust and look for opportunities to participate (Zakharova and Biedenbach 2013) in actions that perpetuate the project outcomes. Both a transparent, involvement-oriented organizational context (Rogiest et al. 2015) and trust in management (Smollan 2013) have been identified as critical elements in gaining commitment to organizational change. Though transparency and trust continue to be a concern in the implementation of international development cooperation projects (Agheneza 2009), more is required if the projects are to succeed and be sustained in organizations (Diallo and Thuillier 2005). Second, an organization with a well-defined philosophy, strategy, and structure will find it simpler to incorporate and sustain project interventions. To begin with, it is doubtful that such an organization will accept and implement project interventions that are not aligned with the organization, and it is not difficult to secure commitment from the organization's internal stakeholders under such conditions. Cummings and Worley (2009) and Goodman and Dean (1982) have both highlighted the importance of the relationship between intervention congruence and the persistence of change interventions. Finally, even if individuals are committed to the project change outcomes, if organizational systems do not change, the process of change institutionalization will not be realized (Murreh-Hanson and Sandmann 2021). This brings to the fore the central role of the organization's governance and leadership in supporting change institutionalization. Consistent with other studies (Grandien and Johansson 2012; Murreh-Hanson and Sandmann 2021; Pishdad and Haider 2013; Waiswa 2020; Yetano 2013), our study points to the support and championing of the project by the organization's senior management. Governance and leadership supportive actions in the form of providing the necessary resources while also creating a stable and conducive organizational environment can spur the institutionalization of project interventions. According to Alänge and Steiber (2009), the responsibility for project sustainability and change rests with the organization structure rather than individuals, who most often leave their assigned roles, yet the project continues. Similarly, the organization's governance can ensure that capable personnel are assigned to the project or change-related positions.

These findings have implications for aid-based organizational development projects' conceptualization, design, and implementation. First, no matter how carefully the project is designed, it will be difficult to implement and institutionalize if it is not clearly drawn from the organization's strategy. A well-defined organizational strategy can serve as a secure landing zone for project interventions. Consequently, internal stakeholders may easily incorporate project outcomes and related behaviors into strategic and operational planning for the organization. Second, there is need for the organization's leadership and the affected stakeholders to clearly understand the project being implemented within the organization. This calls for the expansion of the due diligence and project initiation processes to encompass a thorough analysis of both the formal organizational aspects, such as strategic plans and management structures, and the organizational environment that manifests the culture of the organization.

The standout negative relationship between project characteristics and institutionalization processes, though predicted, is a concerning result in relation to international development project practice. The negative perceptions towards the characteristics of the projects could be the result of the respondents' lack of clarity about the project objectives, which has a negative impact on commitment and integration actions. Further, the implementation of development projects is fraught with operational complexities; for example, in our case study, project activities are managed both the beneficiary organization in the South and the coordinating organization in the North. This level of operational complexity complicates local project ownership, coordination, and sponsorship. It not only jeopardizes effective monitoring, feedback, and corrective actions but also has a negative impact on commitment and the related structural actions required to institutionalize project outcomes and targeted behaviors. Furthermore, the multidimensional nature of the project, in this case touching on various aspects and changes in the organization, poses a challenge of integration in the organization's strategies and operations. These problematic characteristics of development projects have been articulated in many studies (Agheneza 2009; Gajic and Palcic 2019; Ika 2012; Ika and Hodgson 2014; Mishra 2016), and this study extends the analysis to how these same characteristics negatively affect the institutionalization of project outcomes in an organization. The results indicate a non-significant relationship between the project characteristics and organizational characteristics. This is an interesting result to note, because it may highlight the fact that a host organization can accept, without question, a project for the sake of receiving the donor funds, even if it does not fit the organization's context and characteristics or fully match the recipient organization's expectations. Hence, Picciotto (2020) advocates for the gradual adaptation of development projects to their operating context in order to meet project recipients' expectations, rather than sticking to the standard "conjectures embedded in project design" that dominate international development project design and implementation methods manifested by theories of action and change.

6. Limitations and Future Research

Since this study examined a single case of a university implementing development cooperation projects, the findings may not be generalizable. Several academics, however, have emphasized that change institutionalization is a contextual process influenced by underlying organizational factors (Buchanan et al. 2005; Martin et al. 2012; Self et al. 2007; Yetano 2013) that are socially constructed by organizational members (Clausen and Kragh 2019). Moreover, within the international development scholarship, context is a prominent factor as authors argue that one size does not fit all when it comes to project implementation (Ika 2012; Yamin and Sim 2016). An expanded study with a sample drawn from a variety of contexts could extend knowledge in the relatively less studied world of aid-based organizational development projects. Additionally, in the design of the study questionnaire, we identified items from the existing change institutionalization and development cooperation project literature, consultation with relevant experts in the field, and our own experience in implementing North–South development cooperation projects.

More studies using larger samples could help confirm the three suggested categories of project outcome institutionalization actions: *explicit commitment-related*, *integration-related*, and *implicit structural-related actions*. Similarly, further studies on our suggested categorization of institutionalization actions could shed more light on how the project-targeted behaviors take root in an organization. Additionally, aid-based institutional development projects deliver outcomes at different levels: individual project level, organizational level, society level, or community level. There are no studies that examine the relationships between these outcomes. Using qualitative methods, it could be interesting to examine in depth questions such as: What factors and institutionalization actions within an organization translate individual-level project outcomes into organizational-level outcomes? How do institutionalized organizational-level project outcomes translate into community- or society-level outcomes?

7. Conclusions

At present, there is little available scientific evidence on the effectiveness of aid-based institutional development cooperation projects, particularly on how changes introduced by the projects are sustained within the beneficiary/host organizations in the Global South. Additionally, there is a dearth of knowledge about the underlying psychological factors that influence stakeholders to support or not support the project interventions (Khan et al. 2017). Our goal in this study was, therefore, to point out the salience of the project's internal stakeholders in the sustenance of the project-initiated changes. We concurrently examined the micro-aspects of stakeholder beliefs with the macro-aspects of organizational characteristics and intervention characteristics. In so doing, we have underscored the practicable actions that can be employed in the institutionalization processes for changes generated by development cooperation projects and pointed out how the organizational and project characteristics influence these actions. From a theoretical perspective, the findings reiterate theories of institutionalization that place individual behavior at the center of change implementation and institutionalization. Our study also contributes to the debates on project sustainability in international development by employing the lens of organizational change institutionalization models to shed light on how projects with organizational development objectives could be sustained.

The results can assist scholars and practitioners in North–South institutional development cooperation projects, funders, planners, project teams, and organizational leaders in beneficiary organizations in the South to focus on the psychological aspects of stakeholders (beliefs, attitudes, and behaviors) in the development of strategies and actions for sustaining project outcomes beyond the project life cycle. To this end, we suggest that actions to sustain the project's generated changes (outcomes) need to be integrated into the entire project life cycle, in ways that enhance supportive behaviors among stakeholders and, at the same time, are sensitive to likely negative, emergent, and unintended attitudes that are detrimental to the institutionalization processes of desirable project-related behaviors.

Author Contributions: Conceptualization, A.R.M., J.W. and M.D.; methodology, A.R.M. and J.W.; software, A.R.M. and C.K.; validation, J.W. and M.D.; formal analysis, A.R.M. and C.K.; investigation, A.R.M.; data curation, A.R.M. and C.K.; writing—original draft preparation, A.R.M.; writing—review and editing, A.R.M., J.W., C.K. and M.D.; supervision, J.W. and M.D.; project administration, A.R.M.; funding acquisition, J.W. and M.D. All authors have read and agreed to the published version of the manuscript.

Funding: This research was funded by VLIR-UOS (funding agency) for DGD (Belgian Government), grant number UG2019IUC027A103.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Acknowledgments: We are grateful to VLIR-OUS for the scholarship that allowed us to conduct this research, the journal editors, and the three anonymous reviewers for their comments and suggestions on an earlier version of the manuscript.

Conflicts of Interest: The authors declare no conflict of interest.

Appendix A. Own Compilation from Survey Data

Table A1. Loadings.

	Code	Loading	T Statistics	p Values
Beliefs (BEL)				
The project interventions are reasonable to the university	Ap1	0.857	26.309	0.000
I think the project interventions are beneficial to the university	Ap2	0.846	26.035	0.000
The project interventions are relevant to the current situation of the university	Ap3	0.844	23.512	0.000
The interventions of the Projects are making the work of the university staff easier	Ap4	0.822	20.124	0.000
There is a need for the university to improve its operations—teaching, research, and community engagement.	Ds1	0.695	9.509	0.000
There is a need to adopt the new approaches to teaching, research, and community engagement in the university.	Ds2	0.713	10.362	0.000
Change is needed to achieve excellent performance	Ds3	0.637	8.402	0.000
The IUC project interventions are important for all stakeholders in the university	Ds4	0.823	27.955	0.000
I have no problem applying project outputs in my work	Ef1	0.693	11.113	0.000
I have the capability to integrate and use the project outputs related to my work.	Ef2	0.712	12.523	0.000
We can successfully apply the relevant project outputs in my departments/units.	Ef4	0.740	15.627	0.000
My respected peers at work have embraced the project interventions.	Ps1	0.731	12.877	0.000
The IUC project interventions have brought feelings of self-fulfilment to my work	Va2	0.871	31.814	0.000
I believe adoption and use of the outputs of the project interventions will result in higher rewards for my job.	Va3	0.856	31.061	0.000
The adoption and use of IUC project outputs will earn me appreciation from my superiors	Va5	0.782	18.479	0.000
Institutionalization Process (IP)				
There is a visible commitment to the outcomes of the project from the bottom to the top levels of the university	Ip1	0.780	16.439	0.000
The university provides funds on top of the funds from donors to support scaling up outputs of project outputs	Ip2	0.722	12.748	0.000
New university policies have been formulated and adopted to support project interventions	Ip3	0.747	13.342	0.000
Project interventions are integrated into the strategies and processes of schools, departments, and units	Ip4	0.759	13.139	0.000
University organization structure has seen changes (new roles, positions) to accommodate and support project interventions	Ip5	0.677	10.469	0.000
New university processes have been introduced to accommodate the outcomes of the Projects	Ip8	0.696	10.325	0.000
There are efforts to continuously share information about the interventions is shared to old and new university staff members	Ip9	0.801	31.390	0.000
There is a monitoring and evaluation and feedback system to ensure that the project outcomes are integrated into the relevant university processes	Ip10	0.823	27.031	0.000
Active participation by all staff in the projects is encouraged by the university management	Ip11	0.822	22.890	0.000
There is public recognition of project outcomes during the university's ceremonies	Ip12	0.842	30.262	0.000
Organizational Characteristics (OC)				
The university caters for diverse stakeholders' representation in its governance which is good for oversight of projects	Oc1	0.688	10.207	0.000
The community ownership of the university makes it sensitive to projects that target both internal and community stakeholders	Oc2	0.740	12.339	0.000
The university environment is stable allowing project changes to take root	Oc4	0.721	11.797	0.000
Universities are complex organisations, and their change processes are difficult to implement	Oc5	0.672	9.003	0.000
The project's interventions are well aligned with the university's managerial philosophy, strategy, and structure	Oc6	0.811	25.471	0.000
The university is very transparent in its project implementation practices and activities	Oc7	0.777	16.978	0.000
The capacity of trained personnel in the university to plan and implement projects is adequate	Oc9	0.820	21.440	0.000

Table A1. Cont.

	Code	Loading	T Statistics	p Values
Project Characteristics (PC)				
The project interventions have clear and specific goals understood by all stakeholders	Pc1	0.720	11.799	0.000
Implementing projects activities concurrently in the South and in the North which negatively affects local monitoring of projects	Pc2	0.701	9.922	0.000
There is a lot of pressure in projects implementation because of the Involvement of international/ foreign actors	Pc3	0.762	11.210	0.000
The projects are multidimensional touching many aspects and causing changes in different areas of the university	Pc4	0.687	7.940	0.000
There is clear coordination and sponsorship of the projects at the level of top management	Pc5	0.757	11.431	0.000
Staff and other stakeholders of the projects understand the purpose and objectives of the projects	Pc6	0.708	9.701	0.000

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