

**The Returned Envelope: A Case Study in Spontaneous Prosocial Behavior and the Cross-Cultural Potential  
for Altruistic Norms**

**Arinaitwe Julius<sup>1</sup>, Ahumuza Audrey<sup>2</sup>**

**1,2 Metropolitan International University**

**Abstract**

This study investigated the psychological, sociocultural, and normative determinants of spontaneous prosocial behavior, operationalized as the intention to return a found sealed envelope containing identifiable contents to its presumed owner. Drawing on a cross-cultural sample of 412 adult participants recruited across five culturally distinct national contexts Uganda, Japan, Germany, Brazil, and Canada — the study employed a quantitative survey design to examine how altruistic motivation, civic norm adherence, trust in strangers, cultural collectivism, perceived social obligation, and prior prosocial experience predict envelope return intention. Univariate analyses revealed that altruistic motivation ( $M = 3.91$ ,  $SD = 0.81$ ) and civic norm adherence ( $M = 3.78$ ,  $SD = 0.74$ ) were the most consistently endorsed psychosocial constructs across the sample, while overall return intention was affirmed by 67% of respondents. Bivariate correlation analyses demonstrated that all six predictor variables were significantly and positively correlated with return intention, with altruistic motivation emerging as the strongest bivariate correlate ( $r = 0.57$ ,  $p < .001$ ). Structural equation modelling (SEM) confirmed these relationships in a multivariate framework, with altruistic motivation ( $\beta = 0.312$ ), civic norm adherence ( $\beta = 0.274$ ), and perceived social obligation ( $\beta = 0.221$ ) emerging as the three strongest direct predictors of return intention. Indirect pathways further revealed that cultural collectivism influenced return intention through its effects on civic norm adherence and trust in strangers. The model demonstrated excellent fit ( $CFI = 0.961$ ;  $RMSEA = 0.047$ ;  $SRMR = 0.051$ ). Findings underscore the universality and cross-cultural variability of altruistic norms, suggesting that prosocial behavior, while context-sensitive, is meaningfully anchored in shared human motivational and normative structures. Recommendations are offered for public behavior campaigns, educational policy, and institutional trust-building initiatives.

**Keywords: prosocial behavior, altruism, civic norms, cross-cultural psychology, envelope experiment, structural equation modelling, trust, social obligation**

**INTRODUCTION**

The question of why individuals act in the interest of others particularly strangers at no immediate personal benefit and sometimes at personal cost has occupied social scientists, philosophers, and behavioral economists for decades (Görmen, 2022; McGrath et al., 2023; Rees, 2022). Prosocial behavior, defined broadly as voluntary actions that benefit another person or group, encompasses a wide spectrum of conduct ranging from charitable giving and volunteering to small, seemingly trivial acts of everyday helpfulness. Among these, the scenario of finding and returning a lost envelope containing identifiable personal property stands as a deceptively simple yet theoretically rich case study in spontaneous altruism (Pronskikh & Sorina, 2022; Rusydiyah & Rohman, 2020; Tuomas, 2023). Unlike organized charitable giving or institutionally structured volunteerism, the act of returning a found envelope requires no prior commitment, organizational membership, or planned intention; it is instead a real-time moral decision triggered by an unplanned environmental cue (Ayık & Coştu, 2020; Pande & Kumar, 2020; Reiss, 2020). This very spontaneity makes the behavior particularly informative for understanding the internalized moral scripts, social norms, and individual dispositions that guide human conduct when external enforcement and social observation are absent or

**Received: 19.03.2026**

**Accepted: 25.03.2026**

**Published on: 30.03.2026**

---

minimal. Cross-cultural research in behavioral economics — most notably the large-scale lost wallet studies conducted by Cohn et al. (2019) across 40 countries — has established that civic honesty and altruistic return behavior are not only widespread but also surprisingly robust across diverse national contexts, often exceeding the pessimistic predictions of rational self-interest models (Erduran, 2020; Mugagga Muwagga et al., 2018; O’Sullivan & Ring, 2021). However, the psychological mechanisms, normative structures, and cultural dimensions that account for individual-level variability in this behavior remain incompletely theorized. The present study therefore undertook a systematic empirical investigation of the determinants of envelope return intention among adults drawn from five culturally diverse national contexts, with the aim of constructing and testing a theoretically grounded explanatory model capable of illuminating both the universality and the cross-cultural variability of spontaneous prosocial behavior (Chiemenem & Aderibigbe, 2019; Minch-de Leon, 2022; Slemon et al., 2025).

### **BACKGROUND OF THE STUDY**

Theoretical interest in prosocial behavior and altruism has a deep intellectual lineage, drawing from evolutionary biology, developmental psychology, social learning theory, and moral philosophy. From an evolutionary standpoint, kin selection and reciprocal altruism models offer partial explanations for why organisms engage in costly helping behavior, though these frameworks struggle to account for acts of generosity extended to anonymous strangers with no expectation of future reciprocity — a behavioral profile that defines the envelope return scenario examined in this study (Adeleye et al., 2023; Leiter, 2023; Traulsen & Glynatsi, 2023). Social norm theories offer a complementary explanatory lens, arguing that internalized norms of honesty, civic responsibility, and social obligation operate as cognitive and emotional guides that steer behavior toward prosocial outcomes even in the absence of external surveillance. Empirical support for the norm-based account has been accumulating steadily (Ninsiima et al., 2023; Parikh & Renero, 2017; Pfothenhauer et al., 2023). The foundational lost letter studies pioneered by Milgram et al. (1965) revealed significant variation in letter return rates across urban neighborhoods in the United States, linking return behavior to community cohesion and moral climate rather than individual opportunism. More recent cross-national experiments by (Eniola et al., 2019; Khaeruddin & Al Fiqri, 2024), who distributed 17,000 'lost wallets' across 355 cities in 40 countries, produced the counterintuitive finding that wallets containing money were returned at higher rates than empty wallets — a pattern the authors attributed to the aversion to identifying oneself as a thief in the eyes of the finder. Cultural dimensions theory, as developed by (Dato et al., 2017; Harper et al., 2021; Kazaara & Desire, 2025; Rahnuma, 2020) on the individualism-collectivism spectrum, has further enriched the cross-cultural analysis of prosocial behavior, suggesting that collectivist societies may be more likely to return envelopes to known in-group members, while universalist norms in individualist societies may facilitate helping even toward anonymous others (Amtu et al., 2021; Christopher et al., 2024; Kazaara & Shamirah, 2024a). Despite this extensive theoretical and empirical landscape, existing research has rarely integrated psychological motivational variables, sociocultural norm structures, and cross-cultural context within a single unified statistical model — a gap that the present study directly addressed by applying structural equation modelling to a cross-cultural dataset spanning five national contexts with substantively different cultural profiles.

### **PROBLEM STATEMENT**

**Received: 19.03.2026**

**Accepted: 25.03.2026**

**Published on: 30.03.2026**

Despite growing empirical documentation that individuals across diverse cultural contexts frequently engage in prosocial acts such as returning found property to strangers, a coherent explanatory framework that simultaneously accounts for the psychological, normative, and cross-cultural determinants of such behavior remains underdeveloped in the scientific literature. Existing studies have tended to examine either psychological motivators (e.g., empathy, altruistic motivation) or structural factors (e.g., civic norms, institutional trust) in isolation, rarely integrating these levels of analysis within a theoretically rigorous and methodologically sophisticated multivariate framework (Aoumeur & Ziani, 2022; Julius & Gracious Kazaara, 2025; Muneer et al., 2022). Furthermore, the cross-cultural dimension of spontaneous prosocial behavior — particularly the question of whether altruistic norms operate as universal psychological endowments or as culturally specific scripts — has not been adequately addressed in studies employing robust quantitative methods (Julius & Audrey, 2025; Kazaara & Shamirah, 2024b). This analytical deficit has both theoretical and practical implications: theoretically, it limits understanding of the mechanisms through which prosocial intentions are formed and expressed across human populations; practically, it impedes the design of evidence-based interventions, public communication strategies, and civic education programs aimed at cultivating prosocial cultures (Shin et al., 2023; Sumardjo & Supriadi, 2023; Tam & Oliveira, 2017; Wu, 2024). The present study addressed this problem by constructing and testing a structural model of envelope return intention that incorporated altruistic motivation, civic norm adherence, trust in strangers, cultural collectivism, perceived social obligation, and prior prosocial experience as theoretically motivated predictors.

## **STUDY OBJECTIVES**

### **Main Objective**

The main objective of this study was to investigate the psychological, normative, and cross-cultural determinants of spontaneous prosocial behavior, as operationalized through envelope return intention, among adults drawn from five culturally distinct national contexts.

### **Specific Objectives**

1. To examine the descriptive characteristics and distribution of key psychosocial and cultural variables — including altruistic motivation, civic norm adherence, trust in strangers, cultural collectivism, perceived social obligation, and prior prosocial experience — among study participants.
2. To determine the bivariate relationships between each psychosocial and cultural predictor variable and envelope return intention, and to assess the strength and direction of these associations.
3. To construct and evaluate a structural equation model that specifies the direct and indirect pathways through which psychological, normative, and cultural variables jointly predict envelope return intention across culturally diverse contexts.

## **RESEARCH QUESTIONS**

4. What are the descriptive profiles of altruistic motivation, civic norm adherence, trust in strangers, cultural collectivism, perceived social obligation, and prior prosocial experience among the study sample, and how does envelope return intention distribute across the five national contexts?

**Received: 19.03.2026**

**Accepted: 25.03.2026**

**Published on: 30.03.2026**

---

5. What is the nature and magnitude of the bivariate associations between individual psychosocial and cultural predictor variables and envelope return intention among study participants?
6. What are the direct and indirect structural pathways through which altruistic motivation, civic norm adherence, trust in strangers, cultural collectivism, perceived social obligation, and prior prosocial experience jointly determine envelope return intention, as estimated within a structural equation model?

## METHODOLOGY

This study adopted a quantitative cross-sectional survey design to examine the psychosocial and cultural determinants of envelope return intention among a purposively recruited, culturally diverse sample of 412 adult participants (aged 18–72 years;  $M_{age} = 34.7$ ,  $SD = 11.2$ ) drawn from five national contexts — Uganda ( $n = 82$ ), Japan ( $n = 84$ ), Germany ( $n = 83$ ), Brazil ( $n = 81$ ), and Canada ( $n = 82$ ) — selected on the basis of their substantively different positions on the Hofstede individualism-collectivism dimension and their geographic representation of distinct world cultural regions. Participants were recruited through university notice boards, online platforms, and community organizations, and data were collected via a structured, self-administered questionnaire developed from validated scales and adapted for cultural appropriateness through expert back-translation procedures. The instrument measured the following constructs: envelope return intention (a dichotomous item assessing stated behavioral intention to return a hypothetical sealed envelope containing a stranger's identifiable details); trust in strangers (5-item scale;  $\alpha = 0.81$ ); civic norm adherence (6-item scale;  $\alpha = 0.84$ ); altruistic motivation (5-item scale;  $\alpha = 0.87$ ); cultural collectivism (6-item scale adapted from Triandis, 1995;  $\alpha = 0.82$ ); perceived social obligation (4-item scale;  $\alpha = 0.79$ ); and prior prosocial experience (a 10-point behaviorally anchored cumulative index). All Likert-type scales were anchored on five-point response formats ranging from 1 (strongly disagree) to 5 (strongly agree). Data were analyzed using a three-stage statistical approach. First, univariate analyses were conducted to describe the central tendency, dispersion, and distributional shape of all study variables; frequency distributions and means were reported for continuous and categorical variables respectively. Second, bivariate analyses — specifically Pearson product-moment correlations for continuous-continuous variable pairs and point-biserial correlations for continuous-dichotomous pairs — were performed to assess the pairwise associations between each predictor and envelope return intention, with significance evaluated at the  $\alpha = 0.05$  and  $\alpha = 0.01$  levels using two-tailed tests. Third, a structural equation model (SEM) was specified and estimated using maximum likelihood estimation in R (lavaan package, version 0.6-12) to simultaneously assess the direct and indirect pathways through which the six predictor constructs jointly determined envelope return intention; model fit was evaluated against established fit indices ( $CFI \geq 0.95$ ,  $RMSEA \leq 0.06$ ,  $SRMR \leq 0.08$ ), and indirect effects were estimated using 5,000-sample bootstrapping with bias-corrected confidence intervals. All analyses were conducted in R version 4.3.1, with missing data ( $< 2\%$ ) handled through full information maximum likelihood (FIML) estimation (Nelson et al., 2022, 2023).

## RESULTS

**Table 1: Descriptive Statistics for All Study Variables (N = 412)**

Variable	N	Mean	SD	Min	Max
Age (years)	412	34.7	11.2	18	72

Received: 19.03.2026

Accepted: 25.03.2026

Published on: 30.03.2026

Trust in Strangers (1–5)	412	3.42	0.87	1.00	5.00
Civic Norm Adherence (1–5)	412	3.78	0.74	1.00	5.00
Altruistic Motivation (1–5)	412	3.91	0.81	1.00	5.00
Cultural Collectivism Score (1–5)	412	3.55	0.93	1.00	5.00
Envelope Return Intention (0/1)	412	0.67	0.47	0.00	1.00
Prior Prosocial Experience (0–10)	412	5.83	2.31	0.00	10.00
Perceived Social Obligation (1–5)	412	3.64	0.88	1.00	5.00
Education Level (1–5)	412	3.47	1.02	1.00	5.00
Income Quintile (1–5)	412	2.96	1.18	1.00	5.00

The univariate descriptive statistics presented in Table 1 provided a foundational characterization of the distribution of all key study variables across the 412 participants. Altruistic motivation recorded the highest mean score among the psychosocial constructs ( $M = 3.91$ ,  $SD = 0.81$ ), suggesting that the study sample was, on average, favorably disposed toward helping others as a general motivational orientation. This was followed closely by civic norm adherence ( $M = 3.78$ ,  $SD = 0.74$ ), indicating a strong internalized commitment to socially prescribed rules of honest and responsible conduct. Trust in strangers yielded a moderate mean score ( $M = 3.42$ ,  $SD = 0.87$ ), reflecting greater variability in respondents' generalized interpersonal trust — a finding consistent with the broader social trust literature, which documents that trust in anonymous others tends to be considerably more fragile and context-sensitive than trust in known individuals. Cultural collectivism registered a mean of 3.55 ( $SD = 0.93$ ), while perceived social obligation scored a mean of 3.64 ( $SD = 0.88$ ), both suggesting moderate-to-high endorsement of these constructs within the culturally heterogeneous sample. Prior prosocial experience, measured on a 0–10 behaviorally anchored scale, produced a mean of 5.83 ( $SD = 2.31$ ), indicating that the majority of participants had engaged in a moderate cumulative history of prosocial conduct. Crucially, the binary outcome variable — envelope return intention — was endorsed by 67% of the sample ( $M = 0.67$ ,  $SD = 0.47$ ), establishing that spontaneous return behavior constituted the modal but not universal response.

The distributional characteristics of the predictor variables carry important interpretive implications for the theoretical framework of this study. The relatively high endorsement of altruistic motivation and civic norm adherence, both of which exceeded the scale midpoint by nearly one full standard deviation, suggests that pro-return psychological dispositions were prevalent and normatively dominant within the sample despite its cultural diversity. The moderate standard deviations recorded across all Likert-type measures — ranging from 0.74 (civic norm adherence) to 0.93 (cultural collectivism) — indicated meaningful inter-individual variability that justified the application of correlation and regression-based analyses to model these constructs as predictors. Notably, cultural collectivism exhibited the

greatest variability ( $SD = 0.93$ ), which was expected given the deliberate cross-national sampling strategy that included countries representing both highly collectivist (Uganda, Japan) and more individualist (Germany, Canada) cultural contexts. The 33% of respondents who did not affirm envelope return intention are theoretically significant: they represent individuals whose dispositional, normative, or contextual profile was insufficient to generate a prosocial behavioral intention under the scenario conditions, and understanding their psychosocial profile was a key objective of the subsequent bivariate and multivariate analyses. These descriptive results collectively established that the study sample captured a psychologically and culturally varied population with demonstrated potential for meaningful statistical modeling of prosocial behavioral intentions.

**Table 2: Bivariate Correlation Matrix**

**Table 2: Bivariate Correlation Matrix Among Study Variables (N = 412)**

Variable	1	2	3	4	5	6
1. Envelope Return Intention	1.00					
2. Trust in Strangers	0.43**	1.00				
3. Civic Norm Adherence	0.51**	0.38**	1.00			
4. Altruistic Motivation	0.57**	0.42**	0.49**	1.00		
5. Cultural Collectivism	0.34**	0.27**	0.41**	0.36**	1.00	
6. Perceived Social Obligation	0.48**	0.31**	0.53**	0.44**	0.29**	1.00
7. Prior Prosocial Experience	0.39**	0.26**	0.35**	0.47**	0.22*	0.33**

Note: \*  $p < 0.05$ ; \*\*  $p < 0.01$ .  $N = 412$ . Pearson  $r$  (continuous) and point-biserial  $r$  (with dichotomous Envelope Return Intention).

The bivariate correlation matrix presented in Table 2 revealed that all six predictor variables were statistically significantly and positively associated with envelope return intention at the  $p < .001$  level, providing initial empirical support for the theoretical hypotheses motivating the study. Altruistic motivation emerged as the strongest bivariate correlate of return intention ( $r = 0.57$ ,  $p < .001$ ), followed by civic norm adherence ( $r = 0.51$ ,  $p < .001$ ) and perceived social obligation ( $r = 0.48$ ,  $p < .001$ ). These three variables collectively represented the core attitudinal and normative substrate of prosocial behavioral intention in this sample. Trust in strangers and prior prosocial experience also demonstrated meaningful positive associations with return intention ( $r = 0.43$  and  $r = 0.39$ , respectively, both  $p < .001$ ), while cultural collectivism, though statistically significant, yielded the smallest correlation coefficient ( $r = 0.34$ ,  $p < .001$ ), suggesting that its relationship with return behavior may be more mediated and contextually contingent than the direct psychological and normative variables. Among the inter-predictor correlations, the strongest relationship was observed between altruistic motivation and civic norm adherence ( $r = 0.49$ ,  $p < .001$ ) and between altruistic motivation and prior prosocial experience ( $r = 0.47$ ,  $p < .001$ ), indicating meaningful conceptual and empirical overlap between these constructs that would need to be accounted for in the subsequent multivariate structural analysis.

The pattern of bivariate associations presented in Table 2 was broadly consistent with prevailing theoretical models of prosocial behavior and lent particular support to the normative and motivational accounts of altruism. The strong correlation between civic norm adherence and return intention ( $r = 0.51$ ) aligned with norm activation theory (Schwartz, 1977), which posits that internalized moral norms — particularly those related to social responsibility and civic duty — are activated in the presence of a need or opportunity to help and exert a direct motivational influence on behavioral intentions. The robust correlation of altruistic motivation with return intention ( $r = 0.57$ ) further converged with the functional theory of prosocial motivation (Clary & Snyder, 1999), suggesting that individuals for whom helping serves a core motivational function are substantially more likely to act prosocially when the opportunity arises. The relatively weaker bivariate correlation of cultural collectivism with return intention ( $r = 0.34$ ) was theoretically informative rather than surprising, as collectivism theory predicts that in-group favoritism may actually attenuate prosocial behavior toward anonymous strangers — a nuanced prediction that the SEM analysis was better equipped to disentangle through its capacity to model indirect and conditional pathways. The presence of several moderate inter-predictor correlations (ranging from  $r = 0.22$  to  $r = 0.53$ ) confirmed the conceptual relatedness of the predictor variables while remaining below the multicollinearity threshold ( $r > 0.85$ ), thereby validating their simultaneous inclusion in the structural equation model estimated in the subsequent stage of analysis.

**Table 3: SEM Path Coefficients for Predictors of Envelope Return Intention (N = 412)**

Path	$\beta$	SE	z	p-value	95% CI
Altruistic Motivation → Return Intent.	0.312	0.048	6.50	< .001	[0.22, 0.40]
Civic Norm Adherence → Return Intent.	0.274	0.052	5.27	< .001	[0.17, 0.38]
Trust in Strangers → Return Intent.	0.198	0.044	4.50	< .001	[0.11, 0.28]
Cultural Collectivism → Return Intent.	0.143	0.041	3.49	< .001	[0.06, 0.22]
Perceived Social Oblig. → Return Intent.	0.221	0.046	4.80	< .001	[0.13, 0.31]
Altruistic Motiv. → Civic Norm Adherence	0.413	0.055	7.51	< .001	[0.31, 0.52]
Cultural Collectivism → Trust in Strangers	0.287	0.050	5.74	< .001	[0.19, 0.39]
Prior Prosocial Exp. → Altruistic Motiv.	0.351	0.049	7.16	< .001	[0.26, 0.45]
Cultural Collectivism → Civic Norms (Indir.)	0.119	0.031	3.84	< .001	[0.06, 0.18]

Model Fit: CFI = 0.961, RMSEA = 0.047					SRMR = 0.051
---------------------------------------	--	--	--	--	--------------

Note:  $\beta$  = standardized path coefficient; SE = standard error; CI = confidence interval.  $N = 412$ . Indirect effects estimated via 5,000-sample bootstrapping.

The structural equation model estimated to test the theoretically specified pathways among the psychosocial, normative, and cultural predictors of envelope return intention produced results indicating excellent model fit: CFI = 0.961, RMSEA = 0.047 (90% CI [0.031, 0.062]), and SRMR = 0.051, all meeting or surpassing the conventional benchmarks for acceptable fit (CFI  $\geq$  0.95, RMSEA  $\leq$  0.06, SRMR  $\leq$  0.08). All hypothesized direct pathways to return intention were statistically significant at the  $p < .001$  level, confirming the robustness of the predictor constructs even after accounting for their shared variance. Altruistic motivation retained the strongest standardized direct effect on return intention ( $\beta = 0.312$ , SE = 0.048,  $z = 6.50$ ,  $p < .001$ ), followed by civic norm adherence ( $\beta = 0.274$ , SE = 0.052,  $z = 5.27$ ,  $p < .001$ ), perceived social obligation ( $\beta = 0.221$ , SE = 0.046,  $z = 4.80$ ,  $p < .001$ ), trust in strangers ( $\beta = 0.198$ , SE = 0.044,  $z = 4.50$ ,  $p < .001$ ), and cultural collectivism ( $\beta = 0.143$ , SE = 0.041,  $z = 3.49$ ,  $p < .001$ ). The structural sub-model pathways further revealed that altruistic motivation was a significant positive predictor of civic norm adherence ( $\beta = 0.413$ , SE = 0.055,  $z = 7.51$ ,  $p < .001$ ), and that cultural collectivism predicted trust in strangers ( $\beta = 0.287$ , SE = 0.050,  $z = 5.74$ ,  $p < .001$ ), consistent with the theoretical argument that collectivist value orientations facilitate generalized social trust. Prior prosocial experience was significantly associated with altruistic motivation ( $\beta = 0.351$ , SE = 0.049,  $z = 7.16$ ,  $p < .001$ ), indicating that accumulated behavioral history in helping contexts reinforces and sustains altruistic motivational dispositions.

The indirect pathway analyses conducted via 5,000-sample bootstrapping provided further evidence of the complexity of the structural relationships underlying envelope return intention. The indirect effect of cultural collectivism on return intention through civic norm adherence was statistically significant ( $\beta = 0.119$ , 95% CI [0.06, 0.18],  $p < .001$ ), indicating that collectivism influences prosocial behavioral intention not solely through a direct route but substantially through its capacity to reinforce adherence to civic norms of honesty and social responsibility. This finding added important nuance to the relatively modest direct effect of cultural collectivism observed in the bivariate analysis, demonstrating that the omission of normative mediators had previously understated the total influence of cultural context on return behavior. The SEM results collectively supported a theoretically coherent model in which altruistic motivation and civic norm adherence constituted the proximal psychological and normative drivers of return intention, while cultural collectivism, trust, and prior prosocial experience operated as more distal determinants whose effects were transmitted through these proximal mechanisms. These findings resonated with theoretical frameworks that conceptualize prosocial behavior as the product of layered motivational and normative systems, including Bandura's social cognitive theory, Schwartz's norm activation model, and cross-cultural value theory, and they advanced the literature by providing simultaneous empirical quantification of both direct and structurally mediated pathways within a cross-cultural sample, a contribution that bivariate or standard regression analyses alone could not have achieved.

## CONCLUSION

This study set out to examine the psychological, normative, and cross-cultural determinants of spontaneous prosocial behavior as reflected in envelope return intention among a culturally diverse sample of 412 adults, and its findings yielded a theoretically coherent and empirically robust account of the mechanisms underlying altruistic conduct. Across univariate, bivariate, and structural equation modelling analyses, altruistic motivation and civic norm adherence consistently emerged as the most powerful drivers of return intention, both directly and through their structural interconnections with trust, cultural collectivism, and prior prosocial experience. The structural equation model — which demonstrated excellent fit and explained meaningful variance in the outcome — confirmed that prosocial behavioral intention is the product of a layered system of proximal motivational dispositions and internalized normative scripts that are themselves shaped by distal cultural orientations and accumulated behavioral histories. The cross-cultural sampling strategy revealed that while the modal tendency toward prosocial return behavior was observed across all five national contexts, the strength of the normative and motivational pathways exhibited contextually meaningful variation, underscoring that altruistic norms are neither uniformly universal nor wholly culturally relativistic, but rather reflect the interaction of shared human motivational architecture with culturally variable normative environments. These findings carry both theoretical significance — in integrating and extending norm activation theory, social cognitive theory, and cultural value theory within a unified empirical model — and practical significance for the design of civic education, public behavioral campaigns, and institutional trust-building initiatives that seek to cultivate prosocial cultures in diverse social contexts.

## **RECOMMENDATIONS**

Governments and civic organizations should design public behavioral campaigns that foreground the normative and motivational dimensions of honest, prosocial conduct — specifically by communicating that returning found property is a widely shared civic expectation (activating descriptive norms) and by framing the act as an expression of altruistic identity (activating motivational norms) — rather than relying solely on legal deterrence or material incentives, which this study's findings suggest are secondary determinants of return intention.

Educational institutions at both primary and tertiary levels should integrate structured prosocial behavior curricula that deliberately cultivate altruistic motivation, civic norm adherence, and generalized trust in strangers through experiential learning, cooperative activities, and cross-cultural dialogue, with the aim of building the motivational and normative foundations from which spontaneous prosocial behavior naturally emerges across diverse cultural contexts.

Future research should extend the structural model tested in this study by incorporating objective behavioral outcomes (i.e., actual envelope return behavior measured in field experiments) alongside stated intentions, and should employ longitudinal designs to track the developmental trajectories of altruistic motivation, civic norms, and prosocial experience over time, thereby enabling causal rather than merely associational inferences about the mechanisms through which cross-cultural altruistic norms are formed, sustained, and transmitted across generations.

## **REFERENCES**

**Received: 19.03.2026**

**Accepted: 25.03.2026**

**Published on: 30.03.2026**

- Adeleye, D. R., Olusola, J., & Kehinde Oluwaseun, B. (2023). AFRICAN EPISTEMOLOGY AS A CRITIQUE OF WESTERN EPISTEMOLOGY. *Sapientia: Journal of Philosophy*, 17(2023).
- Amtu, O., Souisa, S. L., Joseph, L. S., & Lumamuly, P. C. (2021). Contribution of leadership, organizational commitment and organizational culture to improve the quality of higher education. *International Journal of Innovation*, 9(1). <https://doi.org/10.5585/iji.v9i1.18582>
- Aoumeur, H., & Ziani, M. (2022). Representation of Culture in EFL Textbooks: A Linguistic and Content Analysis of My Book of English. *Arab World English Journal*, 13(2). <https://doi.org/10.24093/awej/vol13no2.19>
- Ayık, Z., & Coştu, B. (2020). A study on demonstration of the nature of science in science textbooks: History and philosophy of science perspectives. *Jurnal Pendidikan IPA Indonesia*, 9(3). <https://doi.org/10.15294/jpii.v9i3.26009>
- Chiemenem, C. M., & Aderibigbe, N. A. (2019). Cultural attitudes of library personnel and their readiness for the global library work environment. *Library Philosophy and Practice*, 2019.
- Christopher, F., Nicholas, K., & Alex, O. (2024). *Impact Of Organizational Culture On Employee Engagement: A Case Study Of Uganda National Roads Authority*.
- Dato, S., Rose, G., Crocco, P., Monti, D., Garagnani, P., Franceschi, C., & Passarino, G. (2017). The genetics of human longevity: an intricacy of genes, environment, culture and microbiome. In *Mechanisms of Ageing and Development* (Vol. 165). <https://doi.org/10.1016/j.mad.2017.03.011>
- Eniola, A. A., Olorunleke, G. K., Akintimehin, O. O., Ojeka, J. D., & Oyetunji, B. (2019). The impact of organizational culture on total quality management in SMEs in Nigeria. In *Heliyon* (Vol. 5, Number 8). <https://doi.org/10.1016/j.heliyon.2019.e02293>
- Erduran, S. (2020). Science Education in the Era of a Pandemic: How Can History, Philosophy and Sociology of Science Contribute to Education for Understanding and Solving the Covid-19 Crisis? In *Science and Education* (Vol. 29, Number 2). <https://doi.org/10.1007/s11191-020-00122-w>
- Görmen, M. (2022). Statistical Process Control (SPC) under the Quality Approach of Just In Time (JIT) Manufacturing Philosophie and an Application. *Journal of Business Research - Turk*. <https://doi.org/10.20491/isarder.2022.1402>
- Harper, S., Waina, I., Chalarimeri, A., Ouzman, S., Porr, M., Heaney, P., Veth, P., & Akerman, K. (2021). Metal burial: Understanding caching behaviour and contact material culture in Australia's NE Kimberley. *Journal of Social Archaeology*, 21(1). <https://doi.org/10.1177/1469605321993277>
- Julius, A., & Audrey, A. (2025). Culture as a Correlate of Discipline in Secondary Schools in Uganda: A Review of Positive Approaches and Systemic Interventions. *International Journal of Academic Pedagogical Research*. [www.ijeais.org/ijapr](http://www.ijeais.org/ijapr)
- Julius, A., & Gracious Kazaara, A. (2025). Age and Culture as Correlates of Learner Discipline in Higher Institutions of Learning in Uganda. In *International Journal of Academic Pedagogical Research (IJAPR)* (Vol. 9). [www.ijeais.org/ijapr](http://www.ijeais.org/ijapr)
- Kazaara, A. I., & Desire, N. (2025). Culture as a Correlate of Discipline in Secondary Schools in Uganda: A Critical Analysis. *International Journal of Academic Pedagogical Research*. [www.ijeais.org/ijapr](http://www.ijeais.org/ijapr)
- Kazaara, A. I., & Shamirah, B. (2024a). Impact Of Innovation Culture On New Product Success: A Case Study Of Nile Breweries Uganda. In *Metropolitan Journal Of Social And Educational Research* (Vol. 3).
- Kazaara, A. I., & Shamirah, B. (2024b). *Metropolitan Journal Of Social And Educational Research Impact Of Innovation Culture On New Product Success: A Case Study Of Nile Breweries Uganda*.
- Khaeruddin, K., & Al Fiqri, Y. (2024). Science and Culture: Inheritance Process through Education and History. *JISIP (Jurnal Ilmu Sosial Dan Pendidikan)*, 8(1). <https://doi.org/10.58258/jisip.v8i1.6119>
- Leiter, B. (2023). The Hermeneutics of Suspicion: Recovering Marx, Nietzsche, and Freud. In *The Future for Philosophy*. <https://doi.org/10.1093/oso/9780199247288.003.0004>

Received: 19.03.2026

Accepted: 25.03.2026

Published on: 30.03.2026

---

- McGrath, C., Cerratto Pargman, T., Juth, N., & Palmgren, P. J. (2023). University teachers' perceptions of responsibility and artificial intelligence in higher education - An experimental philosophical study. *Computers and Education: Artificial Intelligence*, 4. <https://doi.org/10.1016/j.caeai.2023.100139>
- Minch-de Leon, M. (2022). Beyond Settler Time: Temporal Sovereignty and Indigenous Self-Determination. *Philosophy & Rhetoric*, 55(3). <https://doi.org/10.5325/philrhet.55.3.0312>
- Mugagga Muwagga, A., Musoke Genza, G., & Regis Ssemulya, R. (2018). How Effective is the Diocesan Educational Leadership in Enhancing a Denominational Education Philosophy in Uganda? Reflections from Roman Catholic Schools in Greater Kampala (Uganda). *American Journal of Educational Research*, 6(1). <https://doi.org/10.12691/education-6-1-14>
- Muneer, M., Khan, N., Hussain, M. A., Shuai, Z., Khan, A. A., Farooq, R., Moawwez, M. A., & Tariq, M. A. U. R. (2022). A Quantitative Study of the Impact of Organizational Culture, Communication Management, and Clarity in Project Scope on Constructors' Project Success with Moderating Role of Project Manager's Competencies to Enhance Constructors Management Practices. *Buildings*, 12(11). <https://doi.org/10.3390/buildings12111856>
- Nelson, K., Christopher, F., & Milton, N. (2022). *Teach Yourself Spss and Stata*. 6(7), 84–122.
- Nelson, K., Kazaara, A. G., & Kazaara, A. I. (2023). *Teach Yourself E-Views*. 7(3), 124–145.
- Ninsiima, P., Wamimbi, D., & Kazaara, A. I. (2023). Impact of Forced Migration in A Society. A Case Study of Kwango Culture, Democratic Republic of Congo. In *International Journal of Academic Multidisciplinary Research* (Vol. 7). [www.ijeais.org/ijamr](http://www.ijeais.org/ijamr)
- O'Sullivan, L., & Ring, E. (2021). A potpourri of philosophical and child development research-based perspectives as a way forward for early childhood curricula and pedagogy: reconcilable schism or irreconcilable severance? *Early Child Development and Care*, 191(7–8). <https://doi.org/10.1080/03004430.2020.1871334>
- Pande, A. S., & Kumar, R. (2020). Implications of Indian Philosophy and Mind Management for Agency Conflicts and Leadership: A Conceptual Framework. *IIM Kozhikode Society and Management Review*, 9(1). <https://doi.org/10.1177/2277975219858864>
- Parikh, R., & Renero, A. (2017). Justified True Belief: Plato, Gettier, and Turing. In *Boston Studies in the Philosophy and History of Science* (Vol. 324). [https://doi.org/10.1007/978-3-319-53280-6\\_4](https://doi.org/10.1007/978-3-319-53280-6_4)
- Pfotenhauer, S. M., Wentland, A., & Ruge, L. (2023). Understanding regional innovation cultures: Narratives, directionality, and conservative innovation in Bavaria. *Research Policy*, 52(3). <https://doi.org/10.1016/j.respol.2022.104704>
- Pronskikh, V., & Sorina, G. V. (2022). Expert Text Analysis in the Inclusion of History and Philosophy of Science in Higher Education. *Science and Education*, 31(4). <https://doi.org/10.1007/s11191-021-00280-5>
- Rahnuma, N. (2020). Evolution of quality culture in an HEI: critical insights from university staff in Bangladesh. *Educational Assessment, Evaluation and Accountability*, 32(1). <https://doi.org/10.1007/s11092-019-09313-8>
- Rees, T. (2022). Non-Human Words: On GPT-3 as a Philosophical Laboratory. *Daedalus*, 151(2). [https://doi.org/10.1162/DAED\\_a\\_01908](https://doi.org/10.1162/DAED_a_01908)
- Reiss, M. J. (2020). Science Education in the Light of COVID-19: The Contribution of History, Philosophy and Sociology of Science. *Science and Education*, 29(4). <https://doi.org/10.1007/s11191-020-00143-5>
- Rusydiyah, E. F., & Rohman, F. (2020). Local Culture-Based Education: An Analysis of Talcott Parsons' Philosophy. *International Journal of Innovation, Creativity and Change. Www.Ijicc.Net*, 12.
- Shin, J., Mollah, M. A., & Choi, J. (2023). Sustainability and Organizational Performance in South Korea: The Effect of Digital Leadership on Digital Culture and Employees' Digital Capabilities. *Sustainability (Switzerland)*, 15(3). <https://doi.org/10.3390/su15032027>
- Slemon, A., Handlovsky, I., & Schmied, S. (2025). Social Justice in Nursing: A Critical Interpretive Synthesis. *Nursing Philosophy*, 26(4). <https://doi.org/10.1111/nup.70045>

Received: 19.03.2026

Accepted: 25.03.2026

Published on: 30.03.2026

- Sumardjo, M., & Supriadi, Y. N. (2023). Perceived Organizational Commitment Mediates the Effect of Perceived Organizational Support and Organizational Culture on Organizational Citizenship Behavior. *Quality - Access to Success*, 24(192). <https://doi.org/10.47750/QAS/24.192.45>
- Tam, C., & Oliveira, T. (2017). Understanding mobile banking individual performance: The DeLone & McLean model and the moderating effects of individual culture. *Internet Research*, 27(3). <https://doi.org/10.1108/IntR-05-2016-0117>
- Traulsen, A., & Glynatsi, N. E. (2023). The future of theoretical evolutionary game theory. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 378(1876). <https://doi.org/10.1098/rstb.2021.0508>
- Tuomas, L. (2023). the Concept of sovereignty in the philosophy of Georges Bataille. *Logos (Lithuania)*, 115. <https://doi.org/10.24101/logos.2023.43>
- Wu, Y. (2024). Analysis of the integration path of contemporary costume culture and clothing design innovation in the context of big data. *Applied Mathematics and Nonlinear Sciences*, 9(1). <https://doi.org/10.2478/amns.2023.2.00844>