GROUP COHESION AND PERFORMANCE: A SEARCH FOR ANTECEDENTS

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Introduction

A cohesive work group is perhaps one of the most sought after organizational phenomena as it is associated with numerous individual and organizational level outcomes [7]. While no "Holy Grail", cohesive groups have been shown to be better performers [28] in both a process (via better communication) and a goal achievement sense [26]. In addition, members of a cohesive work group perceive less inter-group conflict, and thus individual satisfaction is higher as members experience positive mood states [12] when working in a group that "gets along" as opposed to one wracked with conflict. Similarly, the amount of organizational citizenship behavior displayed in work groups is also affected by cohesiveness in that members of cohesive groups engage in helping behaviors and exhibit empathy toward co-workers [19]. In his pioneering work, Seashore [25] uncovered a negative relationship between group cohesion and job relatedness. Finally, Mikalachki [22] found an inverse relationship between group cohesion and absenteeism.

Essentially, the problem facing managers is this: nurturing cohesion in a work group is a notoriously hit-or-miss process. Even highly developed organizational development teambuilding interventions conducted by skilled practitioners do not always succeed [29]. This paper seeks to develop and test theory that will take some of the guesswork out of building cohesive groups as it has important consequences for individuals and the organizations that they work in.

Cohesion is a group-level construct that has most often been examined from an "outside-in" perspective: either the group's task is designed such that it entails multiple interpersonal contacts, thus increasing the probability of high cohesion, or the group finds itself in opposition to some crisis or common enemy, again inducing cohesion [21]. This paper takes a very micro approach to the problem at hand. Simply, individual-level traits and experiences, as well as the group's performance, are all theoretically and empirically linked to group cohesion. Establishing some of the antecedents to group cohesion is intended to give managers and policymakers some guidance as they embark on the task of purposefully developing cohesive groups. Indeed, research on group cohesion [14] points to the need to uncover the myriad of variables that may influence this construct.

The first part of the paper develops theoretical arguments that link several individual and group level antecedents to group cohesion. This section also includes a discussion on how the constructs in the theory are operationalized and tested in the ensuing empirical study. Next, the methods and results of the study are presented, followed by a discussion on the study's limitations and implications for managers.

1. What Is Group Cohesion About?

The ultimate dependent variable studied in this paper is group cohesion (or simply, cohesion). Cohesion is a ubiquitous concept in social psychology studies look at interaction among group members. Research has indicated the existence of positive relations between cohesion and performance, job satisfaction, and lower turnover in groups [5]. Cohesion, as defined by Goodman, Ravlin, & Schminke [11], is the level of commitment of group members to the group task. This definition lacks somewhat, however, as it glosses over the many different issues that may affect the "commitment of group members". To rectify this shortcoming, this study utilizes a broader conception of cohesion than that provided by the aforementioned definition.

Social integration is a concept from the social psychology literature that paints a better picture of what attitudes might be reflected by a member of a cohesive group. Social integration is defined as "the attraction to the group, satisfaction with other members of the group, and social interaction among group members" [24, p. 22]. Some studies have treated group cohesion as a dimension of social integration within a group (e.g., [24]

and [14]) while others have used the concepts of social integration and cohesion interchangeably [28]. This paper does not go that far. Rather, one can make the observation that the definition of social integration offered earlier provides a construct more easily measured at an individual 'attitude' level. This study makes the assumption that it would be difficult for any member of a group that is not cohesive to subsequently evaluate the group as having high social integration.

The question of what one can expect from a cohesive group has been addressed much more often that the question of what causes cohesion [5]. It is interesting to note that what caused the cohesion to occur in a group could also be a partial determinant of how the group behaves. For instance, a group that comes together to face a common enemy could experience the downsides of cohesion: groupthink [17] or dynamic conservatism [27]. Both of these are destructive consequences of cohesive groups. On the other hand, groups that are cohesive because they enjoy their task [13] or the people whom they work with [24] are more likely to have positive group outcomes. As a preliminary step in examining the many antecedents to cohesion the study next looks at a subset consisting of the individual-level trait of collective self-esteem, past experience with groups in general, and, finally, the performance level of the current group. This approach is in line with research suggestions on uncovering antecedents provided by Casey-Campbell and Martens [7] in their review of the group cohesion-performance literature.

An Individual-Level Trait: Collective Self-Esteem

Collective self-esteem is a construct belonging to the more general theory of social identity [30]. Social identity theory concerns the categorization processes used by individuals [29]. There are two important factors of this categorization process. First, it assists individuals in defining themselves. This self-categorization helps an individual establish his/her personal identity, including beliefs about one's skills, abilities, and characteristics. Second, this level of characterization assists individuals in defining their social relations with other members of the group they belong to. These categories serve as frames of reference to help determine the 'location' of people in the complex intra- and intergroup relationships found in an organization. Thus, collective

self-esteem is an expression of both a personal identity and a social identity.

Crocker and Luhtanen [8] argue that collective self-esteem is a trait. a trait can be defined as a dispositional determinant influencing how an individual processes stimulants, thinks, and behaves [10]. In Crocker and Luhtanen's [8] conceptualization there are three factors that make up collective self-esteem. The first one concerns an individual's private collective self-esteem. That simply deals with whether an individual is privately proud of, or regrets, his/her association with groups in general. Second is membership esteem, which concerns an individual's belief whether he/she is a valuable member of the group. Last, there is importance to identity, and this deals with the influence that groups have on one's self-concept.

Since individuals strive to maintain high levels of self-esteem and positive identity in organizational settings [21], collective self-esteem is a construct that would seem to play an important role in how a person interacts with members of different formal and informal groups. This is a central issue in social identity theory: the need for positive social identity leads individuals to try to maximize intergroup distinctiveness on desirable dimensions. Accordingly, individuals will be biased against outgroup members in order to create favorable comparisons between the "ingroup" and the "outgroup" [27]. The types of comparisons that a given individual makes, and the resultant impact of these comparisons on individual behavior within the ingroup, are reflected in the individual's level of collective self-esteem. Given that collective self-esteem is a trait [8], it is postulated that there will be enduring individual differences on measures of collective self-esteem. An individual with high collective self-esteem will tend to employ social groups extensively in developing their social and personal identities. Therefore, these people should have favorable dispositions towards group solidarity and unity, potentially viewing their groups as being cohesive. This observation leads directly to Hypothesis 1.

Hypothesis 1: Individuals with high collective self-esteem will evaluate their groups as having high group cohesion/social integration.

Past Experience

Although collective self-esteem is a trait, it is expected it to change given a person's past experiences with groups. Research has shown

Fig. 1: The Relationship between the Latent Variables in Hypothesis 1
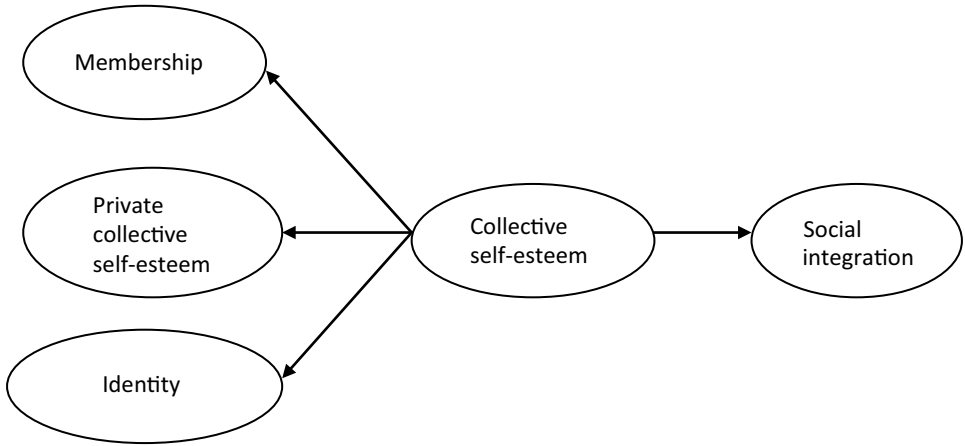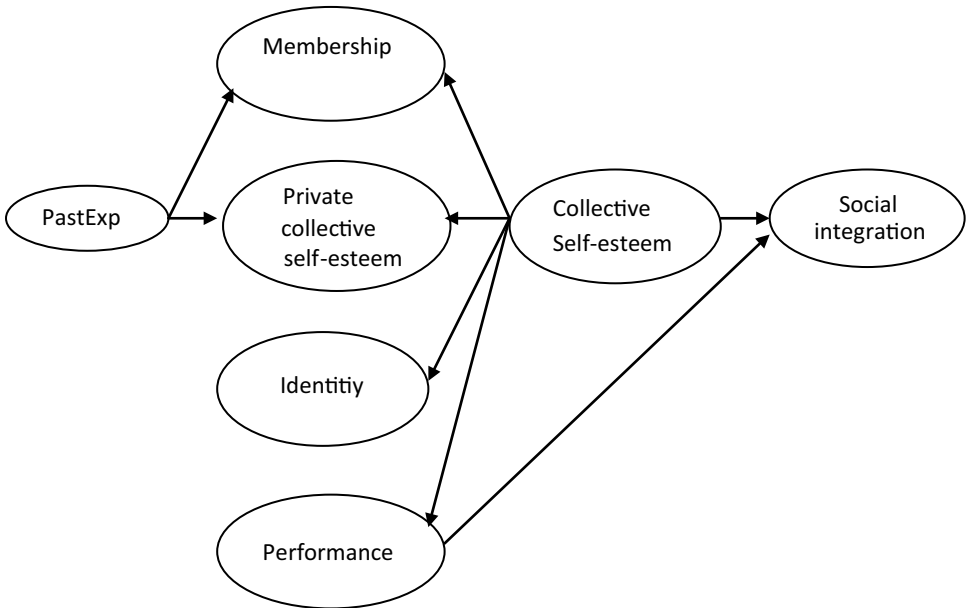

Source: own

that even the most stable of personality traits can change over time [10]. If a person's experiences working with groups in the past, especially the recent past, has been very disappointing, one would expect the person to place less emphasis on social groups as a means of establishing a personal identity. Conversely, those who have had generally positive group experiences in the past are expected much more likely to look to their social groups as sources of self-esteem. a similar relationship is expected between past experience and group performance. Basically, individuals with positive past experiences are predicted to be more likely to be motivated and work hard in their current group, adding to the group's performance. On the other hand, those with negative experiences are expected to be cynical about what the group can do, and thus will not add, and may even detract from the group's performance. Indeed, research on organizational citizenship supports the position that positive past experiences in an organization may lead individuals to exhibit greater commitment and actions that benefit the organization [23].

Performance
As mentioned earlier, high performance is most often seen as an outcome from a cohesive group [28]. However, Janis's [17] work on groupthink suggests otherwise, negatively linking group cohesion to performance. As an alternative to this line of thinking, it is put forth, similar to Hogg [16], performance as an antecedent to social integration (which is seen as a construct that represents cohesion). Members of successful groups are expected to gain a sense of fellowship and comraderie that goes along with high achievement. They will be very satisfied with what the group has accomplished. Low performing groups, though, are expected to look inside for the causes of poor results, especially when no common enemy can be identified. The potential for group conflict will lower group cohesion. Clearly, there is the possibility of reciprocal causation in this relationship: high performance leads to cohesion, which in turn leads to higher performance. For general theoretical considerations, one could consider past experience as the variable that would encompass this feedback loop. If the outcome of social integration (or cohesion) is higher performance, this would be included in the past experience construct, thus completing the feedback loop. However, given the cross-sectional nature of the study only one of these potential relationships is examined directly, as stated in Hypothesis 2:

Hypothesis 2: Positive past experiences working with groups will increase an individual's collective self-esteem as well as performance of the

Source: own

person's work group; individuals in groups with high performance with collective high self-esteem will evaluate their groups as having high group cohesion/social integration.

2. Methods

In this section a comprehensive discussion of the measures employed in the study is presented.

Participants and Data

A total of 277 students who were enrolled in a senior level business class in a North American university participated in the study, and all received partial course credit for their involvement. The sample size is greater than 150, and thus one can employ maximum likelihood estimation methods for the analysis [1].

Missing data in questionnaires can cause two basic problems – the reduction of statistical power and bias in the estimation of parameters. Missing data were handled by imputing the mean of the variable in question with the EQS statistical package [4], as less than 5 % of the cells had missing values.

Measures

The questionnaire was composed of Likert--type questions, based on a 7 point scale, and the questions are anchored by „strongly disagree" on the left and „strongly agree" on the right. The performance measure was the group's grade on the class assignment – a business strategy simulation. The group grade could range from 0-100, a number calculated by the simulation that takes into account the group's decisions as well as the decisions of peer groups. The groups had knowledge of their performance when the questionnaire was administered. Please refer to Appendix 1 to see a listing of the questionnaire items.

Collective self-esteem and social integration are latent variables, and are measured using previously constructed scales. The collective self-esteem scale was adapted from Crocker and Luhtanen [8], and it is an individual-level measure. This scale consists of a number of subscales. These measure private collective self-esteem (i.e., the extent to which one evaluates one's social groups positively), membership esteem (evaluations of oneself as a good member of the groups one belongs to), and importance to identity (how impor-

tant one's memberships in the social groups are to one's self-concept).

Similarly, the social integration scale was adapted from Smith et al. [28]. This scale measures individuals' perceptions concerning how well they consider their group to be socially integrated. The 11 indicators included three reverse-scored items. Reverse-scored items are mainly used to attenuate response pattern bias. However, reverse-scored items may reduce the validity of questionnaire responses and thus introduce systematic error to a scale [15]. To guard against the possibility of having an artificial response factor consisting of negatively worded items a preliminary factor analysis was performed. The preliminary factor analysis on the social integration scale resulted in a 2 factor solution. The 3 reverse coded items loaded on the second factor, and hence their exclusion was warranted. The data were examined to determine if carelessness resulting from the reverse scored items was pronounced throughout the data. There was sufficient variance in responses to the negatively worded questions to suggest that it was not carelessness that caused a 2 factor solution, but rather a reluctance to answer negatively worded questions as strongly as positively worded ones. Of the remaining 8 items, 3 of them which exhibited high loadings on both factors were excluded from further consideration, and one item that did not exceed .70 was also dropped. Since this is a reflective construct it is possible to take a sample of the indicators [6] as no effect indicator is indispensable in measuring a unidimensional construct. Therefore, a total of 5 items were included for further analysis. Table 1 displays the factor loadings for all the social integration items.

Next an exploratory factor analysis was conducted to establish the discriminant validity of the 5 constructs under consideration: private collective self-esteem, membership esteem, importance to identity, past experience with groups, and social integration. With a 5 factor constraint, the results supported the conceptualization of the constructs (with high loadings exclusively on the correct factor).

In the ensuing section, a confirmatory factor analysis is conducted for both of the hypotheses, followed by necessary respecifications and estimation of the theoretical model. Additionally, each of the models' unidimensionality, reliability, and convergent and divergent validity are assessed.

Tab. 1: Factor Analysis of Social Integration Questions Using Principal Components with an Orthosimal Solution

Question no.	Factor 1	Factor 2
Social Integration 1* (Q15)	0.7638	0.2808
Social Integration 2* (Q16)	0.7571	0.1770
Social Integration 3*(Q17)	0.7322	0.1862
Social Integration 4(Q18)	0.6561	-0.0193
Social Integration 5*(Q19)	0.7220	0.2906
Social Integration 6(Q20)	0.6748	0.4592
Social Integration 7(Q21)	0.7221	0.4614
Social Integration 8*(Q22)	0.7353	0.2957
Social Integration 9(Q23)	0.1792	0.6563
Social Integration 10(Q24)	0.1702	0.6618
Social Integration 11(Q25)	0.1289	0.5799

* Indicates selection for further use in the analysis. The data used in the analysis was obtained from a survey conducted for this study with the participation of 277 university students.

Source: own

3. Results

A structural equation modeling approach was employed to test the hypotheses. Essentially, this approach allows for the estimation of structural linear relations between observed and latent variables, with the latter being indicated by observed variables.

Prior to specification of a measurement model the normality assumption underlying the data was examined. The analysis showed that items M2, M3, and M4 (please refer to Appendix 1) had high positive kurtosis. Examination of the wording of the worst offender (M4; kurtosis=14.866) showed the item to be overly strongly worded („I feel I am a useless member of the groups I belong to."), eliciting approximately 69 % (180/277) of the responses as „Strongly Disagree." To maintain construct validity, only item M4 was eliminated at this stage. Initial attempts to run a confirmatory factor analysis turned up another problem – the determinant of the covariance matrix was negative, rendering it non-invertible. Trial and error item deletion determined that removing item I1 allowed the analysis to proceed. Removal of this item does little to affect the validity of the „Identity" construct.

At this point the analysis follows Anderson & Gerbing's [1] two-step approach. The study firsts estimates a confirmatory factor model in which all items are allowed to load only on the postulated factor, while all of the factors themselves are allowed to correlate freely. This approach ensures that all lack of fit observed is due to measurement error, not the theory ultimately being tested. It allows for respecification, if necessary, of poor--fitting measurement models. After measures are refined, structural constraints can be imposed on the model for testing. It should be noted that the theory being tested has a second-order factor – Collective Self-Esteem – that is not included in the confirmatory factor model because it is does not relate directly to measurement. This does not pose a problem since the second-order factor is simply another way of accounting for covariance between existing-factors (i.e., in this case, it is a theoretical construct).

The measures used to evaluate the fit of the models will include the Comparative Fit Index (CFI), a member of the Bentler fit indices which gives an estimate of the improvement of the hypothesized model over a null model with a rule-of-thumb cutoff of [18], [3]. Additionally, the study will consider the Adjusted Goodness of Fit Index (AGFI) which is a conservative measure of the relative amount of variance accounted for by the model tested. A .9 cutoff is also suggested for this index, which is independent of sample size and robust over departures from normality [2]. Two measures of the residual matrix (Standardized RMR and RMSEA) are also included, with values below .05 considered acceptable [2]. Scale reliability is examined with the composite reliability equation given by Anderson and Gerbing [1]. Composite reliability is considered superior to coefficient alpha since it considers individual item reliabilities individually, instead of assuming they are equal, as is the case with alpha. Bagozzi & Yi [2] note that composite reliabilities over .6 are desirable.

Model Testing

Table 2 presents the results of all the model tests. Table 3 presents the factor loadings and composite reliabilities for all factors of the measurement models for Hypothesis 1 (H1) and Hypothesis 2 (H2). All factor loadings are significant, supporting convergent validity of the constructs. The scales also seem to be reliable, meeting the reliability criteria suggested by Bagozzi & Yi [2].

Measurement Model: H1

The measurement model estimated for Hypothesis 1 ($H1_{MM}$) fit quite poorly ($X^2 = 199.55$, df = 84; CFI = .935; RMSEA = .071). Examination of the modification indices shows that items P2 and 13 crossload on the construct „Membership" while the item SI5 crossloads on the construct „Identity." To maintain the construct validity of „Identity," but at the same time to ensure unidimensional measurement, only items SI5 and P2 were eliminated. Respecification ($H1_{MM2}$) resulted in a significant improvement in fit ($X^2 = 95.55$, df=59; CFI=972; RMSEA==.048), as confirmed by a X^2-difference test in Table 4 ($H1_{MM}$-$H1_{MM2}$; $\Delta X^2=103.89$, df=25, p<.001). At this point a unidimensional model exists in which fit was deemed satisfactory, thus further respecification of the measurement model for H1 was not necessary.

Structural (Theoretical) Model: H1

Once adequate unidimensional measurement was established, the theoretical aspects of the

Tab. 2: Model Comparisons

Model	df	X^2	p-val	CFI	AGFI	Std. RMR	RMSEA	R^2 (for Socint)
$H1_{MM}$	84	199.55	<.001	.935	.871	.030	.071	
$H1_{MM2}$	59	95.66	.00179	.972	.919	.025	.048	
$H1_{SM}$	61	106.67	<.0001	.966	.914	.043	.052	.168
$H2_{MM}$	90	143.60	<.001	.965	.905	.023	.047	
$H2_{SM}$	96	162.51	< .001	.957	.900	.032	.050	.368

The data used in the analysis was obtained from a survey conducted for this study with the participation of 277 university students.

Source: own

model could be specified. The theory being tested postulates the existence of a second-order construct, collective self-esteem (CollSE) that is antecedent to feelings of social integration (SocInt). The results of the EQS test of the model are shown in Figure 3. Although the X^2-difference test (Table 4; $H1_{MM2}$-$H1_{SM}$) is significant, suggesting that the restrictions imposed are not justified, the model fits adequately (X^2=106.67, df=61, CFI=.966, RMSEA=.052) and all paths are significant and in the predicted direction. Given the fit criteria suggested by Bagozzi & Yi [2] and Hinkin [15]), this seems to be a fairly good model. Of special interest is the amount of variance in SocInt accounted for by the antecedents (R^2 =.168). This result suggests that collective

Tab. 3: Loadings and Reliabilities (Part 1)

Factor	Item	Loading	Composite Reliability
Hypothesis 1			
Member	MI	.786	.713
	M2	.630	
	M3	.597	
Private	PI	.543	.741
	P3	.687	
	P4	.849	
Identity	12	.833	.832
	13	.738	
	14	.794	
SocInt	SI1	.882	.870
	S12	.841	
	ST3	.696	
	SI4	.738	

Tab. 3: Loadings and Reliabilities (Part 2)

Factor	Item	Loading	Composite Reliability
		Hypothesis 2	
Member	Ml	.786	.713
	M2	.622	
	M3	.604	
Private	PI	.542	.740
	P3	.691	
	P4	.845	
Identity	12	.823	.831
	13	.724	
	14	.816	
SocInt	SI1	.882	.903
	SI2	.843	
	SI3	.694	
	SI4	.736	
PastExp	PE1	.864	.679
	PE2	.553	

The data used in the analysis was obtained from a survey conducted for this study with the participation of 277 university students.

Source: own

Tab. 4: X^2 Difference Tests between the Models

Test	d.f.	ΔX^2	p-val
$H1_{MM}$-$H1_{MM2}$	(-)25	(-)103.89	<.0001
$H1_{MM2}$-$H1_{SM}$	2	11.01	.0041
$H2_{MM}$-$H2_{SM}$	6	18.91	.0043

The data used in the analysis was obtained from a survey conducted for this study with the participation of 277 university students.
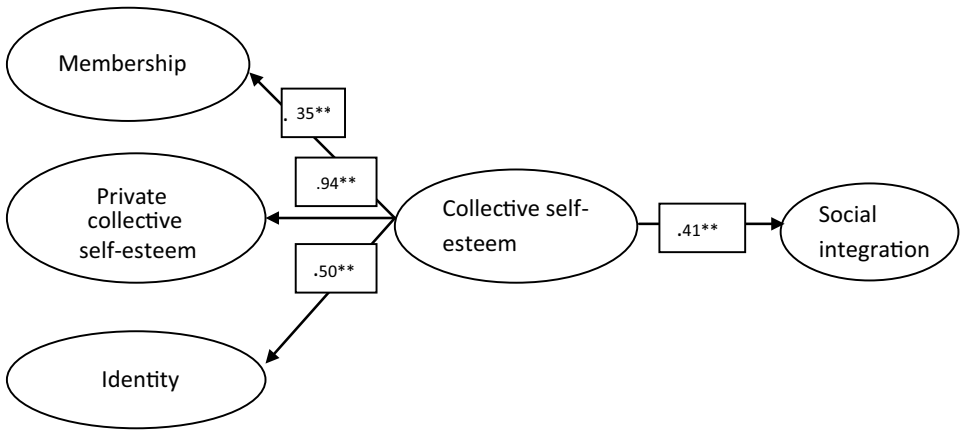
Source: own

self-esteem is a significant predictor of social integration. H2 attempts to further define relevant antecedents of Socint with the addition of the constructs Performance (Perf) and Past Experience (Past Exp).

Measurement Model: H2

The measurement model for H2 builds on $H1_{MM2}$, and simply adds the 2-item factor, PastExp, and the single-item measure, Perf. In order to correctly specify a factor with only one item, as this

Fig. 3: The Relationships between the Latent Variables and their Associated Loadings for Hypothesis 1

** p < .01

Note: The data used in the analysis was obtained from a survey conducted for this study with the participation of 277 university students.

Source: own

model requires for Perf, the study follows Anderson & Gerbing's directions [1], setting the factor loading to .95 with the error variance set to .1 of the observed variance in the covariance matrix. Table 3 shows that this model fits quite well (X^2 = 143.60, df = 90; CFI = 965; RMSEA=.047), and thus no respecification was required.

Structural (Theoretical) Model: H2

H2 incorporates PastExp as an antecedent to the three components of CollSE, as well as to Perf. The results of the EQS test of this model are shown in Figure 4. Again, one sees that the X^2-difference test is significant (Table 4; $H2_{MM}$-$H2_{SM}$). The model seems to fit very well (X^2 = 162.51, df=.96, CFI=957; AGFI=.900; RMSEA=.050), though all paths are not significant. Specifically, the paths (Member, PastExp) and (CollSE, Identity) are non-significant (p>.05), and a Wald test suggests that they be dropped from the model. This poses a problem, since removal of these paths sacrifices the logic of the theory. For theoretical reasons, then, these paths are included in the final model. Future research should pay special attention to the validity of these paths. Finally, the amount of variance in SocInt explained by the entire model has risen substantially (R^2=.368),

lending increased support to the importance of the additional variables included in H2.

Discussion and Conclusion

This study lends preliminary support to theory that says that individuals with high trait collective self-esteem are more likely to feel as if they are part of a cohesive group. Further testing and analysis is necessary to determine if all members of a given group feel the same way about the level of group cohesion. However, the results of this test are encouraging. Knowing that individuals with high levels of collective self-esteem are more likely to feel high social integration suggests that they will also be more satisfied and committed to the group task. This trait shows promise as something that managers putting together work groups should consider.

The results are not all positive for organizations, however. The work of Janis [17] and Smith [27] give one pause in fully recommending putting together a team of high collective self-esteem individuals. This hypothetical team would be composed of individuals whose social groups play a large role in defining their identity. They are more likely to fall prey to 'us' vs. 'them' syn-

Fig. 4: The Relationships between the Latent Variables and their Associated Loadings for Hypothesis 2
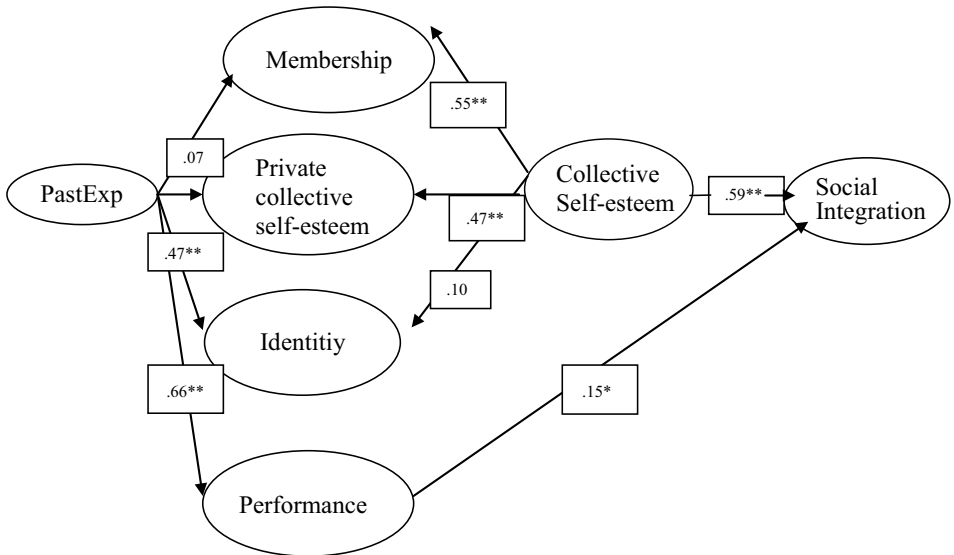
* p < .05, ** p < .01

Note: The data used in the analysis was obtained from a survey conducted for this study with the participation of 277 university students.

Source: own

drome, a key component of groupthink [17] and dynamic conservatism [27]. In the model tested in this paper, performance is the most likely source of these phenomena. Groups that are high performers will be more likely to experience social integration for good reasons, while poor performers will be more likely to become defensive, becoming more cohesive due to their crisis-like situation. The question is, how does the group's composition on collective self-esteem affect this process? That is, could this trait be the linchpin that turns a 'virtuous cycle' of high performance-cohesion-high performance into a 'vicious cycle' of low performance- decline-cohesion-further decline? Future research should specifically address this question.

The main limitation of this study is the reliance on individual responses to determine what essentially a group-level construct is. According to Klein, Danserau & Hall [20], to have a truly group-level construct, all individuals in the group must have the same score on the variable in question. In this case, all individuals in a given group should have identical factor scores on the factor 'Socint.' This paper, however, is content to rely on perceptions of individuals, and instead of measuring some objective construct 'cohesion,' and is measuring something more like 'feelings of cohesion.' Additionally, the performance measure used in this study was obtained at the group level, decreasing the variance of the construct, as well as raising questions about crossing levels of analysis.

Other limitations include those normally associated with convenience samples of university students: are the results generalizable? However, as the purpose of the study was to help uncover some variables that promote the formation of group cohesion (i.e., theory is being developed) external validity is not a dominant issue. In addition, there is an established practice of using university students when measuring individual and group constructs (e.g., [9] and [8]).

Another consideration is the relationship between past experience and collective self-esteem. The loss in significance of the path from collecti-

ve self-esteem to group's importance to identity when controlling for past experience suggests that a person's identity may be less informed by a trait of collective self-esteem than by a person's past experiences with groups. Or perhaps there are groups that are more important to the participant's life than those composed of their classmates.

It was mentioned earlier was the fact the study is using cross-sectional data to deal with a problem that is longitudinal in nature. The effects of time on the development of groups are very interesting and relevant question that should be included in future studies in this area (e.g., [14] and [9]). The dynamic nature of group cohesion and temporal considerations is an area that scholars have investigated, but no solid findings have yet to emerge [7].

Finally, this study adds to the findings on group cohesion. Indeed, Casey-Campbell [7] and Harrison et al. [14] encourage researchers to uncover the antecedents to group cohesion, as this phenomenon is associated with a number of positive effects on organizations. They state that there are numerous work-related values, cultural values, terminal values, and work-related attitudes to choose from. This paper has acted on their suggestions by examining the impact of individuals' past experiences with groups, collective self-esteem, and group performance on the formation of group cohesion. If organizations have knowledge of the conditions that favorably impact the formation of cohesive groups this could have a number of positive implications for group performance. Hence, uncovering further antecedents of this phenomenon is an area worthy of further investigation.

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Appendix 1. Survey Items and their Codes

Collective Self-Esteem:

Membership:

1. I am a worthy member of the groups I belong to. (M1)
2. I feel I don't have much to offer to the groups I belong to. (M2)
3. I am a cooperative participant in the groups I belong to. (M3)
4. I feel I am a useless member of groups I belong to. (M4)

Private Collective Self-Esteem:

5. I regret that I belong to some of the groups I do. (P1)
6. In general, I'm glad to be a member of the groups I belong to. (P2)
7. Overall, I feel that the groups I belong to are not worthwhile. (P3)
8. I feel good about the groups I belong to. (P4)

Importance to Identity:

9. Overall, the groups I belong to have little to do about how I feel about myself. (I1)
10. The groups I belong to are an important reflection of who I am.(I2)
11. The groups I belong to are unimportant to my sense of the kind of person I am. (I3)
12. In general, belonging to groups is an unimportant part of my self-image. (I4)

Past Experience

13. I have enjoyed my experiences working with groups in the past. (PE1)
14. I generally prefer working in groups to working alone. (PE2)

Social Integration:

15. Members of this group trust one another. (SI1)
16. This group is confident that members will perform as expected. (SI2)
17. The members of this group are quick to defend each other from criticism by outsiders. (SI3)
18. The successes of other members of this group help me achieve my own objectives

19. Everyone's input is incorporated into most important group decisions. (SI4)
20. The members of this group get along together very well.
21. Relationships between members of this group are best described as „win-lose"; if he/she wins, I lose.(reverse coded)
22. Members of this group are always ready to cooperate and help each other. (SI5)
23. When final decisions are reached, it is common for at least one member of this group to be unhappy with the decision. (reverse coded)
24. There is a great deal of competition between members of this group. (reverse coded)
25. Members of this group really stick together.

ABSTRACT

GROUP COHESION AND PERFORMANCE: A SEARCH FOR ANTECEDENTS

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With the advent of more team based approaches in managing organizations the construct of group cohesion has gained in saliency as it has implications for both group and organizational performance, and also may positively influence individual job satisfaction. One can define group cohesion as the level of commitment members feel toward the group and the group's tasks. This phenomenon of is usually examined from the perspective on how it adds to, or detracts from, group and organizational performance. Some scholars maintain that a high level of group cohesion leads to enhanced performance through better communication, reduced conflict, more empathy, and greater organizational citizenship. On the other hand, group cohesion has sometimes been asso-ciated with negative performance, as sometimes a highly cohesive group may shun outsiders and new ideas, or even exhibit groupthink in some contexts. However, uncovering the conditions that promote the formation of group cohesion is a much understudied aspect of this construct. In light of this condition, we employ a structural equation modeling approach to examine a number of po-ssible antecedents to group cohesion. The sample is comprised of fourth year university students who answered a questionnaire developed for this study. The antecedents employed in the model include the construct of collective self-esteem, which is composed of membership, private collecti-ve self-esteem, and importance to identify of the group, and one's past experience with groups. Specifically, the results indicate that the individual-level trait of collective self-esteem is a personal disposition that managers should consider when making decisions on group composition.

Key Words: group cohesion, antecedents, performance.

JEL Classification: M19.