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TEAM COHESION: A MULTI METHOD STUDY OF BANK EMPLOYEES IN TURKEY

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Abstract: Team cohesion is one of the most crucial drivers of team effectiveness. However, despite its importance, cohesion research fails to reach an agreement on conceptualization and dimensionality of the construct. Furthermore, previous studies of team cohesion have mostly focused on sports context, necessitating further research in work context. This paper aims to address these gaps in the literature by investigating team cohesion in a work context in Turkey. A qualitative study has been conducted to explore the construct and build a model, followed by a quantitative study that has empirically tested the specified model. The results showed that while the four- dimensionality in the literature (social-task-individual-group) is confirmed, social-task cohesion distinction is more apparent than individual-group distinction. Furthermore sub dimensions have been found to have differential effects on the outcome variables of work effort and team collaboration. Finally, team cohesion is found to vary over time, confirming the dynamic nature of the construct.

Anahtar Sözcükler: *Team cohesion, teamwork, social cohesion, task cohesion.*

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TAKIM SARGINLIĞI: TÜRKİYE'DEKİ BANKA ÇALIŞANLARI ÜZERİNE ÇOK YÖNTEMLİ BİR ÇALIŞMA

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Öz: Takım sargınlığı, takım etkinliğini belirleyen en önemli unsurlar arasında yer almaktadır. Ancak, bu derece önemli bir unsur olmasına rağmen, sargınlık üzerine günümüze dek yapılan araştırmalar, kavramın tanımı ve boyutları hakkında ortak bir sonuca ulaşamamıştır. Bunun yanı sıra, takım sargınlığı araştırmaları genel olarak spor takımları bağlamında gerçekleştirilip iş ortamında daha fazla araştırmaya ihtiyaç duyulmaktadır. Bu makale, yazındaki mevcut eksikliklere değinerek takım sargınlığı kavramını Türkiye'de iş ortamı bağlamında incelemeyi hedeflemektedir. Kavramın anlam ve boyutsallığını araştırmak ve bir model oluşturmak amacıyla düzenlenen bir kalitatif çalışma ardından, kantitatif bir araştırma ile oluşturulan model test edilmiştir. Sonuçlar, yazındaki dört boyutlu modeli (sosyal-görev-birey-takım) doğrulamakla birlikte, sosyal-görev sargınlığı ayrımının, birey-grup ayrımından daha belirgin ortaya çıktığını göstermektedir. Ayrıca, bu boyutların iş gayreti ve takım işbirliği üzerinde değişken etkileri bulunmuştur. Son olarak, takım sargınlığının, takımda geçirilen zamana göre arttığı bulgusu ile, sargınlık kavramının dinamik doğası onaylanmıştır.

Keywords *Takım sargınlığı, takım çalışması, sosyal sargınlık, görev sargınlığı.*

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INTRODUCTION

Along with the changing work structures in the last decades, more and more emphasis has been put on the importance of teams. The team concept has especially become a widely studied organizational phenomenon as the contemporary work places have witnessed the shift from individualized work structures to teamwork, resulting in substantial productivity gains (Morgan *et al*., 1993; West, 2004).

A central aspect of effective and productive teamwork is team cohesion (Greene, 1989; Keyton, Springston, 1990). Team cohesion is basically defined as the gel that binds teams together (State-Davey, 2009). Previous studies have found that cohesiveness among team members is associated with various positive outcomes. There is general agreement that team cohesion is a desirable group property that is linked to team success. Beneficial outcomes of cohesive teams include team loyalty (Polley, 1987), increased effort to achieve group goals (Greene, 1989), the ability of the team to perform under pressure (Mudrack, 1989), higher member participation in team tasks (Widmeyer, Martens, 1978), and team members placing the groups' needs before their individual needs (Littlepage *et al*., 1989). Most important of all, research has consistently shown a positive relationship between team cohesion and team performance (Mullen, Copper, 1994). Furthermore, it is found that it is useful to create interventions to develop this characteristic for competitive advantage (Prapavessis, Carron, 1997). Considering all these outcomes, developing cohesiveness among team members has become a concern for managers (Druskat, Wheeler, 2003).

However, despite the recognition of the theoretical and practical significance of the cohesion construct, literature has major flaws and inconsistencies. Surprisingly, research to date has not reached an agreement on the exact nature or conceptualization and measurement of this important construct. Consequently, confusion in definition and measurement have also led to questioning of the results of studies that investigate team cohesion and its relation to other constructs (Cota *et al*., 1985; Mudrack, 1989). Also, there have been debates on the dimensionality of the concept. Perspectives that have treated team cohesion as a unidimensional construct, mainly referring to "attraction to group" (e.g. Cartwright, 1968) have been criticized leading to a general acceptance of multidimensional views (Cota *et al*., 1995). However, within the dimensions there still exists confusion and different views (e.g. Social versus Task, Group versus Individual).

Another flaw in team cohesion research is that most studies have investigated sports contexts (i.e. athletes, sports teams) (e.g. Jowett, Chaundy, 2004) except fewer studies examining work groups (e.g. Carless, de Paola, 2000; Chang, Bordia, 2001). Although sports teams constitute a very relevant context for investigating the construct, it is necessary to expand our understanding of team cohesion –its definition, nature,

measurement, and correlates- in organizational work settings to be able to reach conclusions regarding the transferability of findings in previous studies in other contexts.

Driving from the aforementioned needs in the field, this paper has four objectives. First of all, it aims to explore the conceptualization and dimensionality of team cohesion. Secondly, following the conceptualization, it anticipates building and empirically testing a model of team cohesion. Thirdly, given the limited research conducted on organizational work team context and the importance of team research in organizational studies, this research aims to address this gap in literature by studying cohesion in work context. Finally, team cohesion in work context has not been investigated in Turkey. Similar to general literature, cohesion studies conducted in Turkey generally focus on the sports context (e.g. Celik, 2015). Therefore, this study aims to contribute to the conceptualization and understanding of team cohesion and its relation to certain team outcomes in the Turkish context. It is known that theoretical work and empirical studies in this field draw heavily on western ideas and measurement while they may not hold true in non-western cultures (Wendt *et al*., 2009). Specifically, team cohesion in Turkish context needs to be understood separately considering the possible linkage of societal cultural aspects of Turkey with cohesion. Turkey is a highly collectivist society (House *et al*., 2004; Kabasakal *et al*., 2012). Cultural dimensions of individualism/ collectivism are expected to be related to team cohesion. Studies have shown that collectivist societies tend to prioritize group goals rather than individual ones compared to individualistic cultures (Triandis, 1995). Furthermore, Oeztzel (1998) and Kirkman and Shapiro (2001) found that groups with a collectivist orientation, have fewer conflicts and use more cooperative team behaviors, compared with groups with an individualistic orientation. Gelfand *et al*. (2004: 456) found that there is an emphasis on cooperative team processes in collectivistic cultures. Thus, collectivist cultural orientation in Turkey may also be reflected by a different conceptualization of team cohesiveness in organizations as well as its outcomes that are found in other country (e.g. Western oriented) studies.

In line with these objectives, two consequent studies have been conducted. Study 1 is a qualitative study with an exploratory purpose to gain an insight for the sub-dimensions of the construct and to operationalize the meaning of team cohesion. The qualitative study has been used for theoretical model building. Study 2, is a follow up quantitative study with the aim of empirically testing the model specified in Study 1. The following section will provide a brief background on the controversies in the conceptualization of team cohesion. Then, research methodology and results will be presented. Finally, findings will be discussed in relation to theoretical and practical contributions, and suggestions for further research.

1. CONTROVERSIES IN DEFINITION AND DIMENSIONALITY OF TEAM COHESION

Previous research on team cohesion has failed to reach consensus on an accurate understanding of what team cohesion it, how it is defined and how it can be measured (Levine, Moreland, 1990: 603). Team cohesion has been defined through various perspectives. According to Festinger *et al.* (1950), group cohesiveness refers to the resultant forces which are acting on the members to stay in a group. Gross and Martin (1952) stated that cohesion is the resistance of a group to disruptive forces. The common denominator of these definitions is that cohesion is related to how a team handles external pressures to reach its goals. However, this definition has been criticized by not clarifying what keeps teams together (e.g. Carron *et al.*, 1985). From a different perspective Evans and Dion (1991) defined cohesion as an individual's desire to remain a member in the group. Similarly many other definitions of cohesion also operationalized it as attraction to the group and members' willingness to stay in the group (eg. Seashore, 1954; Cartwright, 1968). However, Hogg (1992) also has noted that the attraction-based definition remains insufficient to differentiate between interpersonal and group relationships. From a different view, while defining cohesion, Goodman *et al.* (1987) emphasized group members' commitment to task. In general, most definitions in the literature have been criticized to either present an incomplete reflection of a complex construct by referring to certain components or confuse the construct with its antecedents or consequences (Cota *et al.*, 1995).

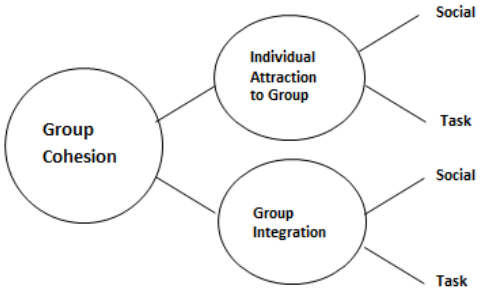
A commonly accepted definition of cohesion has been suggested by Carron (1982: 124) as "the dynamic process which is reflected in the tendency for a group to stick together and remain united in pursuit of its goals and objectives". This definition brings a more comprehensive explanation to include both attraction to the group and dedication to group goals, combining task and social orientation. Furthermore, it implies prioritizing group goals over individual ones. Another important aspect of this definition is the emphasis on the dynamic nature of cohesion. Other studies have also confirmed the dynamic nature of cohesion such that time was found to be influential on team cohesion as cohesion emerges and develops in time from the interaction among members, and influences its members' desire to remain in the group (Leana, 1985; Williams, Widmeyer, 1991).

Driving from the controversies in definition, another lack of agreement in team cohesion research is on its dimensions. Early research on team cohesion has defined it as a unidimensional construct (e.g. Goodman *et al.*, 1987; Seashore, 1954) mainly consisting of attraction to the group or commitment to task. Although these perspectives referred to important aspects of cohesion, they remained inadequate to capture all dimensions. Therefore, many researchers have agreed that cohesion is a

multidimensional construct. For example, DeFleur *et al*. (1993) discuss four types of group cohesion: sentiment-based cohesion, assignment-based cohesion, reward-based cohesion, and dependency-based cohesion. Sentiment-based cohesion refers to the feelings of the group members for each other. Assignment-based cohesion suggests that what binds a person to a group is the willingness to work with others to reach goals because that has been defined as the person's duty. In reward-based cohesion, members believe that the group success will have a positive impact on their personal success. Finally, dependency-based cohesion is based on the interdependence of members on group tasks.

Majority of the research that accepted multidimensionality of cohesion suggested that it includes both a social focus and task focus, where the social aspect refers to affiliation, security, social bonds and task focus includes goals and objectives (Zaccaro, McCoy, 1988). Another distinction regarding dimensions of cohesion has emerged as individual versus group (Widmeyer *et al*., 1995). Individual aspect of cohesion refers to the individual attraction to and willingness to remain in the group. Group aspect is represented by the group's perceptions regarding the group's similarity, closeness, and integration. Carron (1982), starting from the aforementioned definition of team cohesion, integrated these aspects (task, social, individual, and group) to create a four dimensional model of cohesion (Carron *et al*., 1995) (Figure 1).

Figure 1. Conceptual Model of Cohesion



Source: Carron (1982).

These dimensions are explained as follows: (1) Individual Attraction to Group-Social describes individual team members' feelings about personal involvement in the social interaction of the group. (2) Individual Attraction to Group-Task reflects individual team members' feelings about personal involvement in the group task. (3) Group Integration-Social reflects individual team member's perceptions about closeness and bonding in team's social activities. (4) Group Integration-Task is an individual team member's perceptions about the similarity and closeness within the team about accomplishing the task.

This definition and the dimensions of team cohesion have also led to the development of Group Environment Questionnaire (GEQ) (Carron *et al*., 1985; Widmeyer *et al*., 1985). After an extensive process of scale development, a final 18-item version of GEQ capturing the aforementioned four dimensions has been generated. The GEQ demonstrated internal consistency, reliability and content validity in two different sport team samples during its initial development (Carron *et al*., 1985). Although some researchers (Schutz *et al*., 1994; Westre, Weiss, 1991) had concerns about the validity and reliability of the GEQ, most researchers supported the use of the GEQ as the most psychometrically sound instrument to measure cohesion (Cota *et al*., 1995; State-Davey, 2009). This scale has an individual level approach, measuring team members' perceived cohesion of their teams through their self reports.

While multidimensionality of the construct has generally been agreed upon, researchers have not yet confirmed the exact factor structure of team cohesion. Furthermore, the model of cohesion by Carron *et al.* (1985) was specifically developed for sport teams. While pioneering studies have looked at the four factor structure, there are other views which suggest that the individual versus group distinction is not relevant and task and social cohesion distinction is more appropriate for research in non-sports (e.g. work) settings (Zaccaro, Lowe, 1988). Similarly, recent studies that have used the model in work settings have emphasized the challenges of adapting the GEQ for measuring cohesion in work teams other researchers and generally found good support for the task-social distinction but not for the group-individual distinction (Carless, DePaola, 2000; Dyce, Cornell, 1996).

This review of controversies and debates on the team cohesion construct clearly shows the need for a better understanding of what it means, what its dimensions are, how it is measured, and what is the relationship between cohesion and certain team outcomes, especially in the work setting. This paper aims to explore the team cohesion construct through a qualitative study for theoretical model building and item generation, followed by a quantitative study to empirically test the qualitatively driven model of team cohesion in a Turkish work context. The next section explains the research methodology and findings of the two studies.

2. RESEARCH METHODOLOGY AND RESULTS

Value of triangulation via combining qualitative and quantitative methods has been proven to be a powerful technique. As defined by Cohen and Manion (2000: 254), triangulation is an attempt to explain more fully, the richness and complexity of human behavior by studying it from more than one standpoint. This paper follows a sequential exploratory strategy in applying mixed methods research going from theoretical model building by qualitative study to model testing by a quantitative survey.

Study 1: Qualitative Study

Data collection: After the literature review of the study, a qualitative research was conducted for mainly exploratory reasons and theoretical model building. The qualitative part aimed to explore what is understood from "team cohesion" in order to generate items for the survey besides the already existing items in the literature.

Data were collected from 3 focus groups consisting of a total of 18 people, until data saturation was reached. Convenience purposive sampling was employed while participant selection. Groups were composed of full time employed individuals from a major bank in Turkey. They were already working together as a team either in a project team or department team. Participants consisted of 10 females and 8 males and had an average age of 32.4. All of them were university graduates. They were asked to discuss what team cohesion meant to them, considering their current work team. They were encouraged to talk freely and their discussion was stimulated by the facilitator through semi structured questions. Each focus group lasted from 1.5 to 2 hours. Discussions were tape recorded for further analysis.

Data analysis and results: Data analysis was conducted through a combination of inductive and deductive approaches. First an inductive approach has been employed in four stages. In the first stage, a comprehensive list of all main ideas mentioned was prepared. A coder coded the raw data into 269 ideas. However due to meaningfulness of the sentences and phrases, the researcher eliminated 21 of them, which left 248 separate ideas. In the second stage, the aim was to make the ideas more manageable with less number of broader categories. Therefore two independent sorters grouped the 248 ideas into a total of 105 broader categories. The first sorter came up with 55 and the second sorter with 49 categories. The second sorter used a different approach while categorization by differentiating positive and negative aspects and then categorizing accordingly. Then the two sorters worked together to agree upon sorting these 105 categories into 40 code categories. In the third stage, an independent judge coded the 248 idea into 40 dimensions. Inter rater reliability score (Cohen's Kappa) was found to be 0.65. Since this measure of agreement was below the acceptable value of 0.70; the judges and sorters worked together to agree on the re-categorization of certain items which increased the reliability score to 0.834. Then these 40 themes were further grouped into 10 themes reflecting team cohesion. After the deductive stage, applying an inductive approach, these 10 themes were further categorized according to the four existing dimensions in the literature: Individual- Task, Individual- Social, Group- Task, and Group- Social (Widmeyer *et al*., 1985). Additionally, a strongly emerging theme reflecting the feeling of responsibility as cohesion, which did not fit the pre-existing categorization in the literature, emerged. Therefore, it was named as Normative Cohesion. Furthermore, two themes consistently emerged as consequences of perceived

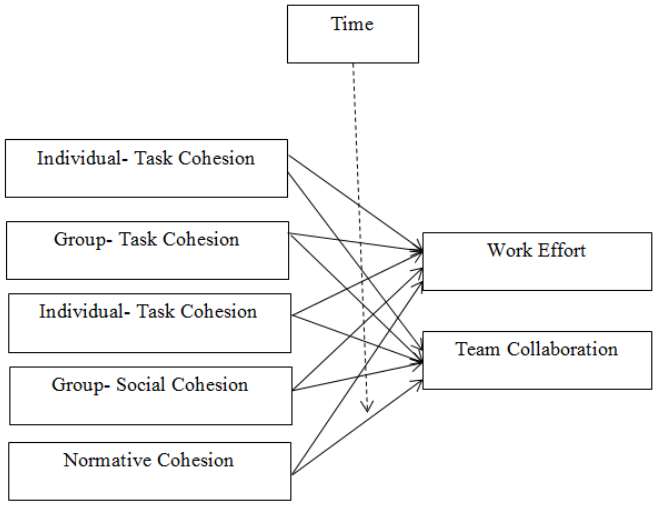
team cohesion: First one reflecting the level of effort and time put in by the individuals and second one referring to the notion of unity, solidarity, and collaboration. The first one was named as work effort and the second one was named as team collaboration. Finally, time effect was also identified as a major theme that predicted team cohesion. The final themes, relevant dimensions, and sample narratives are presented in Table 1.

Table 1. Qualitative Study: Themes and Dimensions

Theme	Sample Narrative	Category/Dimension
1.Dedication to work	*"I really enjoy my task in this team"*	Individual- Task
2.Personal goals	*"This team gives me opportunity for self development"*	
3.Priority of team goals	*"We sacrifice our own needs while working towards the team goal, and no one complains!"*	Group- Task
4.Enthusiasm to reach the team goals	*"Our morale and motivation keeps us going"*	
5.Friendship	*"It is so much beyond work, we are good friends here"*	Group &Individual-Social
6.Socializing	*"We like hanging out together"*	
7.Team consciousness	*"We work as a team, we party as a team; we share a lot!"*	Group-Social & Task
8.Belonging to a group	*"Sense of belonging here feels special"*	Group & Individual-Social
9.Positive emotions for the team	*"I feel happy with these people, there is warmth and sincerity here"*	
10.Sense of responsibility	*"It is a feeling of responsibility to my friends, my task, my leader."*	Normative Cohesion
Other emerging themes		
Work effort	*"We put so much effort and time in what we do in this team"*	Consequence
Team unity/collaboration	"We are in unity, we are ready to help each other, to collaborate in anything	Consequence
Time effect	*"We were not like this at first. It developed in time."*	Predictor

Proposed model and hypotheses: Tracking the appearance of the themes in Study 1 (team cohesion as 5 dimensions, time as a predictor, work effort and team collaboration as two outcome variables), the following model has been proposed for empirical testing in the second stage (Figure 2).

Figure 2. Proposed Model of the Study



The model hypothesized that:

H1: (a) Individual-task cohesion, (b) Group- task cohesion, (c) Individual- Social cohesion (d) Group- Social cohesion (e) Normative Cohesion are positively related to work effort.

H2: (a) Individual-task cohesion, (b) Group- task cohesion, (c) Individual- Social cohesion (d) Group- Social cohesion (e) Normative Cohesion are positively related to team collaboration.

Furthermore, time has emerged as a predictor variable as a result of the qualitative study. Previous studies had also found that cohesion emerges and develops in time, thus time spent with the team constituting an important aspect in the formation of time (Carron, 1992; Leana, 1985; Williams, Widmeyer, 1991). Accordingly, it is hypothesized that:

H3a: Level of team cohesion (for all dimensions) differs across individuals who are members of their teams for a longer time than those who are members for a shorter time.

H3b: Time moderates the relationship between team cohesion and team outcomes of work effort and team collaboration.

Study 2: Quantitative Study

Data collection: In the second phase, a quantitative study has been conducted for empirically testing the proposed model in the qualitative study. A questionnaire has been conducted among 112 people working in a bank. Employees of the bank were sent an online questionnaire and asked to complete the questions considering the current team they are working with (department or project team). 56% of the participants were females, and the average age was 32.9. 83% were university graduates and the rest had a graduate degree.

Measurement: Team cohesion has been measured by a combination of 18 items of GEQ (Group Environment Questionnaire) developed by Widmeyer et al., 1985. Since the items that have emerged from the qualitative study has fallen into the four dimensions of GEQ (individual-task, individual- social, group-task, group-social), the items of the original has scale has been used. Items of the GEQ have been reworded to reflect the work setting instead of a sports setting. The items have been translated to Turkish and back translated to avoid any bias. Furthermore, 3 items have been included that have generated from the qualitative study on normative cohesion. Normative cohesion has been measured by 3 items that have emerged from the qualitative study, assessing the feeling of responsibility towards the leader, the team, the task and the organization. Work effort and team unity have been measured by 2 items each that have emerged from the qualitative stage. A sample item for work effort is "I contribute a lot of time and effort for this team's performance". A sample item for team collaboration is "Everyone helps each other in the team". All items have been measured on a Likert scale ranging from 1 to 5 (1= strongly disagree; 5= strongly agree).

Data analysis and results: Data was analyzed using SPSS Programme 20.0. First of all, an exploratory factor analysis with varimax rotation has been conducted to see the dimensionality of team cohesion scale. Items with low or double loadings have been removed. Final factor structure consisted of 5 factors with a total of 14 items. Reliability scores for each factor are above the minimum satisfactory level of 0.70 (Nunnally, 1978), except for task focus, which is slightly below 0.70. However, it is common to accept lower scors for factors with only two items (Cronbach, 1951). The factor analysis results for team cohesion scale with factor names, loadings, explained variance, and reliability scores (Cronbach's Alpha) are presented in Table 2. Mean scores and correlations between factors are also presented in Table 3.

Table 2. Results of Exploratory Factor Analysis

Factors	Reliability	Factor Loading	Variance Explained (%) 859	Related dimension in literature
Factor 1: Working as a Team (Teamwork)	**0.831**		38.809	
We all take responsibility for any loss or poor performance of the team		0.823		GT
If members of our team have problems at work, everyone wants to help them to get back together		0.747		GT
Our team members communicate freely about each other's responsibilities at work		0.729		GT
Members of our team work in harmony together		0.711		GT
We get along well together		0.618		GT /GS
Factor 2: Task Focus	**0.627**		**11.3**	
Our team is united in trying to reach its goals for performance.		0.766		GT
This team doesn't give me enough opportunities to improve my personal performance		0.733		IT
Factor 3: Individual Socialization	**0.752**		9.317	
Some of my best friends are on this team		0.851		IS
For me, this is one of the most important social groups to which I belong		0.715		IS
I enjoy socializing with members of my team		0.676		IS
Factor 4: Success Orientation	**0.734**		7.15	
Our team members have similar aspirations for the team's performance		0.872		IT
I'm happy with my team's level of desire to win		0.728		GT
Factor 5: Group Socialization	**0.738**		5.656	
Our time would like to socialize outside of work hours		0.722		GS
I do not miss the members of my team when I do not see them		0.688		GS
			Total Variance Explained= 72.231	

*IT: Individual-Task, IS: Individual-Social, GT: Group-Task, GS: Group Social

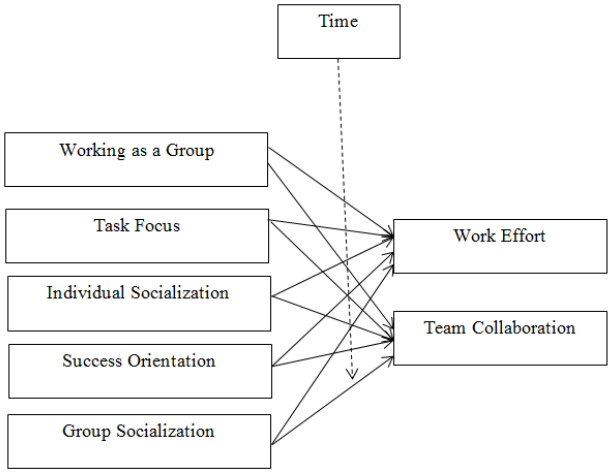
Table 3. Means, Standard Deviations and Intercorrelations of Key Variables

	Mean	SD	1	2	3	4	5	6	7
1. Working as a team	3.52	.64	1						
2. Task focus	3.53	.95	.336	1					
3. Individual socialization	3.19	.92	.412*	.288	1				
4. Success orientation	4.16	.60	.261	.416*	.338	1			
5. Group socialization	3.68	.96	.593**	.391*	.425*	.291	1		
6. Collaboration	3.77	.82	.668****	.310	.396*	.157	.661**	1	
7. Work effort	4.04	.87	.665**	.153	-.055	-.029	.514**	.417*	1

**$p < .001$; *$p < .05$

Based on the dimensionality that emerged as a result of the exploratory factor analysis, the model has been revised according to the new factor structure. Items of normative cohesion have dropped from the revised structure, thus being removed from the model. Instead, a five factor structure of team cohesion appeared (Figure 3).

Figure 3. Revised Model of the Study



Accordingly, the first factor "working as a team" referred to harmony, sharing responsibility, open communication aspects which included group integration elements involving mainly social cohesion. Second factor emerged as task focus, addressing

goals and performance aspects. Third factor represented the individual's feelings of socialization with this team. Fourth factor was called success orientation involving both the individual and group perception of importance of success of the team. Finally the last factor referred to the group's socialization aspect. The order of the hypotheses was kept consistent, only changing the proposed dimensions of team cohesion.

In order to test the Hypotheses 1a-1e and 2a-2e, a series of multiple regression analyses were conducted with team cohesion dimensions as the independent variable and two dependent variables, namely work effort and team collaboration. The results showed that working as a team (B=0.686, p<0.000) and group socialization (B=0.343, p<0.05) had a positive effect on work effort, supporting H1a and H1e. However, there was no significant relationship between task focus, individual socialization, and success orientation and work effort, rejecting H1b,c, and d. Moreover, working as a team (B=0.415, p<0.05) and group socialization (B=0.398, p<0.05) had a positive relationship with team collaboration as well, thus supporting H2a and H2e. However, there was no significant relationship between task focus, individual socialization, and success orientation and team collaboration, rejecting H2b,c, and d. Beta scores and R^2 scores are presented in Table 4.

Table 4. Regression Analysis Results

		R^2	Standardized Coefficients (Beta)	t value	Sig.
H1a	Working as a team		.686	4.829	**.000**
H1b	Task focus		-.025	-.196	.846
H1c	Individual socialization		-.055	-.276	.784
H1d	Success orientation		-.154	-1.217	.234
H1e	Group socialization		.343	2.352	**.026**
	Dependent Variable: Work effort	.595			
H2a	Working as a team		.415	2.603	**.015**
H2b	Task focus		.037	.258	.798
H2c	Individual socialization		.082	.568	.574
H2d	Success orientation		-.111	-.781	.442
H2e	Group socialization		.398	2.435	**.021**
	Dependent Variable: Team Collaboration	.49			

For testing the Hypothesis 3a, length of time spent as a member of the current team was split into short and long time (low versus high) based on the median score. A one way analysis of variance (ANOVA) test was carried out to determine whether scores of task versus social cohesion differed across the different levels of duration in the team. H3a was supported such that both for all dimensions of team cohesion, mean scores were higher in individuals who spent longer time in their teams. Table 5 shows the mean scores of each group (less time versus more time in the team) and the significance of mean score differences.

Table 5. Mean Scores of Team Cohesion Across Time

Team cohesion dimension	Mean score (less time)	Mean score (more time)	P value
Working as a team	3.22	3.91	0.001
Task focus	3.24	3.90	0.042
Individual socialization	2.70	3.80	0.000
Success orientation	3.92	4.47	0.006
Group socialization	3.03	4.50	0.000

On the other hand, in order to test for the moderation effect of time, an interaction variable of time and team cohesion was created. Then, a series of hierarchical regression were conducted for each of the cohesion dimensions and outcome variables with the interaction variable included. However, there was no interaction (moderation) effect of team cohesion and time on work effort or team collaboration. In other words, the relationship between team cohesion and outcome variables was not influenced by the effect of time spent in the team for any of the dimensions, rejecting H3b.

DISCUSSION

Teams, especially highly functioning teams, are an extremely valuable asset in today's society. However, there exist many controversies about the meaning and dimensions of the construct, which also leads an inconsistency in interpreting the studies related to the antecedent and outcomes of cohesion. There is also a lack of studies conducted in work settings as sports settings has been the dominant area of research in this field. The study provides a general framework and a starting point for further research that will be conducted on team cohesion in work contexts. Especially in the Turkish context, team cohesion has been an under researched field in organizational studies. With its unique cultural characteristics (e.g. high collectivism), results of studies conducted in Turkey may show a different meaning and dimensionality attributed to the concept than the Western settings. Therefore, this study anticipated exploring the construct and empirically testing a qualitatively and literature driven model of team cohesion.

Evaluating the overall results of the study, it can be inferred that multidimensionality of the construct "team cohesion" was approved one more time with this study. Both the qualitative study and the quantitative study revealed dimensions that referred to the Individual-Group and Social-Task dimensions. Although dimensions emerged with slightly different structures and names (i.e. 5 factor structure in quantitative study), all of the dimensions found as a result of the two studies belonged to the four main dimensions of team cohesion; namely Individual Attraction To Group-

Social, Individual Attraction To Group-Task; Group Integration-Social and Group Integration-Task. However, while certain dimensions were clearly grouped to belong to one of the four distinct groups (e.g. Social- Group / Task- Individual), in some dimensions, while Social- Task cohesion was clearly evident, Individual-Group distinction could not be made. In other words, while cohesion dimensions related to either task or socialization were clearly separate, but these dimensions involved both people's perceptions about their own tasks or socialization about the team and their evaluation of the group's integration in task and social aspects. This finding is in line with the previous studies which claimed the Social-Task distinction to be relevant whereas Individual-Group distinction was not found in all studies (Dyce, Cornell, 1996; Zaccaro, McCoy, 1988).

An interesting finding that might require further examination is related to Normative Cohesion that strongly emerged in the qualitative study. While this shows the importance of normative (sense of responsibility) related cohesiveness in the Turkish work context, this is a relatively different interpretation of team cohesion compared to other studies. However, the items related to the new dimension "Normative cohesion" added after the qualitative research were eliminated from the factors, showing that an attempt to add different dimensions to the team cohesion construct was not successful. Normative cohesion did not emerge in the operationalization of the construct confirming the literature. This may be due to the small sample size in the quantitative study, or normative cohesion can be investigated as a possible antecedent or consequence of team cohesion in future studies. Previous studies had also shown that norms can both be a predictor and consequence of team cohesion; i.e. as members conform to team norms, they become more cohesive. Consequently, as they become more cohesive, they conform to norms more (Festinger, 1950).

Investigating the relationship between dimensions of team cohesion and team related outcomes of work effort and collaboration, results showed that working together as a team and group socialization were strongly related to both work effort and collaboration, whereas task focus, individual socialization, and success orientation were not found to influence team outcomes. This finding shows that the social aspect of cohesion, mainly referring to attraction to the group and socioemotional cohesiveness as first conceptualized in many studies of cohesion (Tziner, 1982), had a stronger influence on team related outcomes of effort and team collaboration, although task cohesion was expected to influence work effort more than social cohesion. On the other hand, this finding contradicts with Parapavessis and Carron (1997) which found individual social attraction to the task was associated with increased work effort. The difference in findings may be due to the fact that the study by Parapavessis and Carron (1997) was conducted in a sport setting whereas the current study took place in a work setting. Another reason of contradictory findings could be that the operationalization of the

work output and effort in the other study was based on the individual's perception of his or her own work compared to his or her perceived capability whereas in the current study the operationalization involved team's common time and effort invested rather than an individual level output.

Finally, the dynamic nature of cohesion was confirmed once more with the study. This study found that all dimensions of team cohesion belonging to task cohesion and social cohesion have significantly higher scores for those individuals who have spent longer time in their teams compared to participants who were in their teams for a shorter time period. This finding is in line with previous studies that stated that cohesion emerges and develops in time (Carron, 1992; Leana, 1985; Williams, Widmeyer, 1991). However, time did not emerge as a moderator variable which influenced the relationship between cohesion and outcome variable, collaboration. This shows that, although cohesion is strengthened over time, the relationship between cohesion and outcome variables was not influenced by the effect of time. In both cases where less time or more time was spent in the team, group social cohesion factors led to work effort and team collaboration.

Previous studies have shown a positive relationship between team cohesion and many positive team related outcomes (e.g. Mullen, Copper, 1994), indicating that developing cohesiveness among team members has become a concern for managers. Therefore, managers need to use interventions to increase cohesiveness of teams for competitive advantage (Prapavessis, Carron, 1997).The results of this study also confirm this finding, showing the positive relationship between cohesion and work effort and team collaboration. Therefore, managers need to pay attention to developing cohesiveness among team members. Since working as a team and group socialization have emerged as the cohesion dimensions that are strongly linked to positive team outcomes of work effort and collaboration, managers may focus on these dimensions especially. To make sure group members feel and work as a team, harmony of the team can be strengthened by managerial interventions such as encouraging a team culture of sharing responsibility, giving feedback, open communication and helping each other. Managers may also make sure to engrain the commonality of a vision and shared team objectives to foster team members' willingness to work towards the vision as a team. For the social cohesion aspect, managers may plan social interventions, such as gatherings, dinners, meetings outside of work environment, and social activities to develop social bonding and friendship of team members.

In order to decide which interventions may help foster team cohesion, it would also be useful to look at various antecedents of team cohesion found in previous studies. For example, individual attributes such as personality is an important predictor of cohesiveness (House, 1971). Therefore, managers may pay attention to casting their

teams with the right combination of members with more compatible and harmonious personalities rather than conflicting characters. Zaccaro and Lowe (1986) found that shared failures and successes also contribute to increased team cohesion. Managers may make sure small and big successes are celebrated together as a team. Similarly managers may encourage sharing failures with open communication and understanding as a team. With these interventions, shared failure and success experience becomes a part of cohesion development. Clarity of member roles (Evans, Dion, 1991) and team goals (Mudrack, 1989) have also been linked to increased cohesiveness. Therefore, it is suggested that managers may set these roles and goals clearly at the beginning.

On the other hand, given the effect of time on development of cohesion, managers should keep in mind that cohesion develops over time. Therefore, a possible implication would be not rotating members in a team or changing project teams too frequently and to give some time to teams to develop a certain level of cohesion until they become high performing teams.

Literature to date is full of controversies on the definition and dimensionality of team cohesion. This study contributes to the literature by exploring the team cohesion construct and empirically testing a model of team cohesion to contribute to the debates in previous research. Furthermore, considering the need for cohesion research in non-sports settings, the current study that takes place in the work context (bank employees) constitutes a major contribution. In addition, this research sheds light onto how Turkish people, as a collectivist society, understand and interpret the concept of team cohesion, what they think is influential on its formation, and what are the team outcomes of cohesion in the Turkish context. More importantly, regarding the research methodology, triangulation, i.e. using a qualitative study and quantitative follow up study, establishes a major strength that enriches the findings.

On the other hand, this paper has some limitations as well. The empirical study was conducted with a relatively small sample size. Further studies are suggested to test the model with a bigger sample. Furthermore, while the effect of time was measured via entering time as a moderator variable, it is suggested that longitudinal studies be conducted to explore formation or development of cohesion over time, considering its dynamic nature, also confirmed with this study. State-Davey (2009) suggested that reliance on self-report while measuring cohesion is a common technique, which is not surprising due to the nature of cohesion. As indicated by Carron *et al*. (1985), team cohesion should be assessed through individuals' self-reports since cohesiveness can only be evaluated by the team members' own experiences, beliefs, and feelings. However, reliance on self-report for all variables may cause common method bias. Further studies can use objective measures or peer/supervisor ratings to assess dependent variables. Finally, there is still need for more research on team cohesion in

work settings. Future research may investigate the construct more thoroughly by considering the need to distinguish cohesion from its antecedents, consequences, and correlates.

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