

Members' Trust Acts as a Mediator Between their Dual Roles and Cooperative Identity: An Empirical Study of Industrial Cooperatives


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Received: 13 June, 2024

Final Revision: 20 January, 2025

Accepted: 7 February, 2025

Published: 14 February, 2025

 [10.52283/NSWRCA.AJBMR.20240901A02](https://doi.org/10.52283/NSWRCA.AJBMR.20240901A02)

Abstract


Industrial cooperatives are a unique organizational model that strikes a balance between economic objectives and social responsibility. As member-driven organizations, they uphold a distinct identity rooted in cooperative principles by relying on members' dual roles as owners and workers, which help to shape their identity and operational success. However, despite their significance in fostering inclusive growth and sustainable business practices, the extent to which industrial cooperatives effectively uphold and fulfil their cooperative identity remains an underexplored area in the available literature. The situation at hand is that cooperative institutions are experiencing difficulties in putting their cooperative principles into effect in the real world. In this situation, the current study investigates how members' dual roles influence the fulfillment of cooperative identity articulated in cooperative principles. The study also sought to analyze the mediating effect of members' trust on the relationship of members' dual roles and fulfillment of cooperative identity by industrial cooperatives. To analyze these relationships a conceptual model has been formulated with the support of Social Identity Theory and Social Exchange Theory. The conceptual model formulated has been empirically tested by collecting primary data by conducting face-to-face interviews with members of industrial cooperative societies in Kerala. Structural Equation Modeling (SEM) analysis is used to examine how cooperative identity is influenced by members' dual roles. The findings indicate that when members engage positively in their dual roles as owners and workers, it brings benefits to the cooperatives in terms of implementing cooperative identity. Members' trust is regarded as an intermediate variable that connects both their dual roles to favorable behavior towards the cooperatives. Thus, this study provides statistical evidence that the trust of members plays a crucial role in enhancing their involvement as both owners and workers towards establishing the cooperative identity of the industrial cooperative societies.

Keywords: Cooperative Identity, Members' Trust, Dual roles, Members' Identification, Occupational Self-efficacy

I. Introduction


Industrial cooperative societies are member-based organizations that aim to uplift and empower marginalized elements of the community by providing them with jobs, income, and quality of life. Owners and workers are the principal stakeholders in industrial cooperatives. These two groups, guided by their shared interaction norms, form a unified and cohesive unit, emerging as the dominant stakeholder framework in cooperative enterprises. Previous studies have explored industrial cooperatives as a type of social enterprise designed to promote positive societal change through the practice of democratic governance (Spear, 2006). Figueiredo and Franco, (2013)

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classify industrial cooperatives as a form of social entrepreneurship due to their emphasis on generating social benefits as opposed to profit accumulation. Additionally, Lan et al. (2014) and Czernasty, (2014) portrayed industrial cooperatives as a unique representation of social economy values and a dynamic approach to entrepreneurship. The distinguishing features of industrial cooperatives, which differentiate them from other capitalist organizations, are their internal aspect involving members (social) and their exterior aspect involving markets (economic). As a result, the objectives of industrial cooperatives extend beyond solely generating wealth by maximizing profits, as is the case with other business models, and also encompass the creation of value for their members. Thus because of the dual objectives of the industrial cooperatives, their performance should be assessed based on two pillars; as a business unit that generates income from its core activities, and as a cooperative venture in the light of fulfillment of cooperative identity for the betterment of its members. As it is a member-based institution, its competitive advantage lies in the hands of members, who are the owners and, at the same time, workers of the society. The present study investigates the vital role of members' trust in reconciling their conflicting roles as contributors and beneficiaries in preserving the distinctive identity of industrial cooperatives. This study's exploration of trust as a mediator gives useful insights into enhancing member involvement, which in turn improves cooperative performance and resilience (Hao et al., 2024; Sebhatu et al., 2020).

In the ever-changing scenario, industrial cooperatives have been required to make their continued existence by exploiting their unique nature as an opportunity for fulfilling their cooperative identity and for members' development and use as a means of differentiation for contributing to sustainability communities.

Aims and originality of study

The present study is undertaken in industrial cooperative societies with a view (i) to analyze how members' identification as owners of societies, their occupational self-efficacy as workers there, and their job security as workers offered by the societies affect how the societies fulfill their cooperative identity; and (ii) to examine the impact of the trust of members on achieving the cooperative identity by the societies through the identification of their members as owners, their occupational self-efficacy as workers, and their job security. Theoretically, the study is anchored based on social identity theory and social exchange theory, which are used to explain how members' identification with their cooperatives, confidence in their occupational roles, and perception of job security contribute to cooperative success. Trust, as a key component of social capital, is explored as a mediating factor that reinforces cooperative identity. Practically, the study offers valuable insights into how industrial cooperatives can enhance member engagement and long-term sustainability by fostering trust, strengthening ownership identification, and reinforcing workers' roles, ultimately improving governance and performance. From a literature perspective, while previous studies have examined cooperative identity and organizational commitment, research remains limited on the interrelated effects of members' dual roles on the performance of cooperatives. The novelty of this study lies in its integrative approach, developing a comprehensive model that highlights trust as a mediator in the relationship between members' dual roles and cooperative identity, offering new empirical insights into the performance of industrial cooperatives and its role in sustainable economic development.

II. Literature Review and Development of Hypotheses

As member-based organizations, industrial cooperatives uphold cooperative principles and values for the benefit of their members' welfare and well-being, as well as the welfare of society as a whole. Their mission is to support members' socio-economic well-being, which will in turn strengthen the local economy and guarantee the growth of local communities (Matei & Matei, 2012; Steiner & Steinerowska-Streb, 2012). By giving disadvantaged and impoverished groups an avenue to employment, they integrate their members into the nation's growth (Lindsay & Hems, 2004; Bretos & Marcuello, 2017; Novkovic, 2005). However, it is crucial to note that only prosperous cooperatives make meaningful contributions to the member's development while discussing the role of industrial cooperatives. The fact that cooperatives conduct business internally, with their members (social), and externally, with markets (economic), sets them as a hybrid organization. As a hybrid organization, its success should be assessed in both financial and non-financial terms. The non-financial evaluation of performance measures the extent to which cooperatives fulfill their social obligations, which cannot be easily quantified. However, the cooperative's social obligations are reflected in its idealized cooperative principles and values. International Cooperative Alliance (ICA) conceptualizes cooperative identity which contains the definition of a cooperative, the values of cooperatives, and the seven cooperative principles. Novkovic, (2008) added that adhering to cooperative principles and values (ICA, 1995) in their day-to-day operations is what essentially binds all cooperatives together. Van Rijn, (2022) assessed how cooperatives differentiate themselves from other financial

institutions and how closely they adhered to the cooperative identity in their governance. Thus, when referring to the cooperative identity framed by ICA, only cooperative principles have practical application (Bento et al., 2023). According to Szabo, (2009) cooperative principles serve as the foundation for evaluating a cooperative's legitimacy and can establish whether or not it is authentic. Furthermore, during periods of social, political, and economic turmoil, cooperative principles offer direction and guidance (Benson et al., 2017; Zakic & Nikolic, 2018). It is conclusive from the literature that the glory, existence, and competitive advantage of industrial cooperatives are contingent on their commitment to the cooperative identity, which consists of cooperative principles (Barden et al., 2024). However, the cooperative institutions adequately fulfill the cooperative principles, which are hardly ever discussed in the literature, and at the same time, since, industrial cooperative society is an institution of the members, by the members, and for the members. Members have a substantial role in determining the performance of cooperatives. However, how members' roles contribute to fulfilling the cooperative identity remains scanty in the literature, which remains as a research gap. While discussing the members' role in the industrial cooperatives, here members are both owners and workers. So, both roles have a substantial impact on the performance of the cooperatives. The internal management of cooperatives is especially intriguing, as members have personal interests but collectively own and must manage the cooperative together (Ranjbari et al., 2024). The combination of two roles in a single person makes a more critical asset of the cooperatives, which determines the cooperative future destiny. Members' behavior toward their cooperatives has been proven to be influenced by their level of trust (James & Sykuta, 2006). Trust is the factor that connects the role or attitude of members into constructive behavior towards the organization. So, these lacunas provide insights for the present study. In this situation, the present study attempts to investigate to what extent members' dual roles influence the non-financial performance indicator of cooperative identity through the influence of members' trust.

It is understood through the review of literature on cooperative governance that, in contrast to other business models, the exchange is a basic component of the cooperative sector. According to Jussila et al. (2012), social exchange theory is a useful paradigm for understanding cooperative organizations and a useful instrument for expanding the knowledge of cooperative governance. The social exchange theory provides a more comprehensive understanding of organizational behavior in particular as well as human behavior in general (Flynn, 2005; Cropanzano & Mitchell, 2005). The three pillars of the social exchange theory are relationships, resources exchanged, and exchange rules and norms (Cropanzano & Mitchell, 2005). Blau, (1964) and Emerson, (1976) described Social Exchange Theory (SET) as an action-reaction exchange system based on incentive mechanisms for value exchange. According to SET, the preferred mode of exchange chosen by the exchange partners in a relationship is determined by their motivations and expected outcomes, as well as by the norms and expectations that either explicitly or implicitly direct the exchange of resources. The motivation and outcomes of exchange may be economic interest and economic outcomes or social exchange interest and socio-emotional outcomes. Four elements such as trust, commitment, reciprocity, and power are considered by the social exchange theory when analyzing the social exchange interactions between actors. The foundation of the theory of social exchange is Gouldner's, (1960) norm of reciprocity, which states that one is obligated to the other party as soon as the latter acts for the former's benefit (Cropanzano & Mitchell, 2005). That is reciprocity or repayment rules, which dictate that one party's activities must result in a response or other actions from the other, are typical components of exchange rules.

In the context of the governance of cooperatives, the perspective of social exchange theory provides insight into the reasons behind cooperative exchange connections, the resources that are transferred, and the types of exchanges that take place between the member and the cooperatives. Thus, it can be asserted that when industrial cooperatives and their members participate in mutually advantageous activities, the exchange relationship should endure throughout time, with reciprocal obligations being preserved and respected. Once the member/worker is assured that the cooperative will meet its future responsibilities, they will engage in reciprocal actions and exhibit favorable behavior towards the cooperative. Positive reciprocating actions have mostly been taken in the form of members' high levels of trust. Thus, in cooperatives, members' motivation and expected outcomes will determine the preferred mode of exchange. As a member-based organization, the motivation and expectations of members are determined by the role they play in the cooperatives. It is also underlined by Jussila et al. (2012) that social exchange has become one of the most important conceptual paradigms in cooperatives because members play multiple crucial roles.

The members served as the focal point for all actions, in the cooperatives, and at the same time, the success of cooperatives also lies in the hands of members. Because it is a membership-based democratic organization achieving organizational goals depends heavily on the degree of involvement from its members. Therefore, a key notion for cooperative societies is safeguarding members' multiple roles. That is, an industrial cooperative combines two crucial stakeholder relationships into one individual: the owner and the worker. Anyone prepared

to work for the organization can become a member here. A unique model is, thus, created by the owner and worker, who together comprise a single person.

In their dual roles as owners, members are in charge of shaping the future of their own businesses (Hoffmann, 2016). Members' ownership position takes precedence in their relationship with the cooperatives. Owners exhibit a more conscious concern for the prosperity of the organization. Accordingly, such a psychological sense of ownership created a favorable behavioral and attitudinal impact on the organization (Pierce et al., 2001). The Social Identity Theory (Tajfel, 1974) identifies the psychological belongingness and sense of ownership of individuals towards their organization. Conferring to social identity theory, the person is inclined to identify as belonging to a social group. When referring to a cooperative, Novkovic, (2022) defined psychological ownership as the members' conviction that the cooperative, or a portion of it, is "theirs" and that the cooperative is an extension of themselves. As a result, psychological ownership symbolizes the special connection that emerges between members and their cooperatives. Members' identification with their cooperative is a psychological ownership that they have in it. They perceive cooperative societies as belonging to them. They repel any assault or criticism directed against the cooperative society. Therefore, member identification fosters a sense of personal connection to the cooperative society (Chandran & Kumar, 2024). Their strong personal connection motivates them to work with complete dedication for cooperative achievement. Based on the theoretical and literature support, this study conceptualizes the relationship between members' identification and fulfillment of cooperative identity. In this regard, the first hypothesis of the study was formulated as follows:

H₁: Identification of members as owners of cooperatives influences the fulfillment of cooperative identity by industrial cooperatives.

Within the framework of an industrial cooperative society, as mentioned above, members enjoy worker status in addition to the owner role. Therefore, human resource management practices are important in the context of industrial cooperatives. Human resource management activities have the potential to positively impact workers' perceptions and develop a social exchange connection by communicating to them that the organization loves and cares about them (Allen et al., 2003). Workers see human resource management activities as an organization's "personalized" commitment to them, which they subsequently return by acting with positivity and good dispositions (Hannah & Iverson, 2004). The social exchange theory (Blau, 1964) states that when someone is treated well by another, they will feel compelled to repay the favor. Workers will therefore exhibit positive attitudes and behaviors in return when they believe that the human resource management system values their skills and abilities and is concerned about their well-being. An employee's emotional engagement may emerge as a result of the use of human resources management techniques (Lockwood, 2007). Based to Kumar and Pansari, (2014) satisfaction with the job, identification, commitment, participation, and performance are all components of an organizational culture that are linked to employees' emotional engagement. Industrial cooperative societies can employ the human resource framework similarly to other business forms, as members are regarded as workers of the cooperative, and society's performance is contingent upon the member's performance. The performance of a member is contingent upon their ability and self-confidence. Workers' abilities are the proficiencies necessary for human resource initiatives to be meaningful. These abilities or skills are typically linked to procedures like training and recruitment/selection (Bayo & Galdon, 2010; Koeber et al., 2001; Jiang et al., 2012). In the cooperative setting, workers' abilities or skills are perceived as occupational self-efficacy, which refers to their level of confidence in their capability to do a certain task in the cooperative society. An individual's conviction in their competence in a domain or setting has been recognized to constitute the domain-specific construct of self-efficacy. According to this perspective, occupational self-efficacy is the conviction that one can uphold one's competence to carry out in a given profession. Given that cooperative members assume dual roles as both workers and owners, the management appoints members whom they deem competent in fulfilling given tasks and responsibilities. To boost the members' confidence, the board of management of the cooperative provides them with training and orientation after they have been enrolled in the cooperative. By fostering a positive work environment within the cooperative society, the management instills confidence in the minds of its members. Rather than viewing challenging tasks as threats to be avoided, those who have a high level of occupational self-efficacy view them as challenges to overcome (Bandura, 1993). Thus, the administration tries to give priority to allowing those people who have confidence in doing the job to join the cooperative society as members. An organization benefits more from the efforts of a confident and competent individual. Therefore, there is a favorable correlation between occupational self-efficacy and organizational performance. Based on the theoretical and literature support, the second hypothesis is formulated which is given below:

H₂: Members' occupational self-efficacy as workers of industrial cooperatives contribute to the fulfillment of cooperative identity.

For workers to exert discretionary effort, they require the right kind of motivation. According to Koeber et al. (2001) and Jiang et al. (2012) the motivational component is typically associated with procedures like

compensation plans, incentives, performance management procedures, internal promotions, and job stability. The goals of motivation-boosting techniques are to achieve goals and enhance the performance of the organization. A wide range of motivational strategies, including job security, rewards, promotions, and professional development were identified and taken into consideration by Jiang et al., (2012). The current state of the economy is causing job cuts and a slowdown in the recruiting of new staff. Finding a job is getting tougher and harder, workers want security and stability in their existing positions (Evren, 2003). The cooperative sector now plays a role. They provide their members security or stability in their jobs. The job security that cooperatives provide is the most alluring motivating force in the cooperative setting. The guarantee of keeping one's current position at one's current organization is known as job security. According to Burdin, (2014) a major determinant in worker cooperatives' noticeably higher survival rate than investor-owned businesses is job security. The objective of industrial cooperatives incorporated employment assurance, which encompasses more than just income insurance to members (Navarra & Tortia, 2014; Albanese, 2020). While some organizations may provide insurance to workers to mitigate the risk of income fluctuations by stabilizing wages, industrial cooperatives can take it a step further by also guaranteeing employment stability (Craig & Pencavel, 1993; Burdín & Dean, 2012). According to Cheng and Chan, (2007) job security affects both employee behavior as well as outcomes. Industrial cooperatives are a fundamental component of the formal sector in the country. However, industrial cooperatives are typically recognized for their permissive employment practices and increased autonomy for their members. This is only due to the dualism of the cooperatives and the unique purpose for which they were created. When cooperative societies can guarantee a career, according to the social exchange process, members reciprocate back to the cooperative and the cooperative can improve their performance. Based on the literature and understanding, the third hypothesis is formulated as follows:

H₃: Job security provided by the industrial cooperatives to their members influences the fulfillment of cooperative identity.

Mediating effect of Members' Trust

Cooperative member relations involve an exchange relationship where members hold two roles in their interaction with cooperatives. Trust is a fundamental term in the cooperative relationship of exchange, as confirmed by James and Sykuta, (2005). The importance of trust is also highlighted by several studies. According to study findings by Hansen (2002), members are more likely to be active and dedicated to the organization's mission when they have trust in the management and board of directors. Members' behavior toward their cooperatives has been proven to be influenced by their level of trust (Hansen, 2002; James & Sykuta, 2006). Members place their trust in their cooperative due to its competence, reliability, and conscientiousness in making optimal judgments and additionally, they trust the cooperative since it demonstrates goodwill and they perceive its intentions toward them as positive (Hansen & Morrow, 2003). Trust is regarded as the fundamental idea in the reciprocal relationship between a member and the cooperative. Trust is frequently invoked to elucidate an individual's actions towards their organization in a reciprocal connection (Kramer, 1999; Ferrin & Dirks, 2003). The social interaction between two parties involves unspecified reciprocal commitments that are of a long-term nature. Empirical research has shown that one's views, behavioral intentions, and outcomes are significantly influenced by their level of trust in the organization. According to studies by Crossley et al. (2013) and Dirks and Ferrin, (2001), employee perception of a business's future conduct is specifically influenced by trust in the organization. Trust is a crucial factor in the successful functioning of cooperatives as it encourages the participation of members who act as both owners and workers. Ole Borgen, (2001) asserted that members' willingness to dedicate themselves to the cooperative increases with their level of identification with the organization and their level of trust in its governance. Thus, how much individuals identify with the cooperative society will affect their trust towards cooperatives. Cooperatives can embrace their cooperative identity due to the members' strong sense of ownership, which is reinforced by their trust. The success of cooperatives is heavily influenced by the occupational self-efficacy of their members, which is improved through the level of trust that members have in their cooperatives. That is the likelihood of success for cooperatives would increase if the members' occupational self-efficacy is founded upon their trust. If the cooperative demonstrates an intense dedication to its members and shows genuine concern for their well-being by securing employment, the members will develop a sense of trust and confidence in the cooperative, which leads to the fulfillment of cooperative identity. Job security has a significant influence on organizational performance; however, it would be preferable if it were founded on the trust of its members. Based on the above theoretical and literary support, the fourth, fifth, and sixth hypotheses were developed to represent the mediating role of members' trust;

H₄: The relationship between members' identification as owners of cooperatives and the fulfillment of cooperative identity is influenced by the trust of members.

H₅: The relationship between members' occupational self-efficacy as workers of cooperatives and the fulfillment of cooperative identity depends on the trust of members.

H₆: The relationship between members' job security provided by cooperatives and the fulfillment of cooperative identity is influenced by the trust of members.

Based on the above hypotheses formulated, the following conceptual model is proposed for empirically testing and validating.

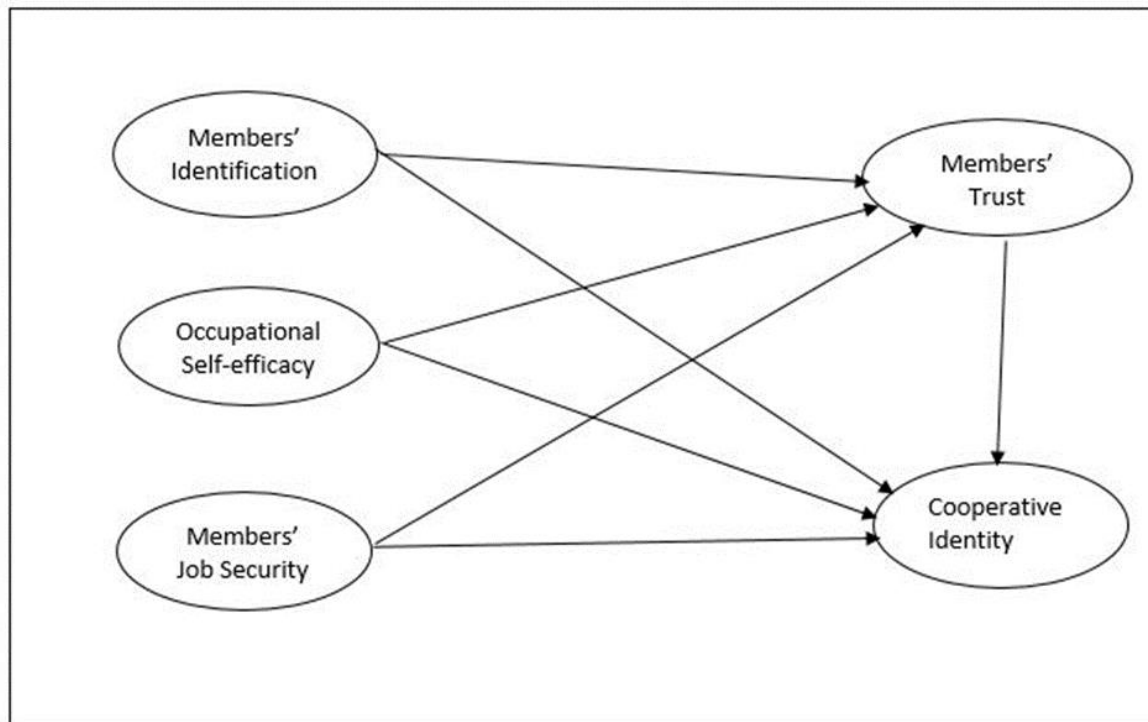


Figure 1: Conceptual Model
Source: Developed by authors

III. Methodology

This study is explanatory in nature. The population of the study consists of members of industrial cooperative societies. Among the industrial cooperative societies working in Kerala, coir and handloom societies are the most important ones. Thus, the sample respondents are selected from these two sectors. The judgmental sampling technique was applied to select the members working in the coir and handloom cooperative societies in Kerala as the sample respondents. A total of 700 samples were obtained, with 350 each from the coir and the handloom cooperative societies. The study collected primary data by employing the survey methodology, namely by conducting face-to-face interviews with the sample respondents. Structural Equation Modelling (SEM) analysis is used to examine how members' dual roles in the fulfillment of cooperative identity are mediated by their trust.

Measures

The items were measured using a five-point Likert scale, which ranged as follows: (1) strongly disagree, (2) disagree, (3) neither disagree nor agree, (4) agree, and (5) strongly agree. A six-item scale was adopted from Awoke (2014) to study members' identification. The six-item scale of occupational self-efficacy is adapted from Rigotti et al. (2008). A five-item scale is adapted from Oldham et al. (1986) to measure the construct of job security. The measurement scale consisting of six items is adapted from Mc allister's, (1995) to assess the level of trust of members. The seven items for measuring the cooperative identity are adapted from the Coop Index tool developed by Stocki and Hough, (2016). These items are modified according to the nature of the functioning of cooperative societies in Kerala and measured on a five-point scale.

IV. Data Analysis

It is the initial stage of data analysis. Firstly, it is confirmed that the final sample size of 700 respondents is adequate for subsequent analysis. To mitigate potential common method bias (Bozionelos & Simmering, 2021; Kock et al., 2021), the current study employs procedural and statistical control measures to guarantee that

responses are not influenced by common method bias. To maintain procedural control, the interview schedule is designed to be simple without the use of complicated and ambiguous terminology. Given that the data is gathered through the interview schedule approach, any doubts or questions from the respondents could be addressed within the data-collecting process itself. This considerably mitigated major bias. After the data collection, the statistical method of Harman's single-factor test is employed to guarantee that the responses are not influenced by common method bias and the result showed 43.84 per cent of the total variation. This percentage falls below the threshold of 50 per cent. The study employed a non-probabilistic sampling technique. The data deviate from a normal distribution. To analyze the data, the researchers employed partial least squares–structural equation modeling (PLS-SEM) using bootstrapping technique utilizing Smart-PLS 4.0. Structural equation modeling is divided into measurement and structural model assessment (Ringle et al., 2018).

Measurement Model Assessment

Reflective measures were used to assess all constructs, and item loadings were carefully assessed to verify the reliability of the indicators. All constructs met the suggested criterion of 0.708 as stated by Hair et al. (2019). Composite reliability (CR) and Cronbach's alpha were also used to determine reliability; all constructs had values more than 0.708, which denotes strong internal consistency. Convergent validity was evaluated by calculating the average variance extracted (AVE) values. All constructs met the minimum threshold of 0.50, indicating that they share a substantial amount of variation with their respective indicators (Garson, 2016; Hair et al., 2014).

Table 1 presents a summary of the outcomes from factor analysis, reliability, and convergent validity checks. Moreover, the discriminant validity was established by confirming that the square root of the average variance extracted (AVE) for each construct exceeded its correlation with another construct. This demonstrates that the constructs are separate from each other, as seen in Table 2.

Table1: Results of Reliability and Validity Analysis

Variables	Code	Item loadings	Cronbach's alpha	CR	AVE
Members' Identification (MI)	MI1	0.931	0.959	0.967	0.830
	MI2	0.965			
	MI3	0.950			
	MI4	0.916			
	MI5	0.770			
	MI6	0.921			
Occupational Self-efficacy (OSE)	OSE1	0.927	0.963	0.970	0.844
	OSE2	0.893			
	OSE3	0.906			
	OSE4	0.851			
	OSE5	0.970			
	OSE6	0.961			
Members' Job Security (MJS)	MJS1	0.864	0.914	0.935	0.743
	MJS2	0.857			
	MJS3	0.823			
	MJS4	0.870			
	MJS5	0.893			
Members' Trust (MT)	MT1	0.786	0.930	0.945	0.743
	MT2	0.869			
	MT3	0.884			
	MT4	0.892			
	MT5	0.933			
	MT6	0.798			
Cooperative Identity (CI)	CI1	0.803	0.941	0.952	0.740

CI2	0.888
CI3	0.816
CI4	0.858
CI5	0.883
CI6	0.874
CI7	0.896

Source: Prepared by authors

Table 2: Results of Discriminant Validity Analysis - HTMT

	CI	MI	MJS	MT	OSE
CI					
MI	0.395				
MJS	0.489	0.475			
MT	0.593	0.368	0.421		
OSE	0.397	0.702	0.575	0.420	

Source: Prepared by authors

Structural model assessment and hypothesis testing

The evaluation of the structural model involves a systematic methodology (Hair & Alamer, 2022). As part of the evaluation of the structural model, the initial phase involves assessing multicollinearity using the VIF (Variance Inflation Factor). It was observed that the VIF values were below the threshold of 3 as recommended by Kock, (2015). Thus, it is established that collinearity does not have a significant impact on the estimates of the structural model. Subsequently, the suggested hypotheses are subjected to testing. The findings (Table 3) demonstrated that all hypotheses were accepted, except for the second hypothesis. Using 5000 resamples, the Bootstrap resampling approach was used to estimate the significance of the direct path and estimate standard errors (Ringle et al., 2005). The structural model assessment results, thus obtained by bootstrapping using the smartPLS 4.0 are given in Fig 2.

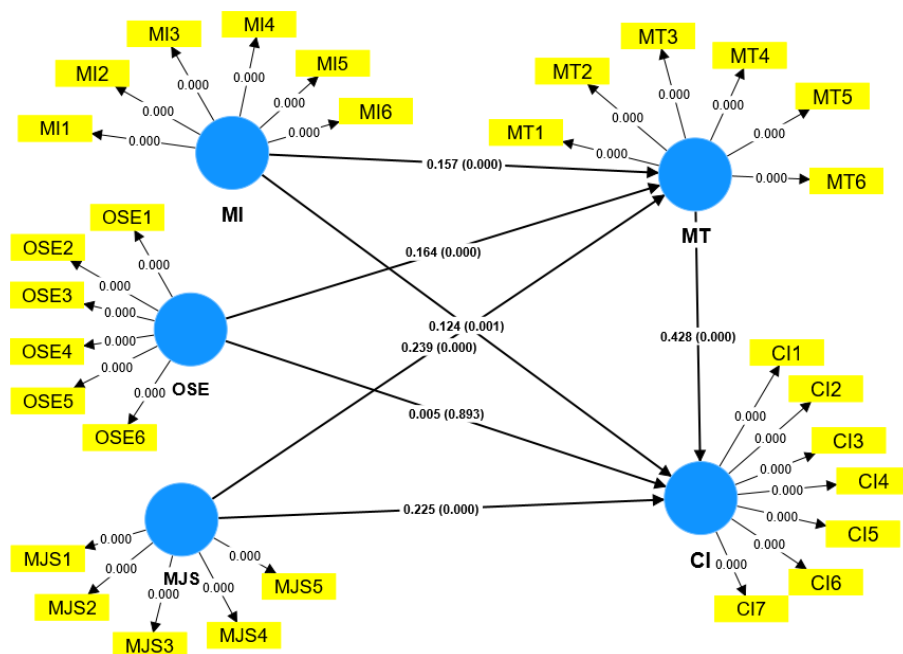


Fig 2: Result of Structural Model Analysis

The results of the hypotheses of direct relationships are presented in Table 3. As per the results (Table 3), there is a significant positive effect of members' identification on the fulfillment of cooperative identity by the industrial cooperative society ($\beta = 0.124$, $t = 3.237$, $p\text{-value} < 0.05$). Therefore, the first hypothesis is accepted. However, the analysis of the path coefficients shows that occupational self-efficacy has no impact on their perception of the fulfillment of cooperative identity by the industrial cooperative society ($\beta = 0.005$, $t = 0.135$, $p\text{-value} > 0.05$).

because the estimates are not statistically significant. Therefore, the second hypothesis formulated for the study is rejected. The examination of the path coefficient shows that the influence of members' job security on the fulfillment of cooperative identity is positive and statistically significant ($\beta = 0.225$, $t = 7.243$, $p\text{-value} < 0.05$). Based on the analysis of the results, the third hypothesis is statistically accepted.

Mediation Analysis

A mediation analysis was carried out following the evaluation of the direct relationships (Table 4). The intervening effect of members' trust that links their dual role to cooperative identity is evaluated. The analysis focuses on examining the specific indirect effect to determine the presence of a mediation effect. The results show that the mediating effect of members' trust in the relationship of members' identification to cooperative identity is positive and also statistically significant ($\beta = 0.067$, $t = 3.505$, $p\text{-value} < 0.05$). Similarly, the mediating effect of members' trust on the relationship of occupational self-efficacy to cooperative identity is found to be positive and statistically significant ($\beta = 0.070$, $t = 3.685$, $p\text{-value} < 0.05$). In the case of members' job security, the members' trust has a positive and significant mediating effect on fulfilling the cooperative identity ($\beta = 0.102$, $t = 4.220$, $p\text{-value} < 0.05$). Hence, the fourth hypothesis formulated for analyzing the mediating effect is accepted as the members' identification as owners of cooperatives and the fulfillment of cooperative identity is influenced by the trust of members in cooperatives. The fifth hypothesis is accepted that members' occupational self-efficacy as workers of industrial cooperatives and the fulfillment of cooperative identity depends on the trust of members. The sixth hypothesis is also accepted that members' job security is provided by industrial cooperatives and the fulfillment of cooperative identity is influenced by the trust of members.

Table 3: Results of Direct Effects of Relationship between Variables

Hypotheses	Relationship of Variables	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Decision
H ₁	MI -> CI	0.124	0.124	0.038	3.237	0.001	Accepted
H ₂	OSE -> CI	0.005	0.006	0.039	0.135	0.893	Rejected
H ₃	MJS -> CI	0.225	0.226	0.031	7.243	0.000	Accepted

Source: Prepared by authors

Table 4: Results of Indirect Effects of Relationship between Variables

Hypotheses	Relationship of Variables	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Decision
H ₄	MI -> MT -> CI	0.067	0.067	0.019	3.505	0.000	Accepted
H ₅	OSE -> MT -> CI	0.070	0.070	0.01	3.685	0.000	Accepted
H ₆	MJS -> MT -> CI	0.102	0.101	0.024	4.220	0.000	Accepted

Source: Prepared by authors

The model's explanatory power is also assessed. It is determined by its capacity to fit the data at hand by assessing the strength of association revealed by the PLS path model (Shmueli et al., 2016; Shmueli, 2010; Shmueli & Koppius, 2011). According to the adjusted R^2 value, the total explained variance of all the predictors in the research model is 43.30 per cent. The predictive relevance of the model was assessed using Q-square. The Q-square value of the endogenous construct is 0.246, which shows the model has predictive power. That is the results are generalizable not only to the data used for the model estimate but also to other datasets that were not part of the estimation process. It is crucial to evaluate the model's ability to predict outcomes that are not included in the original dataset, known as out-of-sample predictive power. The SRMR value of the estimated model is 0.078 and the values are below the recommended threshold of 0.80 (Hu & Bentler, 1999), it is ensured that the model has a good fit.

V. Discussion

As a member-based institution, members' perceptions and attitudes have a substantial role. The feeling of identification as an owner of a cooperative society influences the fulfillment of cooperative identity by their society. Members have positive expectations as a result of their role as owners, and their perception of the performance of industrial cooperatives in terms of cooperative principles is affected by these expectations. A belief or attitude held regarding confidence in doing a particular task or job created by the cooperative society that is occupational self-efficacy will not solely contribute to the fulfillment of cooperative identity. The literature unanimously acknowledges that job security is the primary factor that attracts individuals to choose employment in industrial cooperatives. The current study findings reinforce that members' job security has a notable influence on the realization of cooperative identity in industrial cooperatives. This is because members desired for their cooperatives to be successful, knowing that only then they would be able to find employment within the society and earn a living for themselves.

Members' Trust is a prerequisite for the cooperative success. Being a member-based institution, securing members' trust is essential. In the literature, members' trust is found to be an important factor that determines members' behavior towards the cooperative (Pesämaa et al., 2013; Sabatini et al., 2013). An industrial cooperative is formed through the combined efforts of its members, who are expected to put their trust in the cooperative as it is believed to represent their shared interests. Members' positive actions in the role of both owner and worker add advantages to the cooperatives for practicing the cooperative principles in their day-to-day work. So, members' trust is considered an intervening variable that links their dual role to positive behavior towards the cooperatives (Hao et al., 2024). Therefore, the present study could statistically prove that members' trust has an intervening role that strengthens the members' contribution both as an owner and workers to achieve the cooperative identity of the industrial cooperative society. As an organization that is based on its members, trust is an essential component that connects the roles, attitudes, and beliefs of its members to behavior that is constructive for the organization. As a result of the fact that members of industrial cooperatives play a dual function, the activities that they do within the cooperative are contingent on the degree to which they trust their society. Thus, if members have trust in the cooperative, the cooperatives benefit from the constructive acts of their members while they are acting in the roles of both owner and worker. This allows the cooperatives to put the cooperative principles into practice in their day-to-day operations.

For cooperatives to excel in their economic and social roles, members' trust must be enhanced because trust is typically considered a proxy for success in a relationship-based institution. Distrust among members can have a detrimental impact on the economic and social goals of cooperatives, particularly in terms of upholding cooperative principles related to social functions. The cooperative principles and values not only determine its identity but also serve as metrics for determining its performance. The current study explored the yardstick role of cooperative principles conceptualized as cooperative identity as a framework for performance evaluation. Industrial cooperatives are, therefore, viewed as a unique type of cooperative that may offer a way to comprehend how models of governance and administration integrate the cooperative identity.

VI. Conclusion

Implications of Research

The study is a significant advancement for the academic and research field because there has been little research conducted so far for measuring the non-financial performance that is in terms of the adherence to the cooperative principles by the cooperative societies, specifically in the Indian context. The current study's contribution identifies the ways in which the dual roles played by industrial cooperative members impact the fulfillment of the cooperative identity that all cooperatives must eventually attain.

Implications for Policy and Practice

This study educates industrial cooperative officials, policymakers, and regulators on the importance of maintaining cooperative identity in industrial cooperatives. Industrial cooperatives, as socio-economic enterprises, play an indispensable part in promoting the socio-economic well-being of their members and local communities, as well as contributing to local growth. When the cooperatives successfully build members' trust, that trust may extend to their involvement in the cooperatives' success in terms of fulfilling the cooperative identity and can successfully operate as locally owned people-centered businesses that create sustainable jobs and provide needed services to the needy section. From a policy perspective, the current study highlights the need for frameworks that support trust-building mechanisms within cooperatives. By fostering trust and engagement, policymakers can

leverage cooperatives as tools for social and economic development, particularly in areas where traditional market systems fail to serve vulnerable populations.

As the number of cooperatives and cooperative memberships declines gradually, it is crucial to have a thorough understanding of the attitudes and behaviors of members that foster trust. This is because the success of industrial cooperatives is contingent on the degree to which members place their trust in the organization and actively engage in its operations. This will be reinforced in the industrial cooperatives' scenario due to members' dual responsibilities. This study can enhance the comprehension of the significance of safeguarding the members' role in achieving the cooperative identity of industrial cooperatives. The managerial implication of the study is that it offers insight to the board of directors regarding the significance of preserving members' trust to meet the non-financial performance indicators of cooperative identity. Hence, the study's findings point out the need for improved training for the directors in social and psychological abilities in addition to managerial skills for managing their members effectively.

Future Research Directions

The study took only the coir and handloom cooperatives as sample societies of the study. The future study may be conducted by taking other cooperatives such as producer cooperatives, and consumer cooperatives, and making a comparative study to compare the cooperative performance in terms of fulfillment of cooperative identity. The study only considers the application of cooperative principles. The cooperative values and ethical values underpinned by ICA are also to be considered for measuring the cooperative identity by future researchers.

Competing interest statement

The authors declare they have no financial interest.

Ethical Approval Statement with Informed Consent

The respondents have given their informed consent for the collection and use of their data. All information has been collected ethically and used solely for research purposes.

Author (s) contribution Statement

The work is solely the contribution of the authors. We, the authors Chinju Chandran S. and Rajitha Kumar S., contributed equally, starting from the research design to the finalisation of the manuscript.

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