



COOPETITION, FUNDRAISING EFFECTIVENESS, AND SOCIAL PERFORMANCE:
THE CONDITIONAL ROLE OF EXECUTIONAL CAPABILITY IN PAKISTANI NONPROFITS

Bella Gulshan ¹

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Affiliations:

¹ Independent Researcher
ORCID ID: 0000-0001-5477-
2231

Email: bellagulshan@gmail.com

**Corresponding Author's
Email:**

¹ bellagulshan@gmail.com

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Abstract

Nonprofit organizations often collaborate with peers that also compete for grants, knowledge, visibility, and participation in funded projects. This study examines whether coopetition is associated with social performance through fundraising effectiveness and whether executional capability conditions the fundraising effectiveness-social performance association. Survey data from 418 Pakistani nonprofit organizations were analysed using robust confirmatory factor analysis, hierarchical regression with HC3 standard errors, simple-slopes and Johnson–Neyman analyses and bootstrapped second-stage moderated mediation. Coopetition was positively associated with fundraising effectiveness. The fundraising effectiveness–social performance association was positive when executional capability was low, statistically nonsignificant at its mean, and negative when executional capability was high; the conditional indirect association followed the same pattern. The findings indicate that coopetition can be associated with higher fundraising effectiveness without uniformly corresponding to stronger social performance. It further suggests that executional capability, operationalized through knowledge-protection routines, may constrain resource conversion when implementation depends on continued information exchange and coordination. The study contributes by separating resource acquisition from resource use and by identifying executional capability as a boundary condition in nonprofit resource conversion.

Keywords: Coopetition; Fundraising Effectiveness; Social Performance; Executional Capability; Nonprofit Organizations; Pakistan

1. Introduction

Nonprofit organizations rarely control all the resources needed to pursue their missions. Funding, expertise, legitimacy, institutional referrals, and access to communities are often controlled by donors, public agencies, intermediary networks, and peer organizations. Nonprofits therefore form external relationships to secure critical resources and reduce environmental uncertainty (Pfeffer & Salancik, 1978; Hillman et al., 2009; Drees & Heugens, 2013). Yet organizations that provide valuable resources may also compete for grants, donor attention, skilled personnel, visibility, and inclusion in funded projects. Nonprofits may consequently cooperate and compete with the same partners, a dynamic commonly described as coopetition (Bengtsson & Kock, 2000; Raza-Ullah et al., 2014).

This tension is particularly salient in resource-constrained settings such as Pakistan, where nonprofit organizations often depend on project-based funding while attempting to sustain services amid institutional and financial pressures (Ghaus-Pasha & Iqbal, 2002; Batley, 2011). Organizations benefit from interorganizational relationships through gaining access to information, legitimacy, resources, and beneficiaries, yet they are also faced with the burden of accountability, dependency, and possible limitations of organizational freedom (Guo & Acar, 2005; Bano, 2011; Arvidson & Linde, 2021; Liu & Van de Walle, 2023). The Free and Fair Election Network (FAFEN) provides an adequate analytical lens to explore such



dynamics. The member organizations retain their own identity and purpose but work together in collective action in funding-knowledge networks. Earlier studies on FAFEN showed that there is a possibility of coopetition-based fund generation because of scarcity of resources and alliance formalization (Gulshan & Liaqat, 2022). The present study investigates how the fundraising effectiveness of the concerned relationship can affect social performance.

The outcome of interest is social performance. In this study, social performance reflects gains in service improvements, beneficiary coverage, and the geographic expansion of the organizational activities. Social performance is dependent on the scope and reach of mission-related actions, but not the quality of service, impact on beneficiaries, or impact on the system as a whole (Ebrahim & Rangan, 2014; Benjamin et al., 2023). Therefore, resource availability alone does not signify improved social performance.

Coopetition may be associated with social performance through fundraising effectiveness. Organizations operating in similar funding and knowledge contexts may have relevant information about potential donors, experience writing proposals, connections at institutions, and sources of projects (Fu & Cooper, 2021; Seo & Bryson, 2022). These specific relationships and working with such organizations may reduce fundraising costs and improve outcomes. Therefore, the construct examined here is narrower than long-term organizational fund development. It captures whether a focal relationship produces expected results, lowers fundraising expenses, generates revenues, or establishes useful institutional references. Even when a focal relationship exhibits high fundraising effectiveness, the resulting funds, references, and opportunities must still be connected to staff, programs, reporting systems, local knowledge, and implementation decisions before they can contribute to social performance (Sirmon et al., 2011; Bals et al., 2023).

Executorial capability may shape this conversion process. Nonprofits need routines that enable collaboration while protecting strategically important information and organizational interests (Gast et al., 2019; Song & Yu, 2024). Routines are essential for protecting information about donors, beneficiaries, unique service delivery methods, and stakeholder relationships. Similarly, protective practices may inhibit the communication and cooperation needed for the joint development of opportunities (Gast et al., 2019; Song & Yu, 2024). Thus, the knowledge protection element of executorial capability may help organizations to remain autonomous and limit the association between fundraising effectiveness and social performance. The main question, therefore, is not whether executorial capability is beneficial or harmful but whether its effects differ at different levels of the coopetitive process.

Existing research has examined nonprofit resource dependence and interorganizational collaboration (Guo & Acar, 2005; Fu & Cooper, 2021; Seo & Bryson, 2022), while other studies have considered coopetition, fundraising, knowledge protection, and nonprofit performance (Gast et al., 2019; Arenas et al., 2021; Xie et al., 2023; Song & Yu, 2024). A related study using a different Iraqi nonprofit sample found a relationship between coopetition and performance mediated by external knowledge and an innovative climate (Gulshan & Liaqat, 2023). This provides more insight into why nonprofits develop interorganizational ties and the advantages that may be obtained from these associations. However, studies have not adequately explained whether relationship-level fundraising effectiveness is subsequently associated with social performance or whether protection-oriented executorial routines condition that conversion. This acquisition–conversion question differs from asking whether coopetition has a broad direct association with nonprofit performance.

The present study addresses this gap by examining coopetition, fundraising effectiveness, executorial capability, and social performance among Pakistani nonprofit organizations. Fundraising effectiveness is treated as an intermediate relationship-level outcome rather than as evidence that mission delivery has already improved. The analysis then examines whether the knowledge-protection component of executorial capability conditions the association between fundraising effectiveness and social performance and, consequently, whether the indirect association between coopetition and social performance varies across levels of executorial capability.



Three research questions guide the study. First, is coopetition positively associated with fundraising effectiveness? Second, does executional capability moderate the association between fundraising effectiveness and social performance? Third, does the indirect association between coopetition and social performance through fundraising effectiveness vary across levels of executional capability?

The study contributes to nonprofit management and coopetition research in three ways. First, it identifies fundraising effectiveness as a distinct relationship-level outcome of nonprofit coopetition, rather than treating organizational performance as a single undifferentiated construct. Second, it distinguishes between acquiring resources and converting them into social performance. Third, it develops a boundary-condition argument by examining whether protection-oriented executional routines alter the value of fundraising effectiveness for social performance. Together, these contributions explain why a competitive relationship may perform well in fundraising effectiveness while yielding different levels of social performance, depending on how organizations manage knowledge protection and cross-organizational coordination.

2. Literature Review and Hypotheses

2.1 Resource Dependence, Nonprofit Coopetition, and Social Performance

Resource dependence theory starts from a straightforward premise: organizations are not self-sufficient. External entities control many of the resources required for survival and goal attainment, and dependency increases if those resources are scarce, concentrated, difficult to replace, or of strategic importance (Pfeffer & Salancik, 1978). Organizations respond to such problems through alliances, networks, and diversification, among others, which help improve access and reduce uncertainty. These responses may shift the burden of organizational interdependence, but they bring up new issues related to power, control, and autonomy (Hillman et al., 2009; Drees & Heugens, 2013).

For non-profit organizations, dependency is a critical element of the organizational life. It can either be controlled or limited by donors, government bodies, intermediaries, volunteers, communities, and other organizations. It affects the organization's activities, reporting lines, service delivery, and planning processes (Froelich, 1999). Further, it affects the organizational practices, reporting, service provision, and planning (Froelich, 1999). While collaboration may improve resource access, both financial and information, and even legitimacy, it may also impose some extra accountability responsibilities and limit autonomy (Guo & Acar, 2005; Bouchard & Raufflet, 2019; Xu & Kim, 2021). Therefore, network involvement offers opportunities but implies that governance and coordination problems need to be considered (Ihm & Shumate, 2019; Fu & Cooper, 2021; Liu & Van de Walle, 2023).

The dependence becomes more complicated when a useful partner is also a competitor. Nonprofits can have common social objectives, yet they compete with each other for funding, donors, employees, recognition, and inclusion in funded initiatives. Moreover, nonprofits can also exchange information, cooperate on proposals, make referrals, or engage in joint activities (Arenas et al., 2021; Nascimento et al., 2021). The connection creates some shared value, although both organizations continue to look after their own interests with regard to funding, recognition, knowledge, and future possibilities (Hardy et al., 2003).

Thus, the consequences of coopetition may not be exclusively positive or negative. While coopetition may foster learning, drive innovation, facilitate resource accessibility, and lead to high performance, it may simultaneously trigger conflicts and create problems concerning appropriation and coordination. This will be determined by various factors such as the type of players involved, the degree of their interdependence, governance mode, and performance measures that matter (Corbo et al., 2023; Xie et al., 2023; Klimas et al., 2025; Konyahoğlu et al., 2026). It is relevant to non-profit organizations which need credibility and complementarity even while competing for limited resources (Arenas et al., 2021; Nascimento et al., 2021).

This study analyses competitive resource interdependence as a dimension of nonprofit coopetition. Specifically, attention is paid to organizational interaction in which organizations operate in a resource environment overlap, cooperate on resource opportunities, and take into account each other's competitive concerns. It is a concept that does not incorporate all instances of cooperation and coopetition within the



relationship. Instead, it highlights an environment where mutual benefit is possible through understanding donors' needs and having relevant information while competing for opportunity distribution.

Resource dependence research explains why nonprofits form external relationships and what resources those ties may provide. However, it says less about what happens after access is gained. A relationship may improve fundraising effectiveness without producing a comparable change in social performance (Sirmon et al., 2011). The immediate resource-acquisition outcome of coopetition may therefore be distinguished from its subsequent association with social performance. In this study, fundraising effectiveness captures the relationship-level acquisition outcome, while social performance captures a subsequent mission-related outcome.

2.2 Coopetition and Fundraising Effectiveness

Fundraising effectiveness refers to the extent to which a particular interorganizational relationship produces expected fundraising results, lowers fundraising costs, and generates revenues or useful institutional references (Brooks, 2004). It is more specific than fund development because it refers to the longer process of governance, diversification, and relationship maintenance with donors, and it differs from social performance because fundraising effectiveness reflects resource acquisition rather than expanded mission delivery.

Coopetition may support fundraising, since companies competing in the same environment tend to have knowledge that is valuable to one another (Tidström et al., 2018). Organizations applying for funds from the same sources likely have comparable eligibility requirements, proposal rules, reporting standards, and fund allocation preferences. They may, however, have a different set of local connections, experiences with implementing the proposal, or different sources of legitimacy. The prospective competitor may thus also become an invaluable resource for learning about the proposal, donors, institutions, and financing channels.

Cooperation allows these resources to be combined (Proulx et al., 2014). Organizations may coordinate proposals, share the costs of identifying opportunities, exchange references, pool reputational credibility, or divide responsibilities according to expertise and geographic access. Research on nonprofit networks shows that interorganizational ties connect organizations to different combinations of material, informational, and institutional resources (Fu & Cooper, 2021; Liu & Van de Walle, 2023). Nonprofit collaboration likewise suggests that resources are developed through continuing interaction rather than simply transferred from one organization to another (Seo & Bryson, 2022).

Coopetition may also sharpen fundraising behaviour (Ashley & Faulk, 2010). Recognizing that a partner has conflicting interests may result in closer scrutiny of the donor's expectations, new possibilities, and response speed. Cooperation and coopetition can coexist without necessarily working against each other. The organizations need not eliminate competitiveness from the partnership; they need enough common interest to exchange or combine fundraising-relevant resources.

Coopetition may continue to create doubts, fears of information appropriation, and disagreement about the distribution of funds (Gast et al., 2019). This makes it problematic to predict positive impacts on general organizational performance. Fundraising effectiveness is a more immediate and specific outcome. Despite the tension that may exist, mutual understanding and participation in the same funding context will enable each organization to become valuable to one another. This results in the first hypothesis.

H1: Coopetition is positively associated with fundraising effectiveness.

2.3 Fundraising Effectiveness, Executional Capability, and Social Performance

Fundraising effectiveness creates the potential for mission activity, but it does not demonstrate that social performance has improved. Funds may pay for staff, transportation, program materials, and service delivery. Institutional references can open access to new donors, communities, or locations, while lower fundraising costs may release resources for programs. These benefits contribute to social performance only when acquired resources are connected to organizational routines, implementation decisions, and the knowledge required to deliver services.

Resource-orchestration research helps explain why resource acquisition is only one stage of value creation. Resources must be structured, bundled, and leveraged before they contribute to performance (Sirmon



et al., 2011; Bals et al., 2023). Resource mobilization similarly distinguishes the search for resource providers, access to resources, governance of the resulting relationships, and deployment (Drencheva et al., 2022; Inceoglu et al., 2024). Therefore, a nonprofit may report high fundraising effectiveness while struggling to connect the resulting funds, references, or access to social performance.

In this study, social performance involves documented growth in the provision of social services, numbers of beneficiaries reached, and geographic extent of service provision. It reflects the extent and scope of mission delivery, but not the quality of services provided, the results for individual beneficiaries, or the broader social effects (Ebrahim & Rangan, 2014; Benjamin et al., 2023). This difference between fundraising effectiveness and social performance is thus both conceptual and practical, as one concerns obtaining resources, whereas the other concerns using them to expand mission delivery.

Executorial capability may condition the link between fundraising effectiveness and social performance. Generally, executorial capability relates to the routines used in handling simultaneous cooperative demands (Bengtsson et al., 2016). In this study, two executorial metrics are distinguished that relate to knowledge protection—the ability to contribute useful knowledge without putting core competencies at stake and information screening, ensuring that strategically valuable knowledge is protected (Estrada et al., 2016). This narrower specification of the concept should thus be viewed as a knowledge protection aspect of the executorial capability construct.

Such routines can serve an important purpose. Nonprofit organizations often have confidential data about their donors, beneficiaries, unique service practices, and key stakeholder relationships. Any unauthorized distribution of this information can result in risks such as appropriation, loss of control, or future competitive disadvantage (Rouyre & Fernandez, 2019). Coopetition and knowledge management consider the sharing and protection of knowledge as interrelated activities instead of assuming that total transparency is always desirable (Gast et al., 2019; Song & Yu, 2024; Le Roy et al., 2025). In this regard, it may preserve autonomy and make the coopetition relatively manageable.

The implications of executorial capability may nevertheless differ across stages of resource mobilization. However, the effects of this capability may vary according to the stages of the business relationship. Knowledge protection is important in the process of fundraising, but becomes increasingly restrictive beyond that point, particularly where the utilization of the resources requires the exchange of information. In cases where the grant has been secured using a relationship, the grant can be contingent upon reporting procedures, implementation capacity, referral, beneficiary information, and even legitimacy by virtue of the partnership. Thus, fundraising effectiveness may remain partly embedded in the relationship rather than becoming fully independent resources (Seo & Bryson, 2022).

Under these conditions, higher-level capability can become a limiting factor in resource conversion. Information exchange may slow or narrow information sharing, coordination may become unreliable, and implementation may progress without access to relevant partner knowledge (Ritala et al., 2017). Boundary-spanning research indicates that commitment and coordination are needed to transfer and integrate knowledge across the organizational boundaries (Jiang et al., 2023; Shi et al., 2023). Whereas protection is prioritized over integration, the resources or references gained through the relationship may not relate to social performance. The proposed moderation reflects the trade-off between autonomy and integration but not as a measure of poor management based on high executorial capability. Similarly, low executorial capability does not mean lack of protection, while high executorial capability does not mean inherent harm to protection. The prediction is narrower: with more protection-based executorial capability, the association between fundraising and social performance is expected to decrease.

H2: Executorial capability, as represented by knowledge-protection routines, negatively moderates the relationship between fundraising effectiveness and social performance, such that the relationship becomes weaker as executorial capability increases.

2.4 Conditional Indirect Relationship

Together, these arguments depict a conditional process of resource conversion. There should be a positive relationship between coopetition and fundraising effectiveness because the organizations operate in



a similar resource environment where they have relevant donor data, proposal information, contacts, and access. Fundraising effectiveness, however, remains an intermediate relationship benefit rather than evidence of social performance. Its association may condition the routines through which relationship-generated resources are put into use.

Executorial capability is positioned at the second stage because organizations may report high fundraising effectiveness while maintaining strong knowledge-protection routines. Such routines may not prevent them from identifying funding opportunities, preparing proposals, reducing fundraising costs, or obtaining useful references. Their influence is more likely to emerge when those resources have to be linked to services, beneficiaries, and geographic expansion.

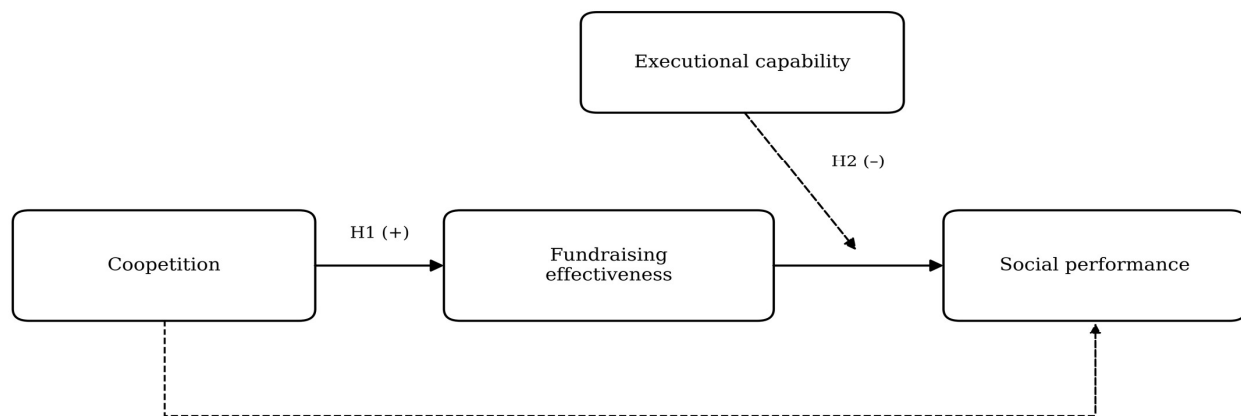
The indirect association between coopetition and social performance through fundraising effectiveness is therefore varied across levels of executorial capability. At lower levels, fundraising effectiveness may be more closely associated with social performance because implementation remains connected to partner information, coordination, and knowledge. Under these conditions, coopetition may be positively associated with social performance through fundraising effectiveness. When executorial capability rises, stronger information filtering may weaken the fundraising effectiveness–social performance association and, in turn, reduce the indirect association.

This argument does not assume that fundraising effectiveness mediates the coopetition–social performance association at every level of executorial capability. Rather, it proposes that both the strength and direction of the indirect association depend on how knowledge protection is managed during implementation.

H3. The indirect relationship between coopetition and social performance through fundraising effectiveness becomes weaker as executorial capability increases.

Figure 1

Conceptual Framework



H3: Conditional indirect association through fundraising effectiveness

Note. The framework specifies a second-stage moderated indirect relationship. EC = executorial capability.

3. Methodology

3.1 Research Design

A quantitative cross-sectional survey design was used to examine the proposed second-stage moderated mediation model. The analysis considers whether coopetition is associated with fundraising effectiveness, whether executorial capability moderates the fundraising effectiveness–social performance association, and whether the indirect association between coopetition and social performance varies across levels of executorial capability. A survey design facilitated the gathering of standardized responses from senior decision makers in nonprofit organizations regarding inter-organizational relationships, fundraising, organizational routines, and social performance.



3.2 Research Context, Sample, and Data Collection

The study was carried out in Pakistan in the Free and Fair Election Network (FAFEN), a nationwide network in the development sector, where member organizations operate in an overlapping donor, project funding, and knowledge environment. This situation is appropriate since the organizations have knowledge and experience in collaborative efforts without losing their individual funding and strategic interests. The unit of analysis was the non-profit organizations, and the senior official in each of the non-profits acted as the key informant.

A total of 509 questionnaires were administered, while 489 were returned. This is equivalent to a gross response rate of 96.1%, with usable responses accounting for 82.1% of all questionnaires administered and 85.5% of those returned. 418 were usable, and 71 were excluded.

The respondents were senior decision-makers involved in external relationships and project-funding decisions. Among the 418 respondents, 378 (90.4%) were chief executive officers and 40 (9.6%) were executive directors, and nearly half had held their position for more than six years. Their seniority supported their use as key informants on relationship-level cooperation, fundraising effectiveness, executional routines, and social performance (Kumar et al., 1993).

3.3 Measures and Constructs

This study involves a theory-based analysis of an archival survey involving larger pools of items associated with cooperation, fundraising, cooperation capability, and nonprofit performance. All main variables used in this study were measured on a seven-point Likert scale, and participants completed the relationship-related section with one interorganizational relationship in focus. This analysis involved: (i) conceptually mapping items from the archival study to the four main variables; (ii) assessment of a four-factor measurement model; (iii) creating composite scores; and (iv) structural modelling. Broader item configurations and alternative moderator locations were examined as robustness checks rather than substituted for the primary specifications. They are presented as transparent, study-specific operationalizations rather than as newly validated universal scales. Appendix A provides the exact wording and standardized loadings.

The cooperation scale was measured by Coop7 to Coop10 items, which have been selected from the ten-item cooperation scale (Gulshan, 2020). These four selected items cover: (i) common knowledge needs, (ii) cooperation concerning similar financing options, (iii) recognition of the fact that there is cooperation between the firms in some areas, and (iv) reaction to each other's competitive behaviour. Therefore, the specification includes only competitive-resource dependency in cooperation and not the full range covered in the original scale.

Fundraising effectiveness was measured with Fund1–Fund3, selected from the seven-item fund development scale (Gulshan, 2020). The robustness test used a broader fundraising variable and is therefore described as a broader fundraising measure, not the entire seven-item scale. Respondents assessed how successfully the focal relationship produced expected results, reduced fundraising costs, and generated revenues or references that met expectations. The four excluded items concerned technology or resource integration, time to market, new customers or services, and contributions to core competencies; these contents were less closely aligned with relationship-level fundraising effectiveness in nonprofit organizations. The measure does not represent the organization's overall fundraising capacity or long-term fund-development strategy.

Executional capability was measured with EXC4–EXC5 from the broader capability instrument (Gulshan, 2020). The items assess whether the organization contributes to a partner's knowledge without risking its own core competencies and whether it uses routines to filter information so that important knowledge remains protected. The retained indicators emphasize knowledge protection and do not represent all executional routines. Executional capability was organization-referenced, whereas the other focal variables referred to the relationship.

Social performance was measured with NOPS1–NOPS3 from the nonprofit performance item set adapted from Coombes et al. (2011). The items ask whether the focal relationship was successful in increasing social services, reaching more beneficiaries, and extending services to additional locations. A fourth social-



performance item concerning bids for government grants was excluded because grant bidding reflects resource pursuit rather than achieved mission output. The retained measure therefore captures service scale and coverage, not service quality, beneficiary-level outcomes, or long-term social impact.

3.4 Analytical Strategy

The data were analysed in R, and the four-factor measurement model was estimated with robust maximum likelihood in lavaan (Rosseel, 2012). Standardized loadings, Cronbach's alpha, composite reliability, and average variance extracted were used to assess indicator and construct quality, while factor correlations and heterotrait–monotrait ratios were used to assess discriminant validity (Henseler et al., 2015). Model fit was evaluated with chi-square, the comparative fit index (CFI), Tucker–Lewis's index (TLI), root mean square error of approximation (RMSEA), and standardized root mean square residual (SRMR).

Measurement validation was completed before hypothesis testing. Composite scores were calculated as item means and standardized for the regression analyses. The models controlled for managerial tenure, organizational size, organizational age, and province. Tenure and province were represented by indicator variables; organizational size was measured as the log-transformed number of permanent employees; and organizational age was calculated from the reported founding year. Because ten organizations did not report a founding year, the controlled analyses used 408 cases.

The hypotheses were tested with regression-based second-stage moderated mediation. Fundraising effectiveness was first regressed on coopetition and the control variables. Social performance was then regressed hierarchically on the controls, the focal main effects, and the fundraising effectiveness $\times$ executional capability interaction. The studentized Breusch–Pagan test indicated heteroskedasticity, so hypothesis tests used HC3 heteroskedasticity-consistent standard errors (Long & Ervin, 2000).

Conditional indirect associations and the index of moderated mediation were estimated from 10,000 case-resampling bootstrap replications (Hayes, 2015). The interaction was probed with simple slopes at one standard deviation below the mean, at the mean, and at one standard deviation above the mean of executional capability. Johnson–Neyman analysis identified the observed regions of the moderator in which the fundraising effectiveness–social performance association differed significantly from zero (Bauer & Curran, 2005). The robustness tests were conducted for the alternative specifications of coopetition, total funds raised, different measures of social performance, non-linear terms, and moderator placement.

4. Data Analysis and Results

The results are reported in the sequence specified by the proposed model. The section first presents the sample characteristics and measurement assessment, followed by the association between coopetition and fundraising effectiveness, the moderating effect of executional capability, and the conditional indirect association between coopetition and social performance through fundraising effectiveness.

4.1 Sample and Control-Variable Characteristics

Table 1 represents characteristics of the respondents and organizations. The total sample was 418 nonprofits, and regression analysis was conducted using 408 cases, as ten organizations did not provide the year they were established. The respondents were all senior managers within their respective organizations.

Table 1

Sample and Organizational Characteristics

Characteristic	n or mean	% or dispersion
Respondent position		
Chief executive officer	378	90.4
Executive director	40	9.6
Managerial tenure		
1–2 years	16	3.8
3–4 years	70	16.7
5–6 years	127	30.4
More than 6 years	205	49.0
Province		



Characteristic	n or mean	% or dispersion
Balochistan	61	14.6
Khyber Pakhtunkhwa	116	27.8
Punjab	145	34.7
Sindh	96	23.0
Permanent employees	M = 18.55	SD = 5.39; range 11–30
Organization age (years; n = 408)	M = 13.04	SD = 7.13; range 0–62

Note. Percentages may not total 100 because of rounding. Organization age was available for 408 cases.

4.2 Descriptive Statistics and Correlations

Table 2 contains the means, standard deviations, and interrelations between the key constructs. Social performance showed the highest mean score, followed by executional capability, fundraising effectiveness, and coopetition. The correlation coefficients between all pairs were positive and of moderate strength. Coopetition showed positive correlation with fundraising effectiveness, executional capability, and social performance, whereas fundraising effectiveness was positively related to executional capability and social performance. None of the correlations was sufficiently high to indicate construct redundancy or problematic multicollinearity.

Table 2

Descriptive Statistics and Correlations

Variable	Mean	SD	1	2	3	4
1. Coopetition	4.65	1.14	—			
2. Fundraising effectiveness	4.59	1.17	.295***	—		
3. Executional capability	4.61	1.47	.278***	.352***	—	
4. Social performance	4.90	1.33	.245***	.220***	.189***	—

*Note. N = 418. *** $p < .001$.*

4.3 Reliability and Measurement Model

Table 3 reports the reliability and measurement results. Standardized factor loadings ranged from .628 to .770 for coopetition, .702 to .749 for fundraising effectiveness, .836 to .873 for executional capability, and .703 to .811 for social performance. Cronbach's alpha and composite reliability exceeded .77 for all constructs. Average variance extracted was above the conventional .50 threshold for fundraising effectiveness, executional capability, and social performance (Fornell & Larcker, 1981). The AVE for coopetition was .469, slightly below the recommended level. Taken together, the acceptable reliability estimates, statistically significant loadings, and strong overall model fit provide limited support for convergent adequacy in this sample, although the subthreshold AVE for coopetition warrants cautious interpretation.

Table 3

Reliability and Measurement Results

Construct	Items	Loading range	Cronbach's α	CR	AVE
Coopetition	4	.628–.770	.775	.779	.469
Fundraising effectiveness	3	.702–.749	.774	.774	.534
Executional capability	2	.836–.873	.843	.844	.731
Social performance	3	.703–.811	.800	.801	.574

Note. CR = composite reliability; AVE = average variance extracted.

The four-factor measurement model showed good approximate fit. Although the scaled chi-square was statistically significant, the remaining fit indices indicated strong model fit: CFI = .988, TLI = .984, RMSEA = .031, and SRMR = .027 (Hu & Bentler, 1999). The largest HTMT value was .435, indicating that the four operationalizations were empirically distinct in this sample. Together with the reliability estimates, these



results provide evidence of internal consistency and discriminant validity, but they do not establish complete content validity for the secondary measures.

Table 4

Model Fit and Discriminant Validity

Measurement indicator	Value
Scaled χ^2	68.20
Degrees of freedom	48
p-value	.029
CFI	.988
TLI	.984
RMSEA	.031
90% RMSEA CI	[.009, .047]
SRMR	.027
Largest HTMT	.435

4.4 Moderated-Mediation Model and Hypothesis Testing

Coopetition was positively associated with fundraising effectiveness ($\beta = .295$, robust SE = .061, $p < .001$), providing support for H1. Substantively, higher levels of competitive-resource interdependence were associated with stronger reported fundraising effectiveness. The model accounted for 9.6% of the variance in fundraising effectiveness.

The interaction between fundraising effectiveness and executional capability was negative and statistically significant ($\beta = -.245$, robust SE = .046, $p < .001$), supporting H2. This result indicates that the positive association between fundraising effectiveness and social performance weakened as executional capability increased. Coopetition also retained a positive direct association with social performance in the interaction model ($\beta = .144$, $p = .011$). By contrast, the conditional main effects of fundraising effectiveness and executional capability were not statistically significant when the other variable was held at its centred value.

The index of moderated mediation was $-.072$, with a 95% bootstrap confidence interval that did not include zero $[-.117, -.034]$. H3 was therefore supported, indicating that the indirect association between coopetition and social performance through fundraising effectiveness varied significantly across levels of executional capability.

Table 5

Hypothesis-Testing Results

Hypothesis	Effect	Estimate	Robust SE / 95% CI	Decision
H1	Coopetition $\rightarrow$ Fundraising effectiveness	.295***	.061	Supported
H2	Fundraising effectiveness $\times$ Executional capability $\rightarrow$ Social performance	-.245***	.046	Supported
H3	Index of moderated mediation	-.072	$[-.117, -.034]$	Supported

*Note. Coefficients for H1 and H2 are standardized. The H3 confidence interval is based on 10,000 bootstrap resamples. *** $p < .001$.*

Table 6

Explained Variance

Model	R ²	Adjusted R ²	ΔR^2
Fundraising-effectiveness model	.096	.075	—
Social-performance controls	.017	-.002	—
Social-performance main effects	.093	.068	.075
Social-performance interaction	.159	.134	.067



Note. The interaction increased explained variance in social performance by 6.7 percentage points.

4.5 Moderation and Conditional Indirect Effects

Table 7 presents the simple slopes and conditional indirect associations. When executional capability was low, fundraising effectiveness was positively associated with social performance ($\beta = .300$, $p < .001$). The association was small and not significant at the mean level of executional capability ($\beta = .055$, $p = .311$), but became negative and significant when executional capability was high ($\beta = -.190$, $p = .009$). This reversal went beyond the hypothesized weakening and should be interpreted as a conditional pattern in this sample rather than as evidence that executional capability is generally harmful.

The indirect association between coopetition and social performance showed the same pattern: positive at low executional capability, statistically nonsignificant at the mean, and negative at high executional capability. Johnson–Neyman analysis indicated a significantly positive fundraising effectiveness–social performance association below a standardized executional-capability value of $-.214$, an uncertain association between $-.214$ and $.748$, and a significantly negative association above $.748$. These values describe the observed sample and should not be treated as universal managerial thresholds.

Table 7

Simple Slopes and Conditional Indirect Relationships

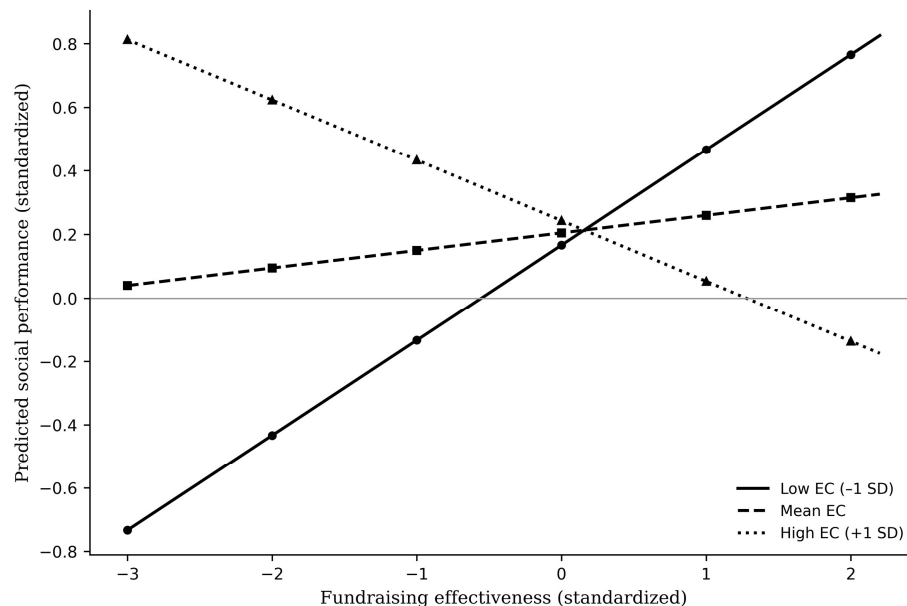
Executional capability	FE → social performance	95% CI	Indirect relationship	95% bootstrap CI
Low (–1 SD)	.300***	[.163, .437]	.088	[.038, .149]
Mean	.055	[–.051, .161]	.016	[–.014, .052]
High (+1 SD)	–.190**	[–.332, –.048]	–.056	[–.110, –.012]
Index of moderated mediation	—	—	–.072	[–.117, –.034]

Note. Bootstrap confidence intervals are based on 10,000 resamples. FE = fundraising effectiveness.

** $p < .01$; *** $p < .001$.

Figure 2

Fundraising Effectiveness and Social Performance Across Executional Capability



Note. Predicted values are based on the controlled interaction model, with coopetition held at its mean, categorical controls at their reference values, and continuous controls at their sample means.

4.6 Diagnostic and Robustness Tests

The diagnostic tests did not indicate problematic collinearity: adjusted generalized variance-inflation factors ranged from 1.01 to 1.14. The studentized Breusch–Pagan test was significant, $\chi^2(12) = 23.70$, $p =$



.022, which supported the use of HC3 standard errors. The Ramsey RESET test did not reach significance at the .05 level, $F = 2.83$, $p = .060$. The squared terms for fundraising effectiveness and executional capability were nonsignificant, while the interaction remained negative and significant.

The main interaction was also stable across alternative specifications. It remained negative when the earlier three-item resource-overlap predictor was used, when the broader fundraising measure replaced the primary measure, and when the three social-performance indicators were analysed separately. First-stage moderation was not significant, while the second-stage interaction remained significant when both potential moderator locations were included. Appendix C summarizes these robustness checks, and Appendix B reports the full controlled regression models.

5. Discussion and Recommendations

The findings indicate a two-stage pattern in nonprofit coopetition. Cooperation with organizations working within the same knowledge and funding domains is associated with higher fundraising effectiveness, indicating that even potential competitors can remain resourceful partners. Such organizations may have the necessary intelligence, skills, institutional connections, and access to resources even as they compete for some of the same opportunities. This view helps explain why the results from coopetition are not universal but rather situation-specific (Xie et al., 2023; Corbo et al., 2023; Klimas et al., 2025). Previous case studies conducted on FAFEN have stated that resource constraints and formalization of alliances could promote joint fund development (Gulshan & Liaqat, 2022). In the current research, this line of thought is further developed in order to demonstrate that the primary advantage of coopetition at the relationship level is resource acquisition, not social performance.

The more theoretically important result addresses what follows once fundraising effects are achieved. Fundraising effectiveness was more strongly associated with social performance where protection-related executional capability was relatively lower, but this relationship declined and became inverse when executional capability was high. It should not be seen as implying that the executional capability is generally destructive for the organization. These retained indicators represent one aspect of knowledge protection within an overall organizational capability. Such results suggest a trade-off between autonomy and integration: activities aimed at protecting competences and confidential information maintain autonomy but also restrict the communication and coordination needed to convert acquired resources, through social relations, into service delivery and organizational growth.

The absence of such an effect in the fundraising process helps identify the source of tension. The organizations were able to find funding opportunities, develop proposals, get recommendations, and minimize fundraising costs without disrupting their protection routines. The problem became clearer during the resource conversion stage because fundraising success still hinged on aligned reporting systems, referrals, implementation skills, and collaboration with partner organizations. Executional capability may change at different stages of the relationship. Protection may not contradict resource acquisition but may be constraining when resource acquisition is still entrenched in the relational process.

This conditional indirect pattern helps understand the differences between success in raising funds and social performance. A relationship can produce funds or access to organizations but not necessarily lead to improved mission delivery. Fundraising metrics can fail to present a complete picture of partnership success without accounting for knowledge-sharing processes and coordination arrangements, which extend resource dependence theory by showing that access to external resources is merely the first step. The effectiveness of these resources in contributing to social performance depends on the organization's ability to maintain critical boundaries without separating the resources from the relational knowledge needed to use them.

Alternate explanations must also be explored. Higher levels of protection routines may be more common where trust is already low, there are issues of appropriation, complicated projects, and heavy reporting responsibilities. Similarly, large or constrained grants might result in compliance costs and delays regardless of knowledge protection. Due to the cross-sectional research design employed in this study, it is unable to ascertain whether practices geared toward knowledge protection impede resource conversion into social performance, not acquisition. These findings should be viewed as reflecting a conditional relationship



corresponding to restricted integration, rather than suggesting that executional capability is associated with poor social performance.

5.1 Theoretical Implications

The study offers three theoretical contributions. First, it adds to nonprofit coopetition research by identifying fundraising effectiveness as a specific relationship-level outcome. Existing research and the supplied case-based work on nonprofit alliance formalization emphasize how coopetition can support fund development, but they do not establish that fundraising gains produce equivalent mission outcomes. The present findings indicate that competitive-resource interdependence is positively associated with fundraising effectiveness because organizations operating in related resource environments may hold useful knowledge, credibility, and institutional references.

Second, the study extends resource dependence theory by distinguishing resource acquisition from social performance. Resource dependence theory explains why organizations form relationships to obtain externally controlled resources and manage uncertainty, while resource-orchestration research explains why those resources must still be organized and used. Integrating these perspectives shows how a relationship can be linked to stronger fundraising effectiveness without a corresponding increase in services, beneficiaries, or geographic coverage.

Third, the study identifies executional capability as a boundary condition in this conversion process. Coopetition-capability research generally presents executional routines as tools for managing simultaneous cooperation and coopetition. The present findings suggest that the knowledge-protection component of executional capability may have different implications at different stages. Protection can support autonomy and reduce appropriation risk, yet stronger protection-oriented routines may be associated with a weaker link between fundraising gains and social performance when implementation depends on cross-boundary knowledge.

5.2 Practical Implications

The findings are relevant to nonprofit executives, network coordinators, donors, and funders. Managers may find it useful to assess competitive relationships in two stages. The first question is whether the relationship has generated funds, lowered fundraising costs, or produced useful references. The second is whether those gains have been connected to services, beneficiary reach, and geographic coverage. High levels of fundraising effectiveness do not automatically translate to stronger social performance.

Executional capability does not imply the choice between complete openness and complete protection. Rather, managers can classify information into the shareable, conditional-shareable, and protected. General criteria and learnings for donors can be openly shared. The referral mechanism and operational knowledge may require role-based access, while the sensitive beneficiary knowledge and methodology can still be kept private.

Network coordinators can improve the link between fundraising effectiveness and social performance by examining liaison roles, report formats, data utilization guidelines, and implementation agreements. Donors may facilitate this process by eliminating any overlap in reporting and funding coordination. This practice may help organizations maintain their legitimate boundaries of information while still having access to knowledge for implementation.

For the nonprofits in Pakistan, the results do not reflect inefficiency in either executional capability or protection of knowledge. They have valid reasons for protecting their donors, community, and program knowledge. The question is, do their routines allow for a clear distinction between sensitive data and that required to carry out the funded project? Periodic assessments of the partnerships may also reveal that delays, duplicate tasks, or referral failures reflect unclear information boundaries in addition to financial or operational constraints.

5.3 Limitations and Future Research

Several limitations should guide the interpretation of the findings. First, the cross-sectional design restricts causal inference. The results are consistent with the proposed model, but they do not establish



temporal order. Future research should follow relationships from proposal development through grant implementation and subsequent service expansion.

Second, all of the key variables have been identified from only one senior informant. These informants were chosen on the basis of their participation in the funding process, but the possibility of common-source bias and recall bias cannot be ruled out (Podsakoff et al., 2003). Future research can consider incorporating information from executives, partners, grants, services, and beneficiaries.

Third, the questionnaires were administered through a network meeting facilitated by FHRP. While this process yielded a high response rate, it is possible that organizations more actively involved in the network felt greater pressure to respond. Additionally, the archived files cannot allow for an in-depth analysis of retained versus excluded questionnaires. Independent administration and a documented nonresponse analysis would strengthen future research.

Fourth, the focal constructs do not share the same referent. Coopetition, fundraising effectiveness, and social performance referred to one focal relationship, whereas executional capability was measured at the organizational level. A general organizational routine can plausibly condition a specific relationship, but future studies should assess executional capability at both organizational and relationship levels.

5.4 Conclusion

This study examined how coopetition, fundraising effectiveness, and the knowledge-protection component of executional capability are associated with social performance in Pakistani nonprofits. Coopetition had a positive association with fundraising efficiency, indicating that organizations can benefit from fundraising by their peers in the same resource environment despite competing with each other.

The effectiveness of fundraising did not show a uniform effect on social performance. The association was positive at lower levels of executional capability, uncertain at average levels, and negative at higher levels of executional capability. The indirect association of coopetition on social performance showed the same pattern conditionally.

The central conclusion is that fundraising effectiveness and social performance represent different but related outcomes. Nonprofits need mechanisms that protect essential information, along with information sharing and coordination, to ensure that fundraising efforts lead to service provision. The real difficulty lies not in choosing between openness and protection, but in protecting organizational interests while linking acquired resources to mission execution.

Declarations

Informed Consent and Data Use. Participants were informed about the study's academic purpose, voluntary participation, confidentiality, and aggregate reporting; informed consent was indicated by completing and returning the questionnaire. The data were used solely for research purposes and contained no personal identifiers.

AI use. AI tools were used for language editing, literature-search assistance, and document organization. The authors verified the statistical results, theoretical interpretations, citations, and final manuscript content and retain responsibility for the work.

Author Contributions

All authors participated in ideation, development, and writing the manuscript. All authors read and approved the final manuscript.

Conflict of Interest Statement

The authors declare that there is no conflict of interest regarding the publication of this article.

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Informed Consent

Informed consent was obtained from all participants.

Data Availability



The datasets generated during and analysed during the current study are available from the corresponding author on reasonable request.

References

- Arenas, D., Hai, S., & De Bernardi, C. (2021). Coopetition among social enterprises: A three-level dynamic motivated by social and economic goals. *Nonprofit and Voluntary Sector Quarterly*, 50(1), 165–185. <https://doi.org/10.1177/0899764020948615>
- Arvidson, M., & Linde, S. (2021). Control and autonomy: Resource dependence relations and non-profit organizations. *Journal of Organizational Ethnography*, 10(2), 207–221. <https://doi.org/10.1108/JOE-05-2020-0021>
- Ashley, S., & Faulk, L. (2010). Nonprofit competition in the grants marketplace. *Nonprofit Management & Leadership*, 21(1), 43–57. <https://doi.org/10.1002/nml.20011>
- Bals, L., Huang, F., & Tate, W. L. (2023). Creating social value at the bottom of the pyramid: Elaborating resource orchestration via social intermediaries. *Journal of Business Research*, 168, 114209. <https://doi.org/10.1016/j.jbusres.2023.114209>
- Bano, M. (2011). Negotiating collaboration in Pakistan: Expertise, networks and community embeddedness. *Public Administration and Development*, 31(4), 262–272. <https://doi.org/10.1002/pad.612>
- Batley, R. (2011). Structures and strategies in relationships between non-government service providers and governments. *Public Administration and Development*, 31(4), 306–319. <https://doi.org/10.1002/pad.606>
- Bauer, D. J., & Curran, P. J. (2005). Probing interactions in fixed and multilevel regression: Inferential and graphical techniques. *Multivariate Behavioral Research*, 40(3), 373–400. https://doi.org/10.1207/s15327906mbr4003_5
- Bengtsson, M., & Kock, S. (2000). "Coopetition" in business networks—to cooperate and compete simultaneously. *Industrial Marketing Management*, 29(5), 411–426. [https://doi.org/10.1016/S0019-8501\(99\)00067-X](https://doi.org/10.1016/S0019-8501(99)00067-X)
- Bengtsson, M., Raza-Ullah, T., & Vanyushyn, V. (2016). The coopetition paradox and tension: The moderating role of coopetition capability. *Industrial Marketing Management*, 53, 19–30. <https://doi.org/10.1016/j.indmarman.2015.11.008>
- Benjamin, L. M., Ebrahim, A., & Gugerty, M. K. (2023). Nonprofit organizations and the evaluation of social impact: A research program to advance theory and practice. *Nonprofit and Voluntary Sector Quarterly*, 52(1_suppl), 313S–352S. <https://doi.org/10.1177/08997640221123590>
- Bouchard, M., & Raufflet, E. (2019). Domesticating the beast: A "resource profile" framework of power relations in nonprofit–business collaboration. *Nonprofit and Voluntary Sector Quarterly*, 48(6), 1186–1209. <https://doi.org/10.1177/0899764019853378>
- Brooks, A. C. (2004). Evaluating the effectiveness of nonprofit fundraising. *Policy Studies Journal*, 32(3), 363–374. <https://doi.org/10.1111/j.1541-0072.2004.00070.x>
- Coombes, S. M. T., Morris, M. H., Allen, J. A., & Webb, J. W. (2011). Behavioural orientations of non-profit boards as a factor in entrepreneurial performance: Does governance matter? *Journal of Management Studies*, 48(4), 829–856. <https://doi.org/10.1111/j.1467-6486.2010.00956.x>
- Corbo, L., Kraus, S., Vlačić, B., Dabić, M., Caputo, A., & Pellegrini, M. M. (2023). Coopetition and innovation: A review and research agenda. *Technovation*, 122, 102624. <https://doi.org/10.1016/j.technovation.2022.102624>
- Drees, J. M., & Heugens, P. P. M. A. (2013). Synthesizing and extending resource dependence theory: A meta-analysis. *Journal of Management*, 39(6), 1666–1698. <https://doi.org/10.1177/0149206312471391>
- Drencheva, A., Stephan, U., & Patterson, M. G. (2022). Whom to ask for feedback: Insights for resource mobilization from social entrepreneurship. *Business & Society*, 61(7), 1725–1772. <https://doi.org/10.1177/00076503211057497>



- Ebrahim, A., & Rangan, V. K. (2014). What impact? A framework for measuring the scale and scope of social performance. *California Management Review*, 56(3), 118–141. <https://doi.org/10.1525/cmr.2014.56.3.118>
- Estrada, I., Faems, D., & de Faria, P. (2016). Coopetition and product innovation performance: The role of internal knowledge sharing mechanisms and formal knowledge protection mechanisms. *Industrial Marketing Management*, 53, 56–65. <https://doi.org/10.1016/j.indmarman.2015.11.013>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/10.1177/002224378101800104>
- Froelich, K. A. (1999). Diversification of revenue strategies: Evolving resource dependence in nonprofit organizations. *Nonprofit and Voluntary Sector Quarterly*, 28(3), 246–268. <https://doi.org/10.1177/0899764099283002>
- Fu, J. S., & Cooper, K. R. (2021). Interorganizational network portfolios of nonprofit organizations: Implications for collaboration management. *Nonprofit Management & Leadership*, 31(3), 437–459. <https://doi.org/10.1002/nml.21438>
- Gast, J., Gundolf, K., Harms, R., & Matos Collado, E. (2019). Knowledge management and coopetition: How do cooperating competitors balance the needs to share and protect their knowledge? *Industrial Marketing Management*, 77, 65–74. <https://doi.org/10.1016/j.indmarman.2018.12.007>
- Gulshan, B. (2020). Coopetition among non-profit organizations: The impact on fundraising and performance [Doctoral dissertation, Istanbul Okan University]. Council of Higher Education National Thesis Center. <https://tez.yok.gov.tr/UlusalTezMerkezi>
- Gulshan, B., & Liaqat, M. M. (2022). Non-profit coopetitive alliances: Manifestation, formalisation and fund development. In M. H. Kratochvilova and R. Kratochvil (Eds.), *Proceedings of IAC in Vienna 2022* (pp. 17–27). Czech Institute of Academic Education z.s. <https://www.conferences-scientific.cz/file/9788088203308>
- Gulshan, B., & Liaqat, M. M. (2023). Coopetition and non-profit performance in war-torn region: Role of outside knowledge and innovative climate. *Aurum Sosyal Bilimler Dergisi*, 8(2), 253–279. <https://doi.org/10.62393/aurum.1294396>
- Ghaus-Pasha, A., & Iqbal, M. A. (2002). Non-profit sector in Pakistan: Government policy and future issues. *The Pakistan Development Review*, 41(4), 879–908. <https://doi.org/10.30541/v41i4Ipp.879-908>
- Guo, C., & Acar, M. (2005). Understanding collaboration among nonprofit organizations: Combining resource dependency, institutional, and network perspectives. *Nonprofit and Voluntary Sector Quarterly*, 34(3), 340–361. <https://doi.org/10.1177/0899764005275411>
- Hardy, C., Phillips, N., & Lawrence, T. B. (2003). Resources, knowledge and influence: The organizational effects of interorganizational collaboration. *Journal of Management Studies*, 40(2), 321–347. <https://doi.org/10.1111/1467-6486.00342>
- Hayes, A. F. (2015). An index and test of linear moderated mediation. *Multivariate Behavioral Research*, 50(1), 1–22. <https://doi.org/10.1080/00273171.2014.962683>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- Hillman, A. J., Withers, M. C., & Collins, B. J. (2009). Resource dependence theory: A review. *Journal of Management*, 35(6), 1404–1427. <https://doi.org/10.1177/0149206309343469>
- Hu, L.-T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>
- Ihm, J., & Shumate, M. (2019). How does a board of directors influence within- and cross-sector nonprofit collaboration? *Nonprofit Management & Leadership*, 29(4), 473–490. <https://doi.org/10.1002/nml.21343>



- Inceoglu, I., Vanacker, T., & Vismara, S. (2024). Digitalization and resource mobilization. *British Journal of Management*, 35(2), 576–593. <https://doi.org/10.1111/1467-8551.12817>
- Jiang, F., Liu, L. X., & Li, J. (2023). From horizontal knowledge sharing to vertical knowledge transfer: The role of boundary-spanning commitment in international joint ventures. *Journal of International Business Studies*, 54(1), 182–202. <https://doi.org/10.1057/s41267-022-00507-9>
- Klimas, P., Gadomska-Lila, K., & Sachpazidu-Wójcicka, K. (2025). Operationalization of coopetition performance: Challenge accepted. *Review of Managerial Science*, 19(7), 2039–2079. <https://doi.org/10.1007/s11846-024-00746-0>
- Konyalıoğlu, A. K., Ates, A., & Paton, S. (2026). Designing, managing and sustaining coopetition: A review of past achievements and future directions. *Review of Managerial Science*. Advance online publication. <https://doi.org/10.1007/s11846-026-00994-2>
- Kumar, N., Stern, L. W., & Anderson, J. C. (1993). Conducting interorganizational research using key informants. *Academy of Management Journal*, 36(6), 1633–1651. <https://doi.org/10.2307/256824>
- Le Roy, F., Fernandez, A.-S., & Lin, P.-C. (2025). Managing coopetitive innovation: Sharing while protecting knowledge in separated project teams. *R&D Management*, 55(1), 203–221. <https://doi.org/10.1111/radm.12694>
- Liu, Z., & Van de Walle, S. (2023). A comparative analysis of resource networks of intermediary support organizations for nonprofit development: Evidence from incubators for nonprofit organizations. *Nonprofit Management & Leadership*, 34(2), 371–391. <https://doi.org/10.1002/nml.21569>
- Long, J. S., & Ervin, L. H. (2000). Using heteroscedasticity consistent standard errors in the linear regression model. *The American Statistician*, 54(3), 217–224. <https://doi.org/10.1080/00031305.2000.10474549>
- Nascimento, L. da S., da Costa Júnior, J. C., Salazar, V. S., & Chim-Miki, A. F. (2021). Coopetition in social entrepreneurship: A strategy for social value devolution. *International Journal of Emerging Markets*, 18(9), 2176–2197. <https://doi.org/10.1108/IJOEM-09-2020-1062>
- Pfeffer, J., & Salancik, G. R. (1978). *The external control of organizations: A resource dependence perspective*. Harper & Row.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Proulx, K. E., Hager, M. A., & Klein, K. C. (2014). Models of collaboration between nonprofit organizations. *International Journal of Productivity and Performance Management*, 63(6), 746–765. <https://doi.org/10.1108/IJPPM-06-2013-0121>
- Raza-Ullah, T., Bengtsson, M., & Kock, S. (2014). The coopetition paradox and tension in coopetition at multiple levels. *Industrial Marketing Management*, 43(2), 189–198. <https://doi.org/10.1016/j.indmarman.2013.11.001>
- Ritala, P., Huizingh, K. R. E., & Almpantopoulou, A. (2017). Tensions in R&D networks: Implications for knowledge search and integration. *Technological Forecasting and Social Change*, 120, 311–322. <https://doi.org/10.1016/j.techfore.2016.12.020>
- Rosseel, Y. (2012). lavaan: An R package for structural equation modeling. *Journal of Statistical Software*, 48(2), 1–36. <https://doi.org/10.18637/jss.v048.i02>
- Rouyre, A., & Fernandez, A.-S. (2019). Managing knowledge sharing-protecting tensions in coupled innovation projects among several competitors. *California Management Review*, 62(1), 95–120. <https://doi.org/10.1177/0008125619885151>
- Seo, D., & Bryson, J. M. (2022). Resource development and use in a nonprofit collaboration. *Public Performance & Management Review*, 45(5), 1181–1213. <https://doi.org/10.1080/15309576.2022.2075021>
- Shi, Y., Cui, T., & Kurnia, S. (2023). Value co-creation for digital innovation: An interorganizational boundary-spanning perspective. *Information & Management*, 60(5), 103817. <https://doi.org/10.1016/j.im.2023.103817>



- Sirmon, D. G., Hitt, M. A., Ireland, R. D., & Gilbert, B. A. (2011). Resource orchestration to create competitive advantage: Breadth, depth, and life cycle effects. *Journal of Management*, 37(5), 1390–1412. <https://doi.org/10.1177/0149206310385695>
- Song, C., & Yu, K. (2024). Knowledge sharing and knowledge protection: An investigation of interorganizational collaboration in China. *Knowledge and Process Management*, 31(2), 140–156. <https://doi.org/10.1002/kpm.1769>
- Tidström, A., Ritala, P., & Lainema, K. (2018). Interactional and procedural practices in managing coopetitive tensions. *Journal of Business & Industrial Marketing*, 33(7), 945–957. <https://doi.org/10.1108/JBIM-06-2016-0125>
- Xie, Q., Gao, Y., Xia, N., Zhang, S., & Tao, G. (2023). Coopetition and organizational performance outcomes: A meta-analysis of the main and moderator effects. *Journal of Business Research*, 154, 113363. <https://doi.org/10.1016/j.jbusres.2022.113363>
- Xu, C., & Kim, M. (2021). Loss or gain? Unpacking nonprofit autonomy–interdependence paradox in collaborations. *The American Review of Public Administration*, 51(4), 308–324. <https://doi.org/10.1177/0275074020983802>

