

# Examining the Mediating Role Supply Chain Identity Salience in the Relationship between Its Antecedents and Supply Chain Social Capital: A Case of Thai Manufacturing Firms

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**Abstract**—The main reason behind carrying out the current study is to examine the mediating role supply chain identity salience in the relationship between its antecedents and supply chain social capital. In this study a new paradigm is presented by supply chain management (SCM) where a systems approach is adopted by firms to manage the supply chain not as a set of fragments but as a single entity, having a sole purpose of synchronizing and adjusting the supply chain activities of partnering firms to develop greater customer value as compared to other supply chain. It is proposed in this study that successful functioning of managed supply chain only takes place when supply chain partners that are involved in crucial relationships actively share a feeling of identity or belonging with the supply chain. Such strong sense of identity plays an essential role in a context of the managed supply chain, as the supply chain management majorly depends upon the cooperation of resultant voluntary independent organizations and social processes and not on the financial or legal ownership. The study has used the SEM-PLS to achieve the objectives of the current study. The study is carried out on the sample of manufacturing firms operating in Thailand. This study presents a detailed view of social processes with respect to SCM context, with the purpose of indicating the contributory role played by supply chain identity salience in the social capital formation.

**Keywords:** Supply Chain Social Capital, Supply Chain Identity Salience, Thailand

## 1. Background

With the increasing globalization and competition, individual firms are finding it hard to fulfill the needs and demands of their customers. Therefore, firms strive to identify means for efficiently coordinating the exchange of unfinished and finished goods [1] and to develop close association among SC partners. The shifts in the relational paradigm involve a shift from dyadic to multiple inter-firm networks, and from transaction to the relational network [2]. Borella, Barcellos [3] presented some of the

basic features of the SC, these are: 1) the SC is a chain of three or more connected firms through a single or multiple downstream and upstream product, finances, information, and services flows, thus, distinguishing it as a different relationship as compared to dyadic buyer-seller association[4]. In the past, besides having conflicting relationships, majority organizations carried out SC activities both independently or being part of adversarial relationships. In this competitive situation, multiple connections are maintained by firms throughout different SCs, resulting in dysfunctional and disorganized SCs. For instance, an SC naturally appears under normal business conditions and appears either as managed or unmanaged; whereas, 2) a managed SC particularly comprises of selected organizations that are associated with downstream and upstream exchange of organizational processes to achieve competitive advantage, through restraining the boundaries and scope only to a set of relationships [5], majorly due to the constraints placed on the capabilities and resources of the organization. Thus, apart from the managed SC, a natural SC acts more like a business phenomenon, where the former type of SC only occurs with the intentional and collective efforts made by the members of the SC [6]. Similar to other studies, this research particularly aims to focus upon managed SCs where partnering organizations tend to cooperate with each other for obtaining mutual benefits.

Besides the expectation of SCM benefits, the existing means are unclear for interacting within managed SC [3]. Thus, important questions which are creating obstacles in SCM understanding are: 1) How membership of firms is maintained in a managed SC, and 2) In what ways firms effectively systemize organizational behaviors within a managed SC? The study employed the well-recognized concepts, i.e. social capital(SCAP) theory and social identity (SID) theory from the literature of strategic management and sociology to understand these issues and

to examine relationship mechanisms existing in a managed SC.

It is proposed in this study that successful functioning of managed SC only takes place when SC partners that are involved in crucial relationships actively share a feeling of identity or belonging with the SC. Such strong sense of identity plays an essential role in a context of the managed SC, as the SCM majorly depends upon the cooperation of resultant voluntary independent organizations and social processes and not on the financial or legal ownership. Regardless of the considerable significance of social processes and SC identity, still there is a limited theoretical base available in the existing literature. Therefore, advancement in SCM research is attempted to develop a conceptualized conceptual framework for explaining possible contribution made by SCAP and SC identity in successful SCM. Starting with the literature review of both the concepts, i.e. SCAP and SID, followed by constructing a conceptual framework, involving SCAP and SID's expected role in SCM, and together with the proposed set of research hypotheses. Finally, based on the current research findings, the study presents research and managerial implications and identify many limitations and directions for future investigations.

## 2. Literature Review and hypothesis development

The drivers of SC identity salience (SCIDS) were identified based on four different dimensions, i.e., SC characteristics, compatibility, economic interdependence, and association. SC compatibility is the extent of perceiving complementary objectives, goals, corporate cultures and operating philosophies by the SC partners [7]. Compatibility is a communal concept since it can only be analyzed across SC members [8]. According to Gerlach, Rödiger [9], SC compatibility is an important determining factor of a firm's SC identity because self-categorization focuses upon differences between dissimilar categories of firms and similarities between the firm's similar categories. Thus, Huber and Hirsch [10] suggested that developing and sustaining SCIDS require certain factors, namely proximity, common history, liking, shared goals and similarity. Contrarily, the incompatibilities in terms of control systems, job stability, reputations, goals, control systems, and strategic horizons among the allied firms may create hindrance in the SC relationships, particularly in the long-run [11].

The compatible strategic goals of participating firms provide the reasons why firms are required to participate in particular SC. Such as, firms seek to improve their effectiveness and efficiency using SCM and also strive for SC competitiveness through knowledge acquisition [12]. For a firm to achieve certain strategic goals through SCM require maintenance of membership in a specific SC. Thus, SC compatibility with respect to the decision

process, culture and organizational structure is essential for the organizations' integration process [13]. Thus, a firms' cognitive bias decreases and its desirability among partner organization's increases with SC compatibility, although values and strategic conflicts between organizations may impede the development of SCIDS and its maintenance [14].

**H1:** The SC capability has a significant impact on the SCIDS

**H2:** The SC capability has a considerable effect on the SC structural SCAP

**H3:** The SC capability is having a substantial impact on the SC relational SCAP

**H4:** The SC capability has significant effect on the SC cognitive, SCAP

SC image exhibit the characteristics of an SC, which in turn provide the drivers of SCIDS. SC image is defined as the assessment of member's beliefs, which are perceived by outsiders regarding their SC. SC image is based on the principles of prestige, reputation, traditions, and confirming the end customers' expectation about product or service [15]. SC reputation appears if an actor's behavioral information in a relationship passes around to other relationship actors through the exchange of information [16]. The SID theory states that all relational members have a desire to be a part of the best organization, particularly concerning its public reputation. Such as, the organizational employees strongly feel a sense of belonging when a firm successfully achieves status and reaches to the level of a good corporate citizen. Moreover, the service offerings and perceived prestige also influence individual membership within the organization [14].

Furthermore, based on a custom of SC partners' relationship, a SC image plays a significant role in the SCIDS of a firm. Such as, the Toyota Supplier Association acknowledged the considerable contribution of member firms in a managed SC by presenting awards, certificate programs, and profit-sharing, etc. Spekman and Davis [17] stated that DaimlerChrysler works together with multiple suppliers under the Supplier Cost Reduction (SCORE) program, with a purpose of redesigning the product and reducing costs, and sharing profits, accordingly. Similarly, the Toyota Supplier Association members are also famous for suggesting means to improve business processes and cost reduction. Thus, SC image acts to be an essential constituent for SCIDS, since the former offers an expected reference point for the firm to be an active SC participant.

**H5:** The SC characteristics have a significant impact on the SCIDS

**H6:** The SC characteristics have a considerable effect on the SC structural SCAP

**H7:** The SC characteristics have significant impact on the SC SCAP

**H8:** The SC characteristics have a considerable effect on the SC cognitive, SCAP

SC association is defined as a member firms' extent of engaging economically and emotionally to the business processes of a particular SC and also takes into account unique factors which stimulate SCIDS. This stimulation takes place by observing the chain-member relationships, and are based upon the cognitive and affective experiences of member firms within the SC. There are two essential elements involved in the SC association: membership visibility and SC involvement. With regards to sports marketing, the empirical evidence has shown that close association exists among enduring participation of a person in a sporting event and identity salience of one's fan [18]. In another study, the scholar has found that positive relation exists among a person's membership for an art museum with the person's social identification among the organization. According to the author, in terms of SC relationships, high involvement by the firm is expected concerning arousal, interest, and motivation in a SC. Besides, the deep commitment of a firm can be witnessed through discussions, decision-making, and adopting SC rituals [19]. Therefore, such deep and lasting involvement may give rise to cognitive and emotional inter-organizational and interpersonal bonds. In particular, SC involvement involves discussions (such as, supplier or distributor advisory council, technical support forum), rituals (such as, sales convention, developer's conferences, dealer association conference, supplier network meeting), and collaboration projects (such as, quality control teams, new product development teams).

Such as a meetings are held by an avionics manufacturing firm and its mechanical suppliers, distributors, indirect and direct material suppliers regularly for assessing the SC performance and market environment. Because of Carvalho, Luna [18], such kind of motivation and ongoing interest for certain managed SC result in the successful development of SCIDS. A person's identity salience for a particular organization triggered when visibly associated with that organization (such as organizational membership awareness, the role of the public organization) [15].

**H9:** The SC association has a significant impact on the SCIDS

**H10:** The SC association has a considerable effect on the SC structural SCAP

**H11:** The SC association has significant impact on the SC relational SCAP

**H12:** The SC association has a considerable effect on the SC cognitive, SCAP

Economic interdependence is the degree of SC members to be economically dependent upon other members of the SC. According to Hoskisson, Gambeta

[20], dependency presents a significant factor of channel relationship, as these relationships are expected to be directly associated with power allocations. Therefore, an actor A's dependence upon actor B in a relationship is equal to actor B's reliance on actor A. Meanwhile, the dependence asymmetry and unilateral dependence give rise to lower commitment, more significant conflict, and lower trust and on the other hand, dependence symmetry and bilateral dependence promotes relationship orientations particularly in the long-term relationships [20]. Since both usage and various types of power sources are not within the scope of this underlying research, therefore, this study emphasizes the economic dependence of SC members on other members. In particular, the transaction frequency and business volume, which a firm generally adopt along with appropriate SC members may affect a SC's identity salience. The higher economic support for a firm increases its dependence upon it, which also emphasize the significance of cognitive and emotional attachment of partner firms [20]. For a particular SC, a firm is likely to develop its identity salience when it acknowledges the strategic and systematic significance of that SC [6], as it seems preferable to develop mutual dependence for maintaining long-term relational transfer. Therefore, it has been argued that interdependence between the SC and its members greatly influence the identification salience of that particular SC.

**H13:** The SC interdependence has a significant impact on the SCIDS

**H14:** The SC interdependence has a considerable effect on the SC structural SCAP

**H15:** The SC interdependence is having a significant impact on the SC relational SCAP

**H16:** The SC interdependence has a considerable effect on the SC cognitive, SCAP

SCAP is the sum and extension of all the money possessed by the employees, and partnering firms, and is assumed to be enrooted in a firm's long-lasting relationships, within an SC [5]. In a network context, the literature Wieland, Hartmann [2] provides three critical SCAP dimensions, namely, cognitive, structural, and relational. The relational aspect involves a firm's relational assets such as those assets which are embedded in SC linkages, namely commitment and trust that work in the form of governance mechanisms, thereby developing and maintaining the SC's collective assets. Commitment refers to explicit or implicit relational continuity pledge among the partners of the SC [2], whereas, trust is a level of confidence which a firm has in the integrity and reliability of its SC partners [2]. Commitment and trust being the essential relationship assets indicate the relational aspect of a firms' SCAP. The structural dimension is defined as the social interaction and network position of an actor. Although, those actors having

significant social network position may enjoy unique advantages, such as gaining access to the valuable resources of other actors. Furthermore, through social interactions, these actors may acquire market knowledge and information, identify business opportunities, and get access to some particular organizational resources [13].

Lastly, the cognitive dimension involves attributes, and shared organizational norms or values, making it easier to understand proper behaviors and shared goals in a social system. The term value refers to a concept which is recognized as desirable, thereby affecting the selection of existing means, ends, and modes of action. For instance, the SCM philosophy or marketing concept concerning customer value creation could indicate the shared value of an SC, which facilitates in promoting specific efforts of organizations [12]. On the other hand, norms refer to certain codes of conduct for directing towards a particular behavior. Norms, in an SC provides organizational expectations regarding particular individual behaviors which regulate and guide them towards exchange and conduct standards [14].

Intensified intragroup commonalities allow the SC members to acknowledge each other as authentic social influence sources and are assumed to be well-qualified for providing each other with convincing information regarding the relevant features of SID's reality. Greater identity salience gives rise to the frequent occurrence of contributory behaviors at the individual level, such as regular information sharing and communication, repeated blood donations, the participation of sports fans, and church attendance [18]. The firms in SC actively interact, communicate, and share information when they perceive themselves to be a particular SC member. Thus, the SCIDS of participating organizations greatly influence the existing social interaction relationships within the SC.

**H17:** The SCIDS has a significant impact on the SC structural SCAP.

**H18-21:** The SCIDS mediates the relationship between antecedents of SCIDS (complexity, characteristics, association and interdependent) and SC structural SCAP

The SID theory states that SID salience combined with psychological processes develop discrimination for out-group members, and preferences for in-group members [21]. Stereotypical behavior includes conflicts and intergroup bias and in-group favoritism. Because of the scholar, common attitudes of group members and the resulting nepotism helps in developing trust in the social network, although such trusting behavior may change with the development of identification processes. Such that, initially, the sense of confidence among firms may actually the existence of trust among those organizational individuals [22]. Wieland, Hartmann [2] have argued that compatibility in corporate identity resulting from the assessment of utilitarian (such as profit maximization, economic rationalization, self-interest) and normative

(such as symbols, traditions, ideology) values of a person must significantly influence the commitment of a member. Combining firm-level commitment with individual responsibility would result in increased organizational commitment, thereby leading to strong influence on the organizational actions [15].

**H22:** The SCIDS has a significant impact on the SC relational SCAP.

**H23-27:** The SCIDS mediates the relationship between antecedents of SCIDS (complexity, characteristics, association and interdependent) and SC relational SCAP

The SCIDS of partnering firms may strongly grab the SC and other group members' social attention, thus the SC partners may possibly develop universal social norms which they are supposed to follow. Besides norm conformity, firms understand that successful survival of a SC is necessary for the firms to stay in business [12]. SID combined with psychological processes develops in-group solidarity [21] which acts to be a crucial segment of exchanging norms, in which conformity exhibits itself as a shared identity or 'we' among the exchange partners of the SC. Hence, participating firms having remarkable SC identity tend to readily internalize SC values and norms (i.e. hiring practices, ethical behavior, risk attitudes), in order to successfully achieve common objectives (such as adding customer value) and to maintain membership [22].

Regardless of the remarkable SCM practices, the efforts to develop an understanding of social exchange processes and similar theory development progress are lagging behind in the SCM. In an attempt to present a theoretical foundation, the present study developed a conceptual framework following the SCAP and SID theories, to describe the social SC management processes, thereby leading to improved performance and better management of a managed SC. The SCAP and SID salience are combined with the SCM and simplified the impact caused by social exchange processes on the overall managed SCs performance. Therefore, it is proposed that the member firms embrace behavioral norms and shared values only when they exhibit identity salience for a particular SC, thereby working towards the SC interest. This SCIDS is responsible for creating SCAP, resulting in superior SCM to add to the customer value.

**H128:** The SCIDS has a significant impact on the SC cognitive, SCAP.

**H29-32:** The SCIDS mediates the relationship between antecedents of SCIDS (complexity, characteristics, association and interdependent) and SC relational cognitive capital

### 3. Methodology

The research is cross-sectional, which means it is based on a certain period because of convenience for the researcher. The method used of collection of data is the survey method. The responses have been collected

through use of survey approach. A five-point scale has been used for measurement of responses regarding the questions. Number 1 is designated to strongly disagreed, 2 for disagree, 3 for neutral, 4 for agree, and 5 for strongly agreed. The final respondents included the operational managers and accountants from the Thai manufacturing firms. The sampling technique was cluster sampling used in the survey research. The information is collected from people regarding a specific issue or topic in the survey research method. Questionnaires were distributed through emails and data was collated. This requires less cost and time and can cover a large geographical region. The data was analyzed using statistical approaches. Moreover, the questionnaire survey makes the collection of information under natural circumstances. People or respondents are free to make choices in questions irrespective of any fear or pressure. No interference is shown by the researchers and survey is conducted in a natural setting.

The results of the survey can be generalized. The items in the questionnaire were directly linked with the items of dimensions and relevant, this makes it valid. The total population is estimated before the estimation of the sample size. The sample size is calculated through the table presented by Krejcie and Morgan [23]. The sample size was selected to be 310 based on the table. The response rate came out to be 63.2 percent.

#### 4. SEM-PLS Analysis

Most of the researchers in the social sciences use the SEM approach. It is a very powerful technique, which can test several relations simultaneously [24]. A number of researchers have suggested the use of co-variance approach such as AMOS. However, PLS-SEM has become an advanced alternative to previous co-variance approaches because of its unique features and abilities. PLS-SEM technique is the widely adopted approach and it has gained huge recognition among the researchers. According to Urbach and Ahlemann [25], the SEM approach is quite suitable. Moreover, PLS is considered beneficial for when researcher aims at the prediction and explanation of the predictive relevance of the variables [24]. This research has used PLS-SEM approach because of its flexibility for sample size and estimation of multiple regressions at a time. Moreover, reflective and formative constructs are involved in PLS-SEM approach. The technique is supported by Hair, Hult [24] because of the tendencies of PLS incorporated in PLS-SEM. The estimation of measurement and structural model is involved in SEM-PLS method. This involves the measurement of its components and determination of degree of indicators loadings and the value of correlation between the related constructs. From a different perspective, the expected measurements by the survey items are determined in the outer model [26]. The measures of reliability and validity determine the relation

between the constructs. The convergent validity for the indicator measures is observed for analyzing the suitability of measurement model (MM). For this, AVE (average variance extracted) is used. The criterion given by Tzempelikos and Gounaris [27] has been used for the measurement of outer loadings. Further, the individual item reliabilities are measured including the indicator reliability and internal consistency reliability through the estimation of composite reliability. The relation between the observed and unobserved variables is reflected through the MM. During the estimation of MM, changes may occur in the items. In order to ensure validity, CFA (confirmatory factor analysis) is used through the incorporation of first and second order constructs. Moreover, every item for the MM is individually estimated through structural, formative, and reflective modeling.

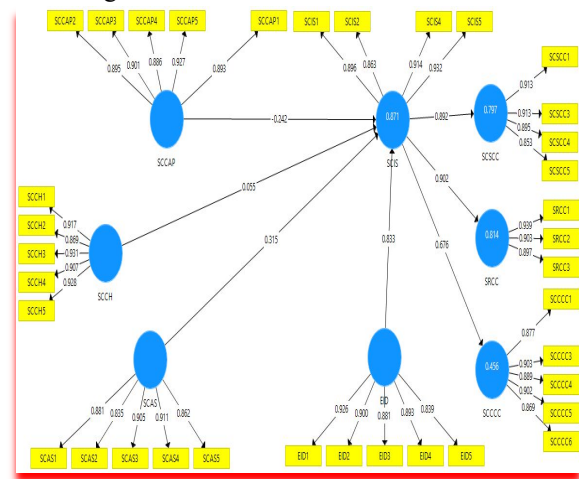


Figure 1. measurement model (MM),

The loading values of this research according to the constructs have been presented in Table 1. It has been indicated that the value of loading for all indicators is in the range 0.749-0.950. Therefore, it ensures that there is sufficient construct validity in the MM.

Table 1. Outer loadings

	EID	SCAS	SCCAP	SCCCC	SCCH	SCIS	SCSCC	SRCC
EID1	0.926							
EID2	0.900							
EID3	0.881							
EID4	0.893							
EID5	0.839							
SCAS1		0.881						
SCAS2		0.835						
SCAS3		0.905						
SCAS4		0.911						
SCAS5		0.862						
SCCAP2			0.895					
SCCAP3			0.901					
SCCAP4			0.886					
SCCAP5			0.927					
SCCCC1				0.877				
SCCCC3				0.903				

SCCCC4	0.889
SCCCC5	0.902
SCCCC6	0.869
SCCH1	0.917
SCCH2	0.869
SCCH3	0.931
SCCH4	0.907
SCCH5	0.928
SCIS1	0.896
SCIS2	0.863
SCIS4	0.914
SCIS5	0.932
SCSCC1	0.913
SCSCC3	0.913
SCSCC4	0.895
SCSCC5	0.853
SRCC1	0.939
SRCC2	0.903
SRCC3	0.897
SCCAP1	0.893

consistency reliability [28]. It can be interpreted like a Cronbach ‘s  $\alpha$ . In other words, the composite reliability (CR) value should be more than 0.7 [29]. Table 2 presents the information regarding the CR of each variable. This table shows that the CR value of each variable ranged from 0.844 to 0.985, which was more than the benchmark of 0.70. Convergent validity is explained as to what extent various items measure the same variable. Based on Tzempelikos and Gounaris [27] recommendation, convergent validity was checked in this study by assessing the AVE. The AVE value should be at least 0.5 for each variable to be sufficient. Following this procedure, the items with lowest loadings were omitted from the data set to improve the AVE value.

**Table 2.** Reliability

	Cronbach's Alpha	rho_A	CR	(AVE)
EID	0.933	0.935	0.949	0.789
SCAS	0.926	0.930	0.944	0.773
SCCAP	0.942	0.944	0.955	0.811
SCCCC	0.933	0.935	0.949	0.788
SCCH	0.948	0.952	0.960	0.829
SCIS	0.923	0.925	0.945	0.813
SCSCC	0.916	0.920	0.941	0.799
SRCC	0.900	0.901	0.938	0.834

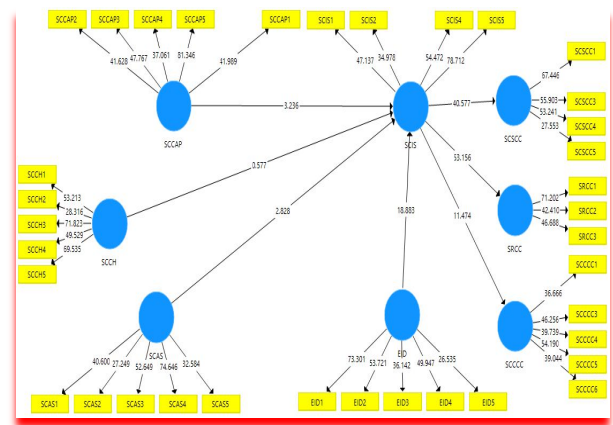
Phillips, Barnes [30] defined it as the level to which each study variable is different from other study variables is known as discriminant validity (DV). The discriminant validity was checked by two measures as recommended by Hair, Sarstedt [31], i.e. the Fornell-Larcker’s criterion and cross-loadings. In the Fornell-Larcker’s measure, the square roots of average variance extracted (AVE) of each variable should be more than the correlations among all other variables [27]. Consistent with this criterion, the square root of the average variances extracted (AVE) of

each study variable was higher than the correlations among other variables except the attitude variable

**Table 3.** Validity Matrix

	EID	SCAS	SCCAP	SCCCC	SCCH	SCIS	SCSCC	SRCC
EID	0.888							
SCAS	0.796	0.879						
SCCAP	0.792	0.706	0.892					
SCCCC	0.750	0.652	0.709	0.888				
SCCH	0.750	0.814	0.882	0.713	0.890			
SCIS	0.821	0.726	0.768	0.776	0.771	0.872		
SCSCC	0.876	0.709	0.766	0.746	0.791	0.852	0.894	
SRCC	0.872	0.722	0.768	0.775	0.753	0.802	0.867	0.913

After assessing the MM, the second step in the PLS Analysis is to evaluate the inner (structural) model. Following Henseler, Hubona [32] suggestion, this study assessed the significance of path coefficients. The structural model is shown in the following figure



**Figure 2.** Structural Model

The significance of the path coefficients was assessed using the standard bootstrapping procedure, which included 1000 bootstrap samples and 310 cases as recommended by Hair, Sarstedt [31], and Henseler, Hubona [32].

**Table 4.** Direct relationship

	O	M	STDEV	O/STDEV	P Values
EID -> SCCCC	0.563	0.560	0.052	10.811	0.000
EID -> SCIS	0.833	0.826	0.044	18.883	0.000
EID -> SCSCC	0.744	0.737	0.046	16.235	0.000
EID -> SRCC	0.752	0.746	0.045	16.812	0.000
SCAS -> SCCCC	0.213	0.214	0.079	2.710	0.003
SCAS -> SCIS	0.315	0.315	0.111	2.828	0.002
SCAS -> SCSCC	0.281	0.281	0.099	2.849	0.002
SCAS -> SRCC	0.284	0.284	0.101	2.826	0.002
SCCAP -> SCCCC	0.163	0.163	0.052	3.146	0.001
SCCAP -> SCIS	0.242	0.241	0.075	3.236	0.001
SCCAP -> SCSCC	0.216	0.215	0.067	3.240	0.001
SCCAP -> SRCC	0.218	0.217	0.067	3.246	0.001
SCCH -> SCCCC	0.037	0.041	0.065	0.571	0.284



SCCH -> SCIS	0.055	0.061	0.095	0.577	<b>0.282</b>
SCCH -> SCSCC	0.049	0.054	0.085	0.576	<b>0.282</b>
SCCH -> SRCC	0.050	0.055	0.086	0.578	<b>0.281</b>
SCIS -> SCCCC	0.676	0.678	0.059	11.474	<b>0.000</b>
SCIS -> SCSCC	0.892	0.892	0.022	40.577	<b>0.000</b>
SCIS -> SRCC	0.902	0.902	0.017	53.156	<b>0.000</b>

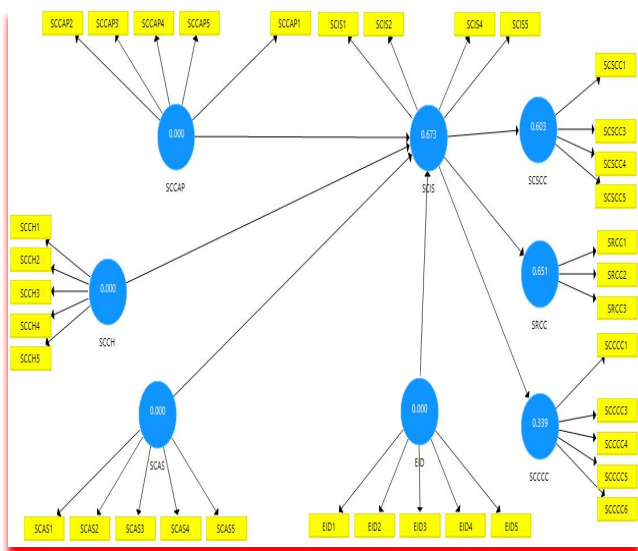
**Table 5.** Indirect relationship

	O	M	STDEV	O/STDEV	P Values
EID -> SCIS -> SCCCC	0.563	0.560	0.052	10.811	<b>0.000</b>
SCAS -> SCIS -> SCCCC	0.213	0.214	0.079	2.710	<b>0.003</b>
SCCAP -> SCIS -> SCCCC	0.163	0.163	0.052	3.146	<b>0.001</b>
SCCH -> SCIS -> SCCCC	0.037	0.041	0.065	0.571	<b>0.284</b>
EID -> SCIS -> SCSCC	0.744	0.737	0.046	16.235	<b>0.000</b>
SCAS -> SCIS -> SCSCC	0.281	0.281	0.099	2.849	<b>0.002</b>
SCCAP -> SCIS -> SCSCC	0.216	0.215	0.067	3.240	<b>0.001</b>
SCCH -> SCIS -> SCSCC	0.049	0.054	0.085	0.576	<b>0.282</b>
EID -> SCIS -> SRCC	0.752	0.746	0.045	16.812	<b>0.000</b>
SCAS -> SCIS -> SRCC	0.284	0.284	0.101	2.826	<b>0.002</b>
SCCAP -> SCIS -> SRCC	0.218	-0.217	0.067	3.246	<b>0.001</b>
SCCH -> SCIS -> SRCC	0.050	0.055	0.086	0.578	<b>0.281</b>

In PLS-SEM, one of the most important criteria to assess the structural model is the variance in the endogenous variable (R<sup>2</sup>) [31]. R<sup>2</sup> values of 0.75, 0.50, or 0.25 for the dependent variable in the structural model.

**Table 7.** R-Square

	R Square
SCCCC	0.456
SCIS	<b>0.871</b>
SCSCC	0.797
SRCC	<b>0.814</b>



**Figure 3.** Predictive Relevance

Based on Hair, Sarstedt [31] suggestion, researchers who use PLS-SEM should apply measures to indicate the model's predictive relevance to evaluate the models

quality. This study relies on Stone-Geiser's test of predictive relevance using blindfolding procedures. This test is usually used to assess the goodness-of-fit in PLS-SEM modeling [30]. Earle, Napper [33] defined a reflective MM as a latent variable that causes variations in a set of indicators. Based on Hair Jr, Hult [34], when the cross-validated redundancy measure (Q<sup>2</sup>) value is more than zero, its indicate that the model ha.

**Table 8.** Predictive relevance

	SSO	SSE	Q <sup>2</sup> (=1-SSE/SSO)
EID	1,085.000	1,085.000	
SCAS	1,085.000	1,085.000	
SCCAP	1,085.000	1,085.000	
SCCCC	1,085.000	717.173	0.339
SCCH	1,085.000	1,085.000	
SCIS	868.000	284.203	0.673
SCSCC	868.000	344.705	0.603
SRCC	651.000	227.503	0.651

### 5. Conclusion

Several managerial implications are presented by this research. Firstly, it must be recognized by managers that every SC does not need to be managed necessarily or practically, as organizations must actively engage to only limited SCs to which they are attached (economically or socially) already. Secondly, more attention must be given by managers to the SCIDS i.e. its antecedents and repercussions, for understanding the social embeddedness value in management of SC. For a selected SC partner group, the SC managers can foster the four major drivers to SID salience. SCAPgeneration demand member firms to develop commitment towards SC, stemming from the social, psychological, and economical states. According to Kim [21], the economic attachment of member firms for a particular SC depends upon the firm's social structure. Thirdly, the study related key SCM components with SCAPand attempted to accentuate the significance of its growth and utilization for accumulating superior SC performance. However, it is commendable to develop considerable SCAP, since it is not in itself merely a SCAPbut a whole SCM, including collaboration, resource exchange, and information sharing, thus steering towards improved business performance. Fourthly, similar performance outcomes obtained on the basis of SCAPand SCIDS may also be obtained through tight control exercised by the channel captain. Although, the SC relationships which are directed through tight control may easily collapse in the absence of mutual cooperation, due to lack of any binding force existing among the members of a SC. This refers to the SC that is not managed and involves no SCM implementation requirement by firms.

## 5.1 Future Research Implications

It is argued that individual-level or micro-level theories can be helpful to simplify the macro-level actions Saleem [35], such as SCM phenomena. In particular, the SID theory mainly appears in the context of individual consumption, whereas, its usage appears to be in a business or SC context, which is somehow rare in the existing set of literature [36]. The current study upgraded the SCAPand SID theories' domain from interpersonal to a SC frame, thereby reflecting the successful application of individual level theories by researchers to explain the inter-firm and firm level phenomena [37]. The current study is a first attempt in the literature of integrating these theories particularly in a context of SC, with the aim of describing the social SC relationship processes. The study aims to contribute in the existing set of literature by integrating the concepts of norms, value, commitment and trust with SCAPand analyze their relationship building along the SC identity and in turn influence the SCM. Regardless of complex social processes, prior studies have found to only emphasize upon certain parts of these social processes. Such as, in a study, only investigated the influence and consequences of SCAPon the SCM and business performance, respectively. This study presents a detailed view of social processes with respect to SCM context, with the purpose of indicating the contributory role played by SCIDS in the SCAPformation. Thus, it is argued that the drivers of SCAPand SCM, such as collaboration, resource exchange, and information sharing, bring about better business performance.

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