

87009

T.C.
MARMARA ÜNİVERSİTESİ
SOSYAL BİLİMLER ENSTİTÜSÜ
İNGİLİZCE İŞLETME ANABİLİM DALI
ÖRGÜTSEL DAVRANIŞ BİLİM DALI

TEAM COMPOSITION AND EFFECTIVENESS

DOKTORA TEZİ

Güler K. İslamoğlu

Danışman:

Profesör Dr. Suna Tevruz

İSTANBUL – 1999

TC. YÜKSEKÖĞRETİM KURULU
DOKÜMANTASYON MERKEZİ

This thesis submitted by Güler K. İslamoğlu to the department of Management- Organizational Behavior of Marmara University in partial fulfillment of the requirements of the degree of PH.D. is accepted by:

Thesis Advisor: Prof. Dr. Suna TEVRUZ

Committee Member: Assoc. Prof. Dr. İnci ARTAN

Committee Member: Prof. Dr. Hayat Kabasakal

Date: June, 1999

Acknowledgments

I would like to thank first of all to Prof. Dr. Suna TEVRUZ, my thesis advisor, for her guidance and support she has provided me throughout this study. It was a great experience and pleasure to get her precious suggestions, which have added too much value to this study.

Thanks to Assoc. Prof. Dr. İnci Artan and Prof. Dr. Hayat Kabasakal, committee members, for their help and understanding.

I am especially grateful to Dr. Sema SÜVARİOĞLU for her very valuable suggestions and guidance for the application of the experimental design.

I would like to thank Dr. Emine ÇOBANOĞLU, Melek BİRSEL, Müjdelen İpek YENER, Serra YURTKORU and Tülay TURGUT for devoting their time through the application of the study.

Many special thanks to Tülay TURGUT and Serra YURTKORU for their generous guidance, assistance and patience in conducting the statistical analysis.

I would like to express my special gratefulness to Cihangir KAVUNCU for providing me the opportunity to conduct this experimental study in the factory site.

My special thanks to all the participants of this study, without whom such a study would be impossible, for their sincere and most valuable contributions.

SUMMARY

Due to the increasing importance of teams within the organizations during the recent years, this study focuses on teams and the factors of effectiveness. The study starts by reviewing the recent research on teams especially emphasizing the relationship between team composition and effectiveness of teams. The review starts with the definition of the concept of the 'team', prior to highlighting the main differences between 'a group and a team'. This distinction is made for this study, while throughout the history the two terms have been used interchangeably by many researchers. The review also includes the historical developments of teams in the industry and gives an overall concept about the factors that influence the effectiveness of the teams at work. These factors include team building stages, team size, team composition, team cohesiveness and leadership provided in the teams. Among these factors, the study mainly focuses on the relationship between team composition and effectiveness, claiming heterogeneity of the team members leading to better performance. Based on the findings in the literature that support the relationship between heterogeneity and team effectiveness, this study focuses on team composition and effectiveness.

Team composition, which is the independent variable of this study, refers to the heterogeneity or homogeneity of the teams depending on the demographic characteristics of the team members. Team effectiveness, which is the dependent variable, is defined in terms of four dimensions: creativity, time required for reaching a decision, quality of decision and job satisfaction of team members in this study:

The study is experimental in design and the experiment was conducted in a factory site of a multinational organization, which is manufacturing fast-moving consumer goods specialized in cleaning agents. The unit of analysis is teams. Twelve teams were formed for the study. The individuals working in the factory are used to form teams with either heterogeneous or homogeneous characteristics.

Although, the hypotheses claimed are not supported at the end of the study, the findings revealed that heterogeneous teams were slightly more creative and took better quality decisions, while spending more time in reaching a decision as hypothesized. On the other hand, opposed to the hypotheses, although the difference is not significant, the members of homogeneous teams are found to be slightly more satisfied with the job performed, whereas members of heterogeneous teams are slightly more satisfied with their teammates.

TABLE OF CONTENTS

	<u>Pages</u>
<i>Literature Review</i>	6
I. Introduction	6
II. Definition	7
III. Difference Between a Team and a Group	9
IV. Historical Development of Teams	17
A. Quality of Work Life	17
B. Socio-technical approach	18
C. Topeka Work System	19
D. Rushton Quality of Work Project	21
E. Confectionary Company	22
V. Contributions of Teams	24
VI. Cost of Teams	28
A. Power readjustment	28
B. Free riding	29
C. Coordination costs	30
D. Domination by the few	30

E. Pressures to conform	30
VII. Turning Individuals to Team Players	31
A. The Challenge	31
B. Shaping Team Players	35
VIII. Types of Teams	37
A. Advice and Involvement	38
B. Production and Service	40
C. Project and Development	41
D. Action and Negotiation	42
E. Self-managing	44
IX. Team Development	47
A. Stages of Team Building	48
B. Team Development Intervention Studies	50
X. Manager's Role with the Teamwork	54
A. Coaching	54
B. Providing Resources	55

XI. Factors That Influence Team Performance	55
A. Organizational Factors	56
B. Team's Structural Factors	61
XII. Effective Work Teams	76
A. Criteria for Team Effectiveness	76
B. Ingredients for Team Effectiveness	77
C. Characteristics of an Effective Team	78
XIII. Team Heterogeneity and Effectiveness	81
XIV. Conclusion and Discussion	102
A. Variables of the Research	106
B. Operational Definitions	106
C. Hypotheses	108
<i>Method</i>	109
I. Research Setting and the Sample	109
A. Training	112
B. Pilot Study	114

C. Actual Application	115
II. Formation of the Experimental Teams	115
III. Task	116
IV. Measures	118
A. Creativity	118
B. Time spent	120
C. Quality of Decision	120
D. Job Satisfaction	122
V. Statistical Analysis	122
Results	124
Conclusion and Discussion	135
References	145
Appendices	188

CONTENT OF TABLES

	<u>Pages</u>
Table 1: Teams versus Groups	12
Table 2: Gebze Factory (Demographic information)	110
Table 3: Degree of Vitality	116
Table 4: Summary of means	124
Table 5: Differences between number of ideas generated	126
Table 6: Differences between originality of ideas generated	126
Table 7: Differences between the categories of solutions	127
Table 8: Quality of decisions in terms of cost	128
Table 9: Quality of decisions in terms of applicability	128
Table 10: Quality of decisions in terms of time required for application	129
Table 11: Differences between the overall quality of decisions	129
Table 12: Differences between teams in terms of time required to make a decision	130
Table 13: Differences between teams in terms of job satisfaction	130
Table 14: Satisfaction with the idea generation (analysis of item 1 on job satisfaction questionnaire)	131
Table 15: Satisfaction with the decision (analysis of item 2 on job satisfaction questionnaire)	132
Table 16: Satisfaction with the teammates (analysis of item 3 on job satisfaction questionnaire)	132
Table 17: Willingness to participate in such a study again (analysis of item 4 on job satisfaction questionnaire)	133
Table 18: Willingness to work with the same teammates (analysis of item 5 on job satisfaction questionnaire)	134
Table 19: Summary of mean ranks	136
Table 20: Distribution of satisfaction scores	138

LITERATURE REVIEW

I. INTRODUCTION

Teams have emerged as a basic unit of study in the organizations during the recent years. In fact, when the term 'team' is considered, it is not a new concept within the organizations while the importance of teamwork has been emphasized throughout the years. As a result of increased global competition, organizations have been forced to revise the way they manufacture and deliver products and services. Organizations have also been changing their organizational structure because they want to operate more effectively with lower number of employees. Moreover, the introduction of total quality management, advanced information technology and learning organizations have changed the organizational structures towards the utilization of teams because these developments have shifted the essence of individual managers and workers to inter-functional management teams and work teams that deal with complex problems and tasks. Therefore, teams have become an important part of the way business is being performed in today's organizations. Books and articles have been written about how to design empowered or self-managed teams (Wellins, Byham&Wilson, 1991; Orsburn, Moran, Musselwhite & Zenger, 1990), parallel learning teams

(Bushe&Shani, 1991), cross-functional project teams (Parker, 1994), executive teams (Nadler&Ancona, 1992) and team-based organizations (Mohrman, Cohen&Mohrman, 1995). The use of self-managing work teams is now common in the United States (Osterman, 1994;Towers Perrin, 1990). However, the origin of the self-managing work teams has been ascribed to two sources: Tavistock studies of post World War II, England (Trist and Bamforth, 1951) and Swedish sociotechnical movement (Cummings, 1978; Denison, 1982).

II. DEFINITION

In the literature, there are numerous definitions of the terms ‘team’ and ‘group’ which are similar to each other. There is no clear definitional difference between the two terms. Different researchers defined the two terms in the same way while some refer to it as a group and some refer to it as a team. That is, the same definition is used for the two terms by different researchers. Below is the list of some of these definitions:

Very briefly, a *team* is a unit of two or more people who interact and coordinate their work to accomplish a specific goal. The definition has three components (Daft, 1997):

- Two or more people are required
- People in a team have regular interaction
- People in a team share a performance goal

This definition might also apply to a group since a definition of a group made by Johns (1996) is as follows:

A *group* consists of two or more people interacting interdependently to achieve a common goal (Johns, 1996).

A *team* is a group of people, but although one can put together a group of people, building a team might not be possible. Therefore the two terms should not be used interchangeably. The team concept implies a sense of shared mission and collective responsibility (Daft, 1997).

A *team* is a collection of individuals who are interdependent in their tasks, who share responsibility for outcomes, who see themselves and who are seen by others as an intact social entity embedded in one or more larger social systems (for example, business unit or corporation) and who manage their relationships across organizational boundaries (Sundstrom, DeMeuse and Futrell, 1990).

A team is a small group of people with complementary skills, who work together to achieve a common purpose for which they hold themselves accountable (Schermerhorn, Hunt, Osborn, 1997).

Similar definitions were made for a group as follows:

A *work group* is made up of individuals who see themselves and who are seen by others as a social entity, who are interdependent because of the tasks they perform as members of a group, who are embedded in one or more larger social systems (community, organization) and who perform tasks that affect others. (customers, coworkers) (Alderfer, 1977 & Hackman, 1987)

A *group* is a collection of individuals in which there is interaction among members, perception of group membership, shared norms and values and fate interdependence (what happens to one group member affects other group members and what happens to the group as a whole affects the individual members) (Luthans, 1992).

Attributes related with team can be summarized as follows:

- Team controls individual member task assignments (Cannon – Bowers, Oser, & Flanagan, 1992; Hackman, 1976; Pearce & Ravlin, 1987; Wall, Kemp, Jackson & Clegg, 1986; Wellins et al, 1990).
- Team has an identifiable or whole piece of work (Cannon – Bowers et al., 1992; Goodman, Devadas, Griffith-Hughson, 1988; Pearce & Ravlin, 1987)
- Team has responsibility for its own quality control, purchasing, absenteeism and training (Goodman, Ravlin, & Argote, 1986; Wall et al., 1986; Wellins et al., 1990).
- Team receives group compensation and performance feedback (Hackman, 1976; Wall et al., 1986)

III. DIFFERENCES BETWEEN A WORK TEAM AND A WORK GROUP

Some of the researchers have underlined the below distinctions between a work group and a work team.

A work group interacts primarily to share information and make decisions to help each member perform within his/her area of responsibility (Robbins, 1996).

Work groups have no need or opportunity to become involved in collective work that calls for joint effort. Therefore, the performance is the total of each group member's individual contribution. That is, no synergy exists that would lead to a level of performance greater than the sum of its parts (Robbins, 1996).

A work team produces positive synergy through coordinated effort. Their individual efforts result in a level of performance that is greater than the sum of those individual inputs (Robbins, 1996). A good model for synergy might be the sports team where each member's contribution in making the score adds to the success of the team. When we add the individual scores to get the total score, it would not reflect the invisible scores which are the contributions of those to the score maker.

For many, team implies more than a group. However, groups become teams only when they develop a sense of shared commitment and strive for synergy among members (Katzenbach & Smith, 1993).

The small work group makes up the basic unit of organization structure. Workers generally organized into groups and committees that perform many management activities. The group might have task activities that are either interdependent or independent. That is, the group may work together as a team, with each member dependent upon the others or they may have separate and unrelated tasks.

Teams imply a high degree of coordination among the members along with a shared belief that achieving a goal of the team is not only desirable, *but* the very reason for the existence of the team. Therefore, any team is a group but only those that have the high degree of interdependence and commitment to success is called a team (Wright & Noe, 1996).

Moxon (1993) defines a team as having a common purpose; agreed norms and values which regulate behavior, having members with interdependent functions and recognition of team identity.

The self-managing teams, quality circles, task forces and committees are the types of teams that are utilized in the organizations nowadays based on the type of work to be performed (Kirkman&Shapiro, 1997)

Katzenbach and Smith (1993) have defined teams as having shared leadership roles, mutual accountability and a specific team purpose. They have clarified the distinction between a group and a team in terms of essence of common commitment, without which groups perform as individuals and in its presence, they become a powerful unit of collective performance.

Katzenbach & Smith and Robbins have summarized the differences between a team and a group as follows.

TABLE 1: Teams vs. Groups

	Groups	Teams
Leadership	Designated leader	Shared and rotated leadership role
Accountability	Individual	Individual and mutual
Purpose	Identical for group and organization	Specific team vision or purpose
Product	Individual work products	Collective work products
Meetings	Runs efficient meetings	Encourages open-ended discussion and problem-solving
Effectiveness	Measured by influence on business	Measured by assessing collective work
Goal	Share information	Collective performance
Synergy	Neutral	Positive
Skills	Random and varied	Complementary
Work	Discusses, decides, delegates work to individuals.	Discusses, shares and decides work

Source: Jon R. Katzenbach and Douglas K. Smith 'The Discipline of Teams' Harvard

Business Review (March-April 1995), 111-120

Robbins, P. Stephen (1996) Organizational Behavior (7th ed.) USA: Prentice

Hall. p. 348

Although these distinctions have been made, many researchers still use the two terms 'group and team' interchangeably in their papers (Cohen & Bailey, 1997; Guzzo & Dickson, 1996).

Cohen and Bailey (1997) claim that popular management literature has tended to use the term 'team,' for example, empowered teams, quality improvement teams and team effectiveness. The academic literature has tended to use the term 'group,' for example, group cohesion, group dynamics and group effectiveness. Groups differ according to their degree of 'groupness' with some groups having members more interdependent or integrated than others. The term 'team' is used by some authors to mean a group that develop a high degree of 'groupness'. (Katzenbach & Smith, 1993).

Guzzo and Dickson (1996) claim that 'team' has replaced 'group' largely in the argot of organizational psychology. The explanation made by Guzzo and Dickson is very realistic when we look at the explanations for the differences between the two terms.

According to the definitions made and distinctions drawn between the team and the group, the most important differences between the two terms can be summarized as follows:

- Since teams are groups whose members are assigned for a special project and disband after the completion of the project, teams are shorter tenured than the informal groups. In informal groups, members still get together even after they accomplished their work and therefore, it lasts longer
- As a result, the term team could be used interchangeably for a formal group as it has been in the researches mentioned above. But team cannot be used to mean an informal group, because while the team members can be assigned from outside, informal groups evolve naturally. As can be noticed in the above definitions the

'formal group' definitions are used for defining teams not the *'informal group'* definitions.

- Since informal groups are formed in response to the members' social needs, the group will last whether or not a project exists. However, after a team disbands, the members might not see each other again since the mere interest of achieving organizational goal has been accomplished. Therefore, although it is possible to develop a team, it is not always possible to develop a feeling of social attraction among members. A team might turn out to be a group later when this feeling develops and the members still want to be together for social reasons.
- In fact, team is a type of a group and the two terms are not two separate things. The group definition by Robbins and Coulter (1996) as two or more interacting and interdependent individuals who get together to achieve organizational goals is the same as many team definitions given above. *Formal* and *informal group* definitions need to be clarified to better understand the difference between a group and a team. *Formal groups* are work groups established by the organization and who have designated work assignments and specific tasks. However, *informal groups* occur naturally in the work environment in response to the need for social contact. They form around friendship and common interests (Robbins & Coulter, 1996). However, teams only develop for formal purposes, that is, for accomplishing a task, running a project and they have officially announced goals and relationships. On the other hand, informal groups might develop naturally as a result of common interests of the organizational members. Therefore, groups might be formed for social purposes in response to the affiliation motives of the

individuals. People that are sharing same interests might get together to ask for their rights. Teams do not evolve for such informal purposes but there might be informal groups within the formal teams. Therefore, all work teams are groups, but only formal groups can be work teams.

- Since teams are formed to accomplish organizational objectives, the members of the team might be assigned by someone outside the team. This is usually the case with project development teams that are formed to accomplish a project. The team might dissolve after the project and might be formed again at some other time in the future when there is a new project in the future either with the same or totally different members. (Wright&Noe, 1996; Cohen&Bailey, 1997). Temporary teams might include task forces, project teams, problem-solving teams that are established to develop, analyze or study a business or work-related issue.
- A distinction should also be drawn between a team and a department. In the department, all the members recruited are from a specific area, such as a finance department or a marketing department. In a finance department every employee has a finance background such as treasury, budget, accounting. However, in teams the members are cross-functional which means a diversity of experts in various specialties from different organizational levels. For example, the project development team might have project designers, engineers, manufacturing specialists, marketing and finance experts.
- Another important distinction is that some of the teams such as self-managing team is a group that does not have a leader. In these teams, the responsibility is

shared among the members and every member controls the work of the other, not the leader. The duties of the leader (planning, organizing, scheduling, assigning jobs and controlling) are conducted by the members of the team. Members usually exchange ideas and engage in collective responsibility in the teams. For example, if ideas generated by the quality circles do not work for a certain project, it is the responsibility of the whole team, not a certain individual. In this sense, teams replaced individuals, not the groups.

- As a result of collective responsibility, the performance appraisal is based on the team's work. Each member is evaluated equally according to the work accomplished. For example, there is no difference between the members in terms of bonus earned as a result of an effective project.
- In such circumstances, it might not be suitable for everybody to work in a team. If an individual has high power distance and very individualistic, team work might not motivate him/her since he/she will be looking for individual accomplishments and want to report to a supervisor and wants to be promoted to a higher level in the hierarchy. Although, building teams is viewed as the key to productivity and the improvement in the quality of working life in the organizations, putting it into practice is a major challenge for people who are used to traditional ways of working.

The purpose of this thesis is to study the teamwork, especially emphasizing the relationship between team composition and effectiveness. Since the distinction between a team and a group has been drawn, in this study, team implies a formal

group made up of people who are interdependent and responsible to accomplish a certain objective. After reviewing the general concepts and characteristics related with the team, relationship between the heterogeneity of the teams and effectiveness will be emphasized.

IV. HISTORICAL DEVELOPMENT OF TEAMS

The historical origins of teams and especially, self-managing teams go back to the group dynamics movement by Kurt Lewin. Prior to the development of teams, groups have been extensively used in organizations.

The group dynamics movement led by Kurt Lewin (1951) is a clear antecedent to the emergence of self-managing teams. That work is a mixture of theory, action research and forms of participation that appears in all the interventions of self-managing teams. Other themes have also evolved from the group dynamics movement that affect the enhancement of self-managing teams.

The most important antecedents for the teamwork are *the QWL (quality of work life) and socio-technical approach*.

A. Quality of Work Life

QWL is concerned with the overall climate of work. It focuses on the impact of work on people as well as organizational effectiveness and the idea of participation in organizational problem solving and decision-making. The evidence by recent research

indicates that employees are more committed to their organization when they participate more in decision making (Luthans, 1995).

In QWL, the aim was to change the overall climate at work so that the human-technological and organizational interface leads to a better quality of work life (Luthans, 1995). In fact how this is achieved and what a *better quality of work life* means are not very clear. On the other hand, there are many analyses and applications of the closely associated socio-technical approach to job design.

B. Socio-technical Approach

The socio-technical approach started at a Volvo automobile plant in Sweden when Pehr Gyllenhammar took over as the head of the plant. This approach emphasizes discovering a way to optimize the harmony and interface between technological, social system and personal system. The socio-technical approach was publicized at the Volvo automobile plant in Sweden to solve the problems of turnover, absenteeism and low-quality performance. As an answer to the demands of workers for a more meaningful work that includes not only better pay and security, but also participation in decision-making process and self-regulation, socio-technical approach was established. The natural module of work replaced a continuous workflow. Autonomous work groups of five to twelve workers were formed as a result of this approach. These groups elected their own supervisors, scheduled, assigned and inspected their own work. In compensation, group rather than individual piece rates were used and except the elected supervisor, all group members made the same amount (Luthans, 1995).

The socio-technical approach which included the technological process and using autonomous self-managing work groups was at first applied on a piecemeal basis around the company and afterwards, the new Kalmar assembly plant was completely redesigned along the lines of socio-technical approach (Luthans, 1995)

On the technological side, the conventional continuous assembly line was changed so that the work remains stationary. To transport the car to various work groups a special carrier was developed. In accordance with the social approach, twenty-five groups of about twenty members each perform work on various models of an automobile (electrical system, steering etc.). These teams organize in the way they want and contract with management to deliver a certain number of products per day. The workers have complete control over their work including scheduling, inspection and feedback. That is, workers provided the total control of work management. This approach at Volvo plant solved the problems of absenteeism, turnover and increased the quality of work life. At Kalmar where QWL was utilized, the assembly costs became the lowest of all plants (Luthans, 1995).

While Volvo project is the most famous in terms of socio-technical approach, a few companies tried out this approach to job design in United States.

C. Topeka Work System:

This is an example of one of the earliest self-managing teams in a U.S. company (Walton, 1972). In 1968, General Foods decided to open an additional pet food plant at a new location. At that time, the problem of employee alienation from work was

evident at the existing manufacturing facility. Indifference, inattention on the part of employees caused frequent plant shutdowns. There were many instances of sabotage and violence (Campbell et.al, 1988)

Management decided to devise the new plant to solve these problems and the plant started to operate in January 1971. Management implemented the new work methods by consulting experts and visiting other organizations.

- *Goals:* The goal was to improve productivity and enhance the quality of work-life.
- *Focal unit:* Work team included seven to fourteen members and a leader. Six teams in the whole plant plus processing (handling raw materials, conversion of raw materials to finished products) and packaging (packaging, warehousing and shipping of the pet food) teams were also formed.
- *Self-managing teams:* These teams were given collective responsibility for large portions of the production process, which included interdependent tasks.
- *Support functions:* Maintenance, personnel functions, quality control were not separated but built into the teams' responsibilities.
- *Supervisor's role:* No supervisor, but a team leader existed to facilitate the team development and group decision-making.
- *Training:* During the development of the plant in two years, employees were given skill training and education concerning the team philosophy of the new organization.
- *Hiring:* Team was given responsibility for screening and selecting employees to replace the leaving ones.
- *Job flexibility:* The team assigned tasks to members as opposed to being assigned tasks by the management. Movement was controlled by the team.

- *Pay:* Pay increases were decided by how many tasks an individual mastered in his team and in the whole plant.
- *Grievances:* The team handled the problems itself.
- *Other changes:* Teaching and learning from others are encouraged. Status differences were minimized by having a common decor throughout the plant and open parking lot. Responsibilities for challenging and unchallenging jobs were equally distributed. Housekeeping tasks were assigned to everybody.

D. Rushton Quality of Work Project:

This is an adopted self-managing team example (Goodman, 1979). This project was headed by Eric Trist in a coal mine. Rushton Mining company in Pennsylvania produced coal for electrical utility. In late 1973, management and union decided to change the way of managing and organizing work at the mine to attract young miners to Rushton in the future. The mine was not suitable for young workers who had high expectations for the job. The union was interested in increasing the safety at the work place. The project was initiated by the management, union, a consulting team headed by Trist and an independent evaluation team (Campbell et.al, 1988)

- *Goals:* The aim was to increase safety, productivity and get higher job satisfaction, higher earnings, greater job skills.
- *Focal unit:* Sections were formed. Less between-crew competition and more cooperation was expected.
- *Autonomous work teams:* Crew had the responsibility for daily production and directing the work force.

- *Foreman's job:* The position had no longer responsibility for production, but was involved more in planning and integrating the crew with the rest of the mine.
- *Job switching:* Jobs were exchanged to learn the tasks of others. This has facilitated getting multi-skilled.
- *Pay:* All members of the experimental section got the same pay and it was the top rate for the crew because they had increased responsibility for production and maintenance of equipment and learned to perform multiple skills.
- *Additional crew members:* Two support men (to lay track, transport supplies) were added to the traditional crew of six production men.
- *Joint committee:* Small labor-management committee (five members from each group) was established seventy-five days after the experiment began. This committee supervised the daily operations of the program.
- *Training:* Training on safety practices, ventilation, roof control and other potential problems were a major part of the program.
- *Grievances:* The problems were resolved within the experimental section and if not, it was brought to the joint committee.
- *Allocation of financial gain:* If gains did occur, it would be shared between the labor and management.

E. Confectionary Company:

Wall, Kemp, Jackson and Clegg (1986) reported the use of self managing teams in a new plant of a large, multisite, British nonunionized confectionary company. The senior management with a consultant from Tavistock Institute created a new factory and new form of work (Campbell et.al, 1988).

- *Focal unit:* Work groups formed consisting of 8-12 people.

- *Nature of work tasks:* The work team was responsible for allocating jobs, reaching quality and production targets, solving local production problems, recording production data, organizing break, collecting raw materials, delivering finished goods, calling for engineering support and selecting new recruits.
- *Supervision:* This post did not exist.
- *Training:* Training was given to new work teams on how the factory would be organized and managed.
- *Other changes:* Single eating facility, no time clocks, monthly payments by credit transfer and a flat (three-level) managerial structure were the other changes.

As it is illustrated by these first examples of changes in job design, over the last three decades, there has been a movement towards participation both in theory and practice (Locke and Schweiger, 1979). Participation is marked by a shift toward sharing control and power. It is assumed that providing employees with more control, information and responsibility is a vital and valuable practice and leads to the satisfaction and productivity of the workers. Design of self-managing teams represents the shift of control and power. Members are not only involved in decision-making but they also control group design and membership (Campbell et. al, 1988)

As a result of these first experiences of teams in the industry, there are positive outcomes such as higher commitment, productivity, safety and worker satisfaction.

Today, an increasing number of organizations are using teams rather than individuals for accomplishing some of the organizational objectives to maintain a strategic advantage. For example, 82% of companies with hundred or more employees reported

they use teams (Gordon, 1992). 68% of Fortune 1000 companies reported that they used self-managing work teams and 91% reported that they used employee participation groups in 1993 (Lawler, Mohrman&Ledford, 1995).

The teams are preferred in many organizations for a variety of reasons.

V. CONTRIBUTIONS OF TEAMS

Work teams have dramatically changed and improved the way of doing business in the organizations. CEO of Texas Instruments, Jerry Junkins stated that ‘ No matter what your business, these teams are the waves of the future’. Bateman and Zeithaml (1993) claimed that if used appropriately, teams can be effective as

- *A building block for organization structure:* A team structure utilized at Kyocera Corporation had led the company to be selected as the best managed company in Japan.
- *Force for productivity:* Productivity at General Mills, Lodi California cereal plant increased by 40% after the management started using work teams that schedule, operate and maintain machinery.
- *Force for quality:* Xerox, as a component of the Leadership Through Quality process, started utilizing work-family groups and special cross-organizational task teams. As a result, Xerox won the Malcolm Bridge National Quality Award due to bill accuracy improvement of 35%, drop in service time by 27% and increase in satisfied customers by 42%.
- *Force for change:* CEO of Bell Atlantic Corporation, Raymond Smith, has created the client service groups, which transformed a formerly monopolistic bureaucracy

into an entrepreneurial corporation. These autonomous profit centers develop their own assortments of products or services and market them to corporate headquarters and the different operating companies of Bell Atlantic.

- *Force for innovation:* At 3M work teams tripled the number of new products.

Many organizations are using teams. At Mattel, a team of artists, toy designers, computer experts and automobile designers speed up the toy design process by creating Top Speed toy cars in only 5 months which had last 13 months previously. Volvo uses teams of hourly workers to manufacture a complete car. Hecla Mining Company utilizes teams for corporate goal setting. Ford uses teams to detect quality problems and improve efficiency. Teams have become an important part of the way business is being performed in many organizations such as General Electric, AT&T, Hewlett Packard, Motorola, Apple Computer, Federal Express, Saab, Johnson&Johnson, PepsiCo. Etc (Robbins, 1996).

Teams may also be viewed as substituting hierarchy in the organizations. For example, several sales managers, marketing representatives, and sales assistants may work together with accounting specialists in a team to prepare sales plans and budgets instead of having the specialists do the detailed work and report up the chain of command to the managers for plan development (Lawler, 1988).

Teams have become powerful management tools by involving and empowering employees in daily organizational processes. Most of the companies prefer using teams because

- The evidence illustrates that teams typically outperform individuals when the tasks being done require multiple skills, judgment and experience (Robbins, 1996).

- Organizations use teams as a way to better utilize employee talents so that they will compete more effectively and efficiently. Teams create the potential to produce more outputs with no increase in inputs (Robbins, 1996).
- Teams are more flexible because team members' broad skills and job descriptions enable them to adapt processes quickly. Team members have the skills, information and authority to direct their expertise and commitment to changing needs of the customers (Wright & Noe, 1996).

Since teams allow more parties to participate in information flow, the firm becomes more able to respond to external demands (Allen, 1986). Especially teams made up of individuals with different backgrounds and different experiences often notice things homogeneous teams do not. As a result, the use of heterogeneous teams may result in more innovative ideas and better decisions than made by individuals alone (Robbins & Coulter, 1996).

- Teams are responsive to changing events than are traditional departments because teams have the capability to quickly assemble, deploy, refocus and disband (Robbins, 1996).
- Teams facilitate employee participation in operating decisions (Robbins, 1996).
- Teams are an effective means for management to democratize their organizations and increase employee motivation (Robbins, 1996).
- Employees in teams have a tendency to deliver higher quality and more productivity due to their involvement and authority that make them highly committed. Increase in productivity and quality lead to increase in profitability (Wright & Noe, 1996). Team members expect and demand a lot from each other. As a result they promote cooperation and improve employee morale (Robbins & Coulter, 1996). Teams also facilitate cross-functional coordination and

organizational learning because employees from different departments working together on projects transfer knowledge to one another (Allen, 1986).

- The use of teams will help managers to do more strategic thinking such as long-term plans. Especially in self- management teams, since the members share among themselves the functions of the managers such as organizing, controlling, settling disputes, managers will have plenty of time to do strategic thinking (Robbins & Coulter, 1996).
- Organizations can become more attractive to current and potential employees due to effective use of teamwork because teamwork offers individuals a chance to meet social needs and enjoy a sense of involvement and achievement. Work can become more interesting for those employees who put high value on participation in decision making and doing something meaningful (Wright&Noe, 1996).

Many research findings support the positive contributions of teams to the organizations.

For example, after self-managing teams have been introduced in the workplace, researchers have found greater levels of team productivity (Cohen&Ledford, 1994; Goodman et al, 1988; Kirkman&Rosen, 1996; Trist, Susman&Brown, 1977; Wellins et al, 1990), quality (Cohen&Ledford, 1994;

Wellins et al, 1990), customer satisfaction (Kirkman&Rosen, 1996; Wellins et al, 1990), safety (Cohen&Ledford, 1994; Goodman et al, 1988; Trist et al, 1977).

Researchers have also found lower levels of team costs to produce goods or services (Cohen&Ledford, 1994; Trist et al, 1977)

At the individual level researchers have found that self-managing teams lead to more job satisfaction (Cordery, Mueller & Smith, 1991; Kirkman & Rosen, 1996; Wall et

al, 1986) and organizational commitment (Cordery et al., 1991; Kirkman & Rosen, 1996).

More specific examples of benefits, such as the decrease in customer service telephone response time to 13 seconds from 7.5 minutes and manufacturing cycle time by 40%, were reported by Manz and Sims (1993), Wilson, George, Wellins and Byham (1994).

Although there exists a large number of evidence on the success of the teams to a great extent and especially self-managing teams, a large body of empirical evidence, on the other hand, has discovered cultural values directly affecting the success of team practices in organizations (Adler, 1997; Bhagat, Kedia, Crawford & Kaplan, 1990; Boyacıgiller & Adler, 1991). Due to the changes in structure towards teamwork, employees are observed to react with anger while the changes clash with their deeply held values and beliefs (Adler, 1997; Hultman, 1995). Therefore, it might be necessary to turn this individual resistance to adopt to teamwork.

VI. COSTS OF TEAMS

A. Power readjustment

When companies start establishing teams, the major losers may be middle and low level managers. These managers are reluctant to give up power. In fact, when teams are successful, fewer supervisors are needed because workers take over supervisory responsibility. Therefore, these managers have to adjust to new working conditions and have to learn new, people oriented skills to survive. (Daft, 1997).

B. Free riding

In large teams, some people are willing to work less than they would work individually. This might also be called social loafing because workers do not want to exert equal effort. Especially in large teams, some people are likely to work less (Daft, 1997).

Social loafing refers to the reduced performance of the individuals who act as part of a group rather than alone (Ingham et al., 1974; Latane, Williams, and Harkins, 1979; Harkins & Petty, 1983). Individuals who think that they are a part of a task in a group reduce their performance, independent of any potential loss attributable to distraction or lack of coordination during actual group performance (Steiner, 1972).

Latane, Williams and Harkins (1979) conducted a typical loafing study in which they asked the individuals to perform a task either alone or in 'pseudogroups', in which they are made to believe that they are performing the task with others, although they are actually performing alone. In this study, performance was found to decrease with increasing group size. In another study by Latane and others, the loafing effect was found to decline when outputs are identifiable and individuals are held accountable for their outputs.

Loafing effect has been shown with different tasks such as sound production (Latane, Williams and Harkins, 1979), rope pulling (Ingham et al., 1974), brainstorming and vigilance (Harkins & Petty, 1982) and judgement tasks (Weldon & Gargano, 1988). In some of these tasks, subjects are asked to produce as much as possible whereas in

others there are some performance criterion. Group performance is based on the additive outputs of individual group members.

C. Coordination costs

Teams spend time getting ready to do work and decide who would do what and when, thus lose productive time. Also, it takes more time to reach a solution than would be the case if an individual was making the decision. This can limit the management's ability to act quickly and decisively when necessary (Robbins, 1996). This is called coordination cost. Hours may be devoted to the administration and coordination of the team. (Daft, 1997).

D. Domination by the few

Team discussions can be dominated by one or few members. The team's overall effectiveness might suffer if these dominant members have low or medium ability (Robbins, 1996).

E. Pressures to conform

There might be social pressures within the team. That is, some members of the team might exercise pressure on the minority, unpopular or unusual views of the others. As a result, these minority members might conform to these pressures to be accepted by the others. Therefore, any overt disagreement will be squashed and conformity will be encouraged (Robbins, 1996).

VII. TURNING INDIVIDUALS TO TEAM PLAYERS

A. The Challenge

1. Resistance due to cultural values

The challenge of creating teams is greatest under two conditions

- Highly individualistic national culture
- Organizations that have historically valued individual accomplishments

Cultural values brought by employees to the organization may create resistance to teamwork. On the other hand, resistance can also be due to cultural elements within the organization (Kirkman&Shapiro, 1997). In a study of how Russian workers respond to North American management practices, Welsh, Luthans and Sommer (1996) observed that performance decreased in response to participative management. They ascribed this to a long history of Russian management simply ignoring employee opinions as well as cultural value differences.

Zaltman and Duncan (1977) define *resistance* as any response that serves to maintain status quo when faced with pressure to change the status quo.

Parsons and Shils' theory (1951) differentiated between individualism and collectivism in modern organizations. They identified the distinction between self-orientation or focus on ego-integrative morals and a collectivity-orientation, or focus on the social system. Mead (1967) uses the cultural labels of cooperation versus individualism, Kluckhohn and Strodtbeck (1961) use individualism versus collaterality and Hofstede (1980) uses collectivism versus individualism.

The cultural value, collectivism is the belief that the collectivist or group concerns should motivate the members of the society more than the individualistic ones and collectivist cultures, such as Japanese culture, value the emotional dependence of individuals on institutions and organizations (Hofstede, 1980).

In an individualistic culture, self-sufficiency and control, attainment of individual goals that may or may not be consistent with the in-group goals and membership in multiple in-groups are emphasized. If membership becomes a burden or inhibits the achievement of individual goals, individualistic members may drop out of the group. As a result, in individualistic cultures, people feel proud of their own accomplishments and get satisfied by individualistic achievements contrary to the collectivist cultures where pleasure and satisfaction are drawn from group accomplishments (Triandis et al., 1988).

Partially, an individual's perceived dispensability and expectations of others' actions are determined by individualism and collectivism. While collectivists emphasize the achievement of group outcomes and subordination of personal interests to make sure the group goals are attained, each member of the group perceives himself or herself as an indispensable part in group's survival. Moreover, collectivists will work hard for group activities, not worrying that other members will fail to shoulder their burdens and will take advantage of them (Ho, 1978; Hofstede, 1980; Lai & Lam, 1986). On the other hand, individualists are motivated by self-interest and achievement of personal goals. If an individualist's contributions to collective action are not appreciated, he/she will maximize self-gain by depending on the work of others and redirect effort to achieve personal outcomes (Olson, 1971).

Eventually, such differences in cultural values may lead to individual resistance, which is one of the common barriers to using work teams. Individual performance is replaced by performing well as team players, therefore individuals should be able to communicate openly and honestly, to cope with differences and resolve conflicts, and sublimate personal goals for the good of the team (Kirkman & Shapiro, 1997).

2. Resistance from other parts of the organization

Teamwork eventually offers employee ownership and control with the aim of increasing commitment, creativity and potential. If traditional managers do not hand direction and control over to the team, this would lead to conflict in relation to who makes the decisions within the organization. The climate of the organization therefore has to support individual autonomy and learning. The resistance of the management by not delegating or failing to give up ownership will create a challenge for teamwork to accomplish its task (Torrington & Hall, 1998).

3. Resistance within the team

When an organization decides to establish teams to get the work done, some of the individuals may feel uncomfortable since for many years they have been used to being told what to do. Therefore they may need some time to take this responsibility for themselves (Torrington & Hall, 1998). Therefore, in organizations that took the decision to make the transition, the importance of team selection of newcomers and of selecting skills relevant to a team environment as well as technical skills will be very crucial (Torrington & Hall, 1998).

The most important individual characteristics related with the team environment are interpersonal skills, self-motivation, ability to cope with peer pressure, level of technical and administrative experience, communication skills, ability to cope with stress, ability to cope with ambiguous situations and conflict in a constructive way (Salem, Lazarus & Cullen, 1992).

Employees may show their resistance through behaviors such as sabotage, vocal protests, withdrawal or reduced commitment (Hultman, 1979; Judson, 1991; Kotter & Schlesinger, 1979; Odiorne, 1981).

Those employees showing resistance most often file personal grievances, demand transfers to other departments or apply for job openings in some other organizations (Hultman, 1979). These employees also experience personal withdrawal from the job and the organization (Judson, 1991) and they either refuse to cooperate with, avoid or ignore other employees (Hultman, 1979, 1995). The effects can be reciprocal such that one indication of resistance - reduced commitment - may lead to other reactions such as absenteeism or lateness (Mathieu & Zajac, 1990).

Since resistance will affect the effectiveness of the teams, it is necessary to understand the reasons behind it and find out what factors encourage or discourage resistance to working in teams and find solutions.

B. Shaping Team Players

1. Selection

Some people already possess the interpersonal skills to be effective team players. When hiring individuals, it should be taken into consideration that the employees would be able to fulfill their team roles (Robbins, 1996).

2. Training

Employees brought up with the importance of individual accomplishments can be trained to become team players. Training can offer employees work-shops that will improve their problem-solving, communication, negotiation, conflict management and coaching skills (Robbins, 1996).

The type of training required also depends on the job design and on the needs of the workforce. The areas in which training could be given are (Johns, 1996):

a. Technical training

It includes math, computer use or any tasks that the individual is unfamiliar.

Cross-training in the fields of other teammates could also be carried out.

b. Social skills

Assertiveness, problem solving, and routine conflict resolution are the skills required for the smooth team operation.

c. Language skills

This might be required in teams where members are international.

d. Business training

Basic training on finance, accounting, production or marketing can help employees to better grasp how their team's work fits into the larger picture of the whole organization.

3. Rewards

Reward systems can be rearranged so that promotion, pay raises and other type of recognition would be tied to effectiveness as a cooperative team member. This however, does not mean that individual contribution would be overlooked but it is balanced with selfless contributions to the team (Robbins, 1996).

The purpose is to tie rewards to team accomplishments rather than individual accomplishments while providing team members with individual performance feedback. Gainsharing, profitsharing, or skill-based pay are types of reward systems suitable for a team environment. Since skill-based pay rewards the acquisition of multiple skills that can support the team, it might be reinforcing the members to learn new skills (Johns, 1996).

In organizations, there are different types of teams that carry out different types of work. Therefore, it might be helpful to go over the team types (Robbins, 1996).

VIII. TYPES OF TEAMS

In the workplace, mainly there are three common types of teams (Schermerhorn, Hunt, Osborn, 1997).

- There are *teams that recommend* things, which are developed to study specific problems and suggest solutions to them. These teams work with a due date and disband after the objective has been accomplished.
- There are *teams that make or do* things. They perform ongoing and permanent tasks such as marketing or manufacturing tasks. They do not work with scheduled dates for disbanding.
- There are *teams that run* things. These management teams are made up of people with the formal responsibility of leading other groups. The key issues of the top management teams, including the organization's most senior executives, are to identify overall organizational objectives, goals and values while helping others achieve them.

The desire to achieve high levels of commitment and coordination is common in organizations, but the nature of specific teams differs. Teams differ along two major dimensions (Wright&Noe, 1996):

Differentiation: The extent to which team members are specialized relative to others in the organization. This is the degree of technical specialization within the team.

Integration: The degree to which the team must coordinate with managers, non-management employees, suppliers and customers outside the team. This is the degree of coordination with other work units.

According to these two dimensions, there are four applications of team work:

A. Advice and Involvement

These teams are formulated to produce output from a wide range of employees. All employees of the organization or representatives from the departments might be assigned to these teams. The members meet only to generate ideas or proposals.

Modern organizations utilize advice/involvement teams to empower work groups to regularly identify solutions to problems related with service quality or cost reduction.

Advice teams are established to expand the information base for managerial decisions. These teams may promote suggestions for quality improvement from production workers. (Kreitner and Kinicki, 1998).

Mostly Japanese companies are using these types of teams to generate solutions for safety, quality and production related problems.

Characteristics of these teams:

1. ***Low differentiation:*** There is low degree of technical specialization. They have inclusive or representative membership. Work cycle can be long or brief and they have limited working time.

2. *Low integration:* There are few demands for synchronization with other work units because external exchange can be minimal and work cycle may not be repeated. Since advice teams work on their own, at its own pace, there is little need for coordination with other work units.
3. *Typical outputs:* Decisions, selections, suggestions, proposals and recommendations
4. *Example:* Committees, review panels and boards, quality control circles, employee involvement programs, advisory councils

One of the most practiced application of advice/involvement teams are *quality circles* which are composed of eight to ten employees and supervisors who have a shared area of responsibility and regularly meet to discuss quality problems, analyze causes of the problems, make recommendations and take corrective actions.

Some of the quality circles make and carry out proposals, but most have limited scope of activity and brief working time, perhaps a few hours each month (Thompson, 1982).

In advice and involvement teams, performance may depend on the heterogeneity of task-related abilities or specialties, as suggest by research on group problem-solving (Goodman et. al, 1986).

Employee involvement groups perform similarly, discovering ways to improve customer service (Peterfreund, 1982).

B. Production and Service

These teams are responsible for producing and selling goods and services. The team may work full time over an extended period of time. The members of the team are drawn from a wide range and these teams are formed to empower first-line employees. The team members usually collaborate with suppliers, customers and other groups in the corporation (Wright&Noe, 1996). These first-line employees work together full-time, sometimes over protracted periods with freedom to decide their division of labor. A team's work is a process of receiving materials or information from suppliers, altering or putting on values in cooperation with managers, peers and staff and delivering output to team customers. (Sundstrom, Meuse, Futrell,1990).

Teams utilize technology to generate products or services such as assembly, construction, maintenance, mining, commercial airlines, sales and others (Sundstrom, Meuse, Futrell,1990). Production teams generate the same or similar outputs over and over again.

These teams are responsible for performing day-to-day activities. (Kreitner and Kinicki, 1998).

Characteristics of these teams:

1. *Low differentiation:* The degree of task specialization is low due to minimal training on routine tasks. There are variable membership requirements. Work cycles are repeated or it can be a continuous process. The turnover might be high.

2. *High integration*: Externally paced work usually synchronized with suppliers and customers inside and outside the organization (Wright & Noe, 1996). Therefore, coordination needs to be high because work flows from one team to another (Kreitner and Kinicki, 1998).
3. *Typical outputs*: Food, chemicals, components, assemblies, retail sales, customer service and equipment repairs
4. *Example*: Assembly teams, manufacturing crews, mining teams, flight attendant crews, data processing groups, maintenance crews.

C. *Project and Development*

These teams are responsible for planning, investigating, analyzing and reporting with the purpose of generating complex and unique outputs.

Coordination among team members is high but not with non-team members.

Characteristics of these teams:

1. *High differentiation*: Members are usually expert specialists. Tasks may require specialized facilities (Wright & Noe, 1996). Work cycles differ for each new project, but they are longer than in production and service teams. They often carry out projects that require creative problem solving and application of specialized knowledge (Kreitner and Kinicki, 1998).

2. *Low integration*: These projects usually have deadline. There is little synchronization inside the organization but task may require external communication.
3. *Typical outputs*: Plans, designs, investigations, presentations, reports and findings
4. *Example*: Research groups, planning teams, architect teams, engineering teams, development teams, task forces

Organizations might identify the need for communicating and solving problems across functional lines. Therefore, to reduce the time spent for reviewing and requesting changes in other departments' decisions, they may develop cross-functional teams.

Cross-functional teams are made up of employees from about the same or different hierarchical level, from different work areas, who come together to accomplish a task.

These teams are responsible for project that cross functional lines.

Task force is an example of a temporary cross-functional team.

Cross-functional teams allow people from diverse areas to exchange views, develop new ideas, solve problems and coordinate complex projects.

D. Action and Negotiation

These teams are composed of members that are expert with specialized skills. The team members coordinate with other members and support personnel. To resolve

disputes, team members meet and communicate regularly while doing independent planning.

Characteristics of these teams:

1. *High differentiation:* There is exclusive membership of expert specialists, specialized training and performance facilities. The life span may sometimes be extended.
2. *High integration:* Performance events closely synchronized with counterparts and support units inside the organization.
3. *Typical outputs:* Combat missions, contracts, lawsuits, concerts, surgical operations and competitions
4. *Example:* Sports teams, entertainment groups, expeditions, negotiating teams, surgery teams, cockpit crews
5. These action and negotiation teams can best be illustrated by a baseball team in which there is high specialization and coordination. Nine highly trained athletes play specialized defensive positions. Effective hitting is also necessary besides good defensive play. Coordination between the manager, base runners, base coaches and bull-pen needs to be precise, too. This is the case with airline cockpit crews, hospital surgery teams, rock music groups and mountain climbing expeditions (Kreitner and Kinicki, 1998).

E. Self-managing teams

Quality circles were one of the most widely practiced applications of teams during 1980's. These teams composed of employees and supervisors who work on problems and recommend solutions to take corrective action. However, employees did not get involved in work-related decisions and processes. This has led to the establishment of self-managing teams that are not only responsible for solving problems but also implementing solutions and taking full responsibility for the outcomes (Robbins, 1996).

Self-managing teams are introduced with the intention of improving both the organizational productivity and the quality of working life for employees (Manz&Sims, 1986, 1987).

In the organizations this fairly recent team development, the *self-managing teams*, consist of two dynamics (Kirkman & Shapiro, 1997):

- Process of self-management
- Collaborative teamwork

Self-managing teams have ongoing responsibility for the complete work process or a portion of it or responsible for improving operations, solving routine problems, planning and controlling their work. Since these teams are responsible for the complete work, they are charged with making decisions or carrying out all activities required to issue a product or service. Therefore, they are a type of production/service

teams that has taken over many responsibilities traditionally considered part of management (Wright&Noe, 1996).

Self-managing teams are permanent and formal components in the organizational structure. They replace the traditional work groups that are led by supervisors (Schermerhorn, Hunt,Osborn, 1997). Therefore, the term ‘ongoing responsibility’ in the definition of these teams means they work together daily rather than solving a problem and disbanding afterwards. It also refers to the team’s responsibility for the quality of its goods and services (Wright&Noe, 1996).

Since the team is responsible for an entire work process or segment, the organization charges the team with making decisions and carrying out all activities required to deliver a certain service or produce a certain product (Wright&Noe, 1996).

Decision-making authority of the self-managing team differentiates it from the other type of teams. Its members take on duties that are performed by managers or first-line supervisors such as planning, work-scheduling, distributing tasks, performance evaluation and quality control (Schermerhorn, Hunt,Osborn, 1997).

Wellins et al (1990) define self managing teams as having the following responsibilities:

- They manage themselves (plan, organize, control, staff and monitor)
- They assign jobs to members (decide who works on what, where and when, hire new members)

- They plan and schedule work (control start-up and ending times, the pace of work, setting goals and priorities)
- They make production or service-related decisions (responsible for inventory, quality control decisions and work stoppage, coordination with other teams and departments)
- They take action to solve problems (inspect output, address quality issues, customer service needs, review team performance, member discipline and rewards)
- Identify needs for training and acquire the training

Self-managing work teams are composed ten to fifteen people who take the responsibilities of their previous supervisors. This includes collective control on the pace of the work, determination of work assignments, organization of breaks, and collective choice of inspection procedures.

Fully self-managed teams are empowered with decision-making authority, which means that the members have the freedom to select their own members, evaluate each other's performance, solve problems, spend money, monitor results and plan for the future. This, in turn, decreases the importance of supervisory positions and even eliminates such a position (Robbins, 1996).

This type of team is given access to resources such as information, equipment, machinery and supplies needed to complete a task (Robbins, 1996).

The main difference of self-managing teams with other teams is that they are both responsible for getting the work done and for managing themselves (Robbins & Coulter, 1996).

IX. TEAM DEVELOPMENT

Some theories argue that teams develop through a series of stages to accomplish effective performance. The best known is Tuckman's (1965) model, which includes forming, storming, norming, performing and adjourning. Later, Gersick (1988) developed a model called 'equilibrium model' which suggests that teams exhibit long stable periods during which relatively short revolutionary changes take place. This model assumes that development relies on external relations.

The most recent development by Glickman et al. (1987) establishes on both Tuckman's and Gersick's models. Thirteen U.S. Navy gunnery teams studied during training helped in the development of this model. These teams showed a progression from 'teamwork' or 'intermember coordination' to 'taskwork'. However, whether the teams follow certain fixed stages for development or show varying temporal patterns in different organizational contexts remain a question for future research. McGrath, Futoran and Kelly (1986) suggest that although each team has to deal with certain developmental issues, the order of precedence depends on the circumstances.

Team building (or team development) involves the evaluation of the team's performance and culture to end harmful behaviors and strengthen productive behaviors. Team building refers to efforts to improve a team's functioning in terms of

interpersonal processes. Team members themselves can carry out the team building activities. This can also be carried out by a facilitator, who has expertise in this area (Wright&Noe, 1996).

A. Stages of Team Building

1. Forming

It is a period of orientation and getting acquainted. Members first break the ice and test each other for friendship and task orientation. Acceptable behavior patterns are discovered. Power or authority offered, either by formal or informal leaders, is accepted by the members. The situation is ambiguous since the ground rules and what is expected of team members are not discovered yet (Daft, 1997). Because of this uncertainty, members are aware of their dependency on each other (Johns, 1996). Members are testing the waters to discover acceptable behavior patterns (Robbins&Coultar, 1996).

2. Storming

This stage is marked with disagreement and conflict. Team's mission is discussed among members. Subgroups may disagree with each other on team's goal and how it is to be achieved. There may be lack of cohesiveness and unity at this stage. If this stage is not passed through successfully, the team can never achieve high performance.

At this stage, participation should be encouraged by the leader. Team members should announce their ideas, discuss disagreements and work through uncertainties and conflicting perceptions about tasks and team goals (Daft, 1997).

3. Norming

At this stage, conflict is solved and unity and team harmony emerges. Agreement is reached on who the leader is, who has the power and member roles. Members accept and understand each other. A sense of team cohesion is developed by the members. Leaders should emphasize oneness within the team and help clarify team roles and norms at this stage (Daft, 1997).

4. Performing

Problem solving and task accomplishments are the major functions at this stage. Members become committed to the team's mission. Members are coordinated with each other and disagreements are handled in a mature way in the interest of task achievement.

At this stage leader should concentrate on managing high task performance (Daft, 1997).

5. *Adjourning*

This stage occurs at task forces, committees and teams that have a limited task to perform and disband after completion (Daft, 1997).

B. Team Development Intervention Studies

Team building (or team development) involves the evaluation of the team's performance and culture to end harmful behaviors and strengthen productive behaviors. Team building refers to efforts to improve a team's functioning in terms of interpersonal processes. Team members themselves can carry out the team building activities. This can also be carried out by a facilitator or a consultant, who has expertise in this area (Wright&Noe, 1996). The consultants meet with teams to analyze interpersonal processes and improve development of the team (Dyer, 1977).

When newly formed, teams have certain difficulties such as comprehending challenges in the early stages. Team building activities can help when such difficulties occur or prevent them from occurring. Team building is a sequence of planned activities intended to collect and analyze data on the functioning of the team and launch changes designed to improve teamwork and increase effectiveness (Schermerhorn, Hunt, Osborn, 1997). The purpose of team building functions is to make a team highly effective by helping members learn or improve skills in working effectively as a group (Wright&Noe, 1996).

Team building includes functions of diagnosis, change and development (Wright&Noe, 1996). It starts with someone noticing an existence of a problem or a

probability of a problem. Team members then work together to collect data in relation to the problem, study the data, work on improvements and implement the action plans. Therefore, the whole process is based on cooperation (Schermerhorn, Hunt, Osborn, 1997).

1. Diagnosis

Through diagnosis, team members could depict functional and dysfunctional aspects of interaction among group members. This leads the team to realize the problem areas. At this stage, team members' roles and norms can be analyzed and described in detail (Wright&Noe, 1996).

Defining problems involves comprehending people's behavior both as individuals and as team members (Wright&Noe, 1996). The goal here is to get answers to questions such as 'How well are we doing in terms of task accomplishments?' and 'How satisfied are we as individual members within the team and the way it operates?' (Schermerhorn, Hunt, Osborn, 1997).

Diagnosis could be handled by asking members to fill out questionnaires or constructive communication could be used to define problems. Answers to such questions as 'how clear the team goals are, how much consensus there is on these goals, and what keeps the team members from being productive' could be obtained through this process. The results could be tabulated and provide a basis for discussion by team members (Wright&Noe, 1996).

Interviews or structured interactions such as nominal group technique could also be utilized to define the problem. These can be held with the assistance of a consultant either from outside or from in-house staff (Schermerhorn, Hunt, Osborn, 1997).

Diagnosis can help team members learn to explain how the behaviors of others are perceived on the team, which in turn can assist in building trust and openness on the team. With the help of constructive communication, the team members may come to believe that cooperation expressing feelings freely will help the team and all will benefit from this process (Wright&Noe, 1996).

2. Change

After the problem is identified by the process of diagnosis, the team is ready to begin solving these problems. The solution may require a change in the way the team operates. The change process could be put in a written contract defining what will be changed and who will do what (Wright&Noe, 1996).

The success of change process depends on how well the problems are described and how willing the members are to change (Wright&Noe, 1996).

3. Development

When a team faces a problem that requires team-building activities, this need implies that the team is unable to define and correct problems through its usual patterns of interaction. Therefore there is a need for further development to prevent and handle

problems more routinely. Thus, team building should not only take corrective action for existing problems but also identify and resolve future problems. This is the purpose of development function (Wright&Noe, 1996).

Internal mentoring relationships could be utilized to develop teamwork skills.

Role therapy, which is formal means of development is a technique in which a consultant participates in team activities temporarily to stimulate improvement in group processes (Wright&Noe, 1996).

Role therapy includes analysis, modeling and coaching. The consultant may discuss the role of each member privately with that person. Then the entire team may meet together with the consultant to publicly discuss the way the roles are defined by each member and where the problems related with roles are occurring. The consultant models the way with which team members should operate the process of diagnosis in the future and encourages them to handle the process by themselves. The consultant may coach the team members as they try to do so. This process helps team members depict sources of role problems and improve the way of communication with each other (Wright&Noe, 1996).

The introduction of teams within the organization structure does not eliminate the manager's job, but in fact reshapes it. Managers help the teams by coaching and providing resources.

X. MANAGER'S ROLE WITH THE TEAMWORK

In the teams, managers carry out their management functions of planning, organizing, leading and controlling in a different way such that they help the team members gain and use these skills (Wright&Noe, 1996).

A. Coaching

The successful coach of a work team builds team members' self- confidence and clarifies what the team is striving for.

1. Alignment

The manager ensures the team efforts and achievements support the organization's goals.

2. Coordination

The manager tries to maintain harmony between different teams.

3. Decision process

The manager assists the team make good decisions.

4. Continuous learning

The manager makes sure that the team's needs for training and learning are met.

5. Creating and maintaining trust

The manager works for building and keeping trust among the members.

B. Providing resources

The manager must make sure the team receives the resources it needs.

XI. FACTORS THAT INFLUENCE TEAM PERFORMANCE

Every work team is affected by external and internal conditions that influence its functioning. The work team has certain resources such as member resources that include members' abilities and personality characteristics. Other resources are implied by its structure such as the team's size, members' roles, norms and the composition of the team. On the other hand, since the team is not functioning in isolation and since it is a part of a larger organization, its performance will be influenced by the climate of the organization and organizational resources. Finally, the team's performance is affected by the design of the task it is performing. Therefore, these factors are important to internal processes and team performance (Robbins, 1996).

To sum up, these factors can be grouped into two categories. These are organizational factors and structural factors.

A. Organizational Factors

Since a team is a subset of a larger organizational system, part of the explanation for its performance can be drawn by understanding the organization to which it belongs. These factors include organization's strategy, authority structures, formal regulations, performance evaluation processes, organizational resources, job design and organizational climate (Robbins, 1996).

1. Organization strategy

The organization's overall strategy adopted by top management determines the organization's goals and means for achieving these goals. The strategy determines such things as reducing costs, improving quality, increasing market share or shrinking the size of the whole operation. The strategy might also influence the power of teams within the organization. If the strategy directs the organization towards using teams for accomplishing tasks, the organization will be more likely to allocate resources to work teams. This in turn, will affect the team performance positively (Robbins, 1996).

2. Authority structures

Organization's authority structures determine who reports to whom, who makes decisions and whether individuals or teams are empowered to make decisions. This, of course determines the place and importance of teams within the organization's hierarchy, whether a team is self-managed or directed by top management. Since these factors determine the speed of decision making and the conflict within the team and the dispute between the team and the management, it will influence the team's performance (Robbins, 1996).

3. Formal regulations

The more the rules, procedures, policies and other forms of regulations within the organization to standardize employee behavior, the less space the members have to determine independent sets of behavior within the team. Therefore, since the team members have to obey the formal regulations, they cannot make independent decisions that might be more suitable to the task at hand. This, will of course affect their performance (Robbins, 1996).

4. Performance evaluation

It is very important whether the organization rewards the individual or team accomplishments. If the organization values individual accomplishments rather than teamwork, it is less likely for the teams to perform effectively (Robbins, 1996). Because individuals will modify their behaviors by adopting those behaviors that are rewarded by the organization. For members to contribute more to teamwork and

increase the team performance, they should observe that the more they contribute to teamwork and the more they accomplish as a team, the more they are rewarded.

5. Climate

A high-performing team is also a one with a climate that supports teamwork. The team's climate means its shared values, norms, perceptions and attitudes. A team with such a climate stimulates and rewards cooperation and problem solving rather than intra-group competition and blame. Team norms emphasize trust, continuous improvement and failures are perceived as learning experiences. In such a climate employees can admit their mistakes more easily and commit themselves to attaining the team's goals. (Wright:&Noe, 1996).

It is more likely for teamwork to develop when management sets up a supportive environment for it. Such an environment includes encouraging members to think like a team, providing the required time and effort for meetings, and believing in members' capacity to achieve the desired performance. Such a climate helps the members to feel more comfortable when initially developing the teams. Furthermore, it will help in the development of trust, cooperation and compatibility within the team and the organization (Newstrom & Davis, 1997).

The cross-functional team that designed the 'Neon model' at Chrysler had an uncomfortable climate at the beginning. The production workers and engineers were working together in this project. However, engineers perceived the participation of production workers as a threat and the workers did not believe that their opinions

would be taken seriously. During the first meetings, the engineers did all the taking while the production workers hung back. Eventually, the workers started to make valuable suggestions that were incorporated into the design by the engineers. As a result, after such a cooperation, the attitudes of both workers and engineers improved and production workers participated more actively in the team.

Individuals cooperate more when they perceive that their efforts are integrated orderly to accomplish a common objective (Kreitner & Kirichi, 1998). Therefore, building a cooperative climate is very important.

6. Organizational Resources

When organizations do not have adequate resources, so will the work teams. The absence of resources such as time, money, raw materials and equipment will affect the team performance in a negative way. When the organization does not have these resources, it will not be able to allocate it to the work teams, thus hindering their performance. No matter how capable a team is, if it does not have the necessary equipment or raw materials to put its plans into action, the team will not be able to operate (Robbins, 1996).

7. Job design and technology

Teams are more effective in terms of productivity, job satisfaction and manager's judgments of their performance when they are self-managed and members highly involved in decision making. Effectiveness also increases when each of the team

members accomplish a variety of tasks and view their efforts as significant (Wright:&Noe, 1996)..

Tasks assigned to self-managing teams should be complex and challenging, requiring interdependence among the team members for accomplishment. In fact, these tasks should have the qualities of an enriched job (including job responsibility, recognition, opportunity for growth, learning and achievement). Briefly self-managed teams should have something useful to manage and members should use various skills and diverse knowledge to perform on the task (Johns, 1996).

Self-managed teams could be used for both blue-collar or white-collar jobs. Complex service and design jobs seem especially suitable for white-collar. For example, Federal Express established self-managing teams at the back-office clerical work to improve billing accuracy and reducing lost packages which contributed in the savings of millions of dollars (Johns, 1996).

Kodak, General Mills, GM's Saturn plant utilized self-managed teams among the blue-collars. These teams are responsible for dividing labor among various subtasks as required and making a variety of decisions about matters that has an impact on the team (Johns, 1996).

Task design and social organization also rely on technology. In coal mining, for example, earlier methods allowed miners to work independently, but new technology created specialized tasks that necessitated miners to synchronize efforts in small teams (Trist, Higgins, Murray&Pollock, 1963). Therefore, technology may urge team

members to learn all tasks, or as in musical groups, each member can master only one task due to the complexity of the tasks (Sundstrom, De Meuse & Futrell, 1990).

Logical subdivision of the technical process into operating subunits of reasonable size that can become partially independent depend upon the optimal fit between task, technology and social organization (Ketchum, 1984).

B. Team's Structural Factors

1. Size

The ideal size is seven, although the number of members varies between five to twelve.

As the size of the team increases, it becomes harder for the members to interact with and influence each other.

A summary of research on group size suggests the following:

a. Small teams (2 to 4 members)

Small teams display more agreement, ask more questions and exchange more ideas.

Small teams report more satisfaction and engage in more personal discussions.

b. Large teams (12 or more members)

Large teams are inclined to have more disagreements and differences of opinion.

Since there is more centralized decision making and less member participation, demands on leaders are more in large teams. Large teams are less friendly and report

more absenteeism and turnover due to less satisfaction associated with specialized tasks and poor communication.

Evidence related with the effect of team size on team's performance is conflicting. Several scholars have claimed that large teams are superior to smaller ones due to the extent of capabilities and resources with which to accomplish team tasks (Hill, 1982; Jackson, 1992; Shull, Delbecq & Cummings, 1970).

Harrison (1975), Hoffman & Maier (1961), Shaw (1981) and Shull et.al. (1970) have argued that large teams can improve problem-solving capabilities by increasing

- the amount of information that can be recalled and absorbed
- the amount of critical judgments to correct errors in inference and analysis
- the scope of perspectives brought to deal with a problem
- the number of potential solution strategies

These increases may lead to higher-quality decisions (Cummings, Huber, Arendt, 1974; Ziller, 1957).

Hoffman (1979), Shaw (1976) and Hare (1976) have found a team's performance to be a positive function of its members' abilities, which increase as the team size increases enlarging the resources available to solve a problem. Hambrick and D'Aveni (1992) also support the effectiveness of large teams by stating that the resources available in a team are a result of how many people are in it.

Besides these advantages, large teams tend to have coordination and communication problems that smaller teams do not have (Blau, 1970; Shaw&Harkey, 1976). Small teams are more cohesive and their members experience more satisfaction than the members of large teams (Shaw, 1981; Swap, 1984). Small teams tend to make faster decisions and reach consensus faster than large teams (Shull et.al, 1970; Thomas&Fink, 1963).

As a result, decision quality might be higher in large teams, while it might be more suitable to use small teams when solving easy problems (Hare, 1952).

Hare (1952) and Slater (1958) found out that the members of larger teams were less satisfied with the amount of time available for discussion, participation opportunity, group meetings and decisions taken.

In addition, in a large team there might be more conflict and dissension since it brings together more members with different viewpoints. Also the members identify less easily with the success and achievement of the team. For example, certain member of a four-person cancer research team would be more able to identify his/her personal contributions to a research breakthrough more easily than can a member of a twenty-person team (Johns, 1996).

In relation with the demands of the task, self-managed teams should be as small as possible to be feasible. The aim is to keep coordination problems and social loafing to a minimum. Although these negative factors can be a problem for all teams, they are especially important for self-managing teams. Since there is no leader in self-managing teams, there is no boss to coordinate the team's activities and depict social

loafers who do not do their share (Johns, 1996). Therefore, if the team size gets smaller it will be easier for members to control each other.

McKeachie's (1963) study on discussion groups at the college level revealed that larger groups were less satisfying both to the students and the instructor.

2. *Team Roles*

A team must be structured in order to retain its member's social well being and complete its task. By this way, the team can be successful. The emergence of two types of roles in successful teams, meet the requirements for task performance and social satisfaction. These roles are (Daft, 1997):

- a. *Task specialist*: People who spend time and energy helping the team achieve its goal. This role includes team task activities that contribute to the performance of important tasks. In an effective team, members contribute important task activities as required and as building blocks for performance success (Schermerhorn, Hunt, Osborn, 1997). The following behaviors are displayed:

- ❖ *Initiation*: Offer new solutions to team problems
- ❖ *Give opinions*: Propose opinions on task solutions and feedback on others' suggestions. Offer authoritative and relevant information and facts
- ❖ *Seek information*: Ask for task related facts from others
- ❖ *Summarize*: Make a summary of ideas proposed to a problem and clarify relations among various suggestions. Coordinate member activities

- ❖ *Energize*: Increase interest when the team slows down
 - ❖ *Procedural technician*: Perform routine duties (handing out materials, or rearranging seats)
 - ❖ *Recorder*: Take notes and document the discussion at the meetings.
- b. *Socio-emotional role*: People who support team members' emotional needs and help strengthen social entity. This role involves team maintenance activities that support the social and interpersonal relationships among its members. They assist the team to stay intact and healthy as a continuous social system. In an effective team, maintenance activities assist in building and sustaining relationships required for members to work and stay together over time (Schermerhorn, Hunt, Osborn, 1997).
- ❖ *Encourage*: Receptive to others' ideas; praise and encourage others to get their contribution more.
 - ❖ *Harmonize*: Reconcile conflicts between disagreeing parties
 - ❖ *Reduce tension*: Tell jokes when the tension is high
 - ❖ *Follow*: Agree to try out others' ideas
 - ❖ *Compromise*: Change opinion to keep team's harmony and try to keep some members from dominating

Some team members may play *dual roles* and contribute both to the accomplishment of tasks and meet members' emotional needs.

Some team members may play *non-participator role* while they contribute neither to the task nor to the fulfillment of social needs.

3. *Member Resources*

a. Abilities

Team's performance can be forecast by evaluating the task-related and intellectual abilities of the members because these abilities put parameters for what members are able to do and how effectively they will perform in the team (Robbins, 1996).

b. Personality characteristics

Research has revealed that traits such as sociability, self-reliance and independence tend to be positively related to team productivity, morale and cohesiveness. However, traits such as authoritarianism, dominance and unconventionality tend to be negatively related with team's performance. These traits will affect the team performance by determining how the individual will interact with other team members (Robbins, 1996).

4. *Composition*

The composition of teams has become an important issue in the teamwork. The team composition refers to the degree to which members of the team differ in demographic

attributes such as age, gender, race, educational level or length of service in the organization. This variable is called demography (Robbins, 1996).

Groups and organizations are composed of cohorts, which include individuals who hold common attributes. For instance, everyone born in 1960 is of the same age and has shared common experiences such as the women's movement (Robbins, 1996).

Similarity in age might lead to similarity in attitudes. Numerous studies have pointed out that there are systematic differences in attitudes and beliefs among people of different age cohorts (Wagner, Pfeffer, O'Reilly, 1984). Individuals of different ages have different experiences and accept social values at different stages and also aging leads to changes in cognitions (Eisenstadt, 1956; Elder, 1975).

John (1996) stated that a team should have members who are similar enough to work well together and diverse enough to bring different perspectives and skills to the task at hand.

In assembling teams, Johns (1996) added two other composition components. These are:

a. Stability

To establish considerable interaction and cohesiveness, team membership should be quite stable because rotating members in and out of the team will lead to a failure in developing true team identity.

b. Expertise

To be effective, team members should have a high level of expertise, which means that everybody does not have to know everything, but the team as a whole should be knowledgeable in the skills required for performing the particular task.

The composition of teams will be dealt more in detail under the 'Team Heterogeneity and Effectiveness' section.

5. Team Cohesiveness

Team cohesiveness is referred to as the extent to which members are attracted to the team and motivated to remain in it.

A cohesive group is one that sticks together, one whose members are bonded to one another and to the group as a whole. Cohesiveness would likely to be accompanied by feelings of commitment, harmony and solidarity on the part of group members (Mudrack, 1989).

The members of cohesive groups should be 'tightly coupled' (Weick, 1976), and a feeling of 'we-ness' comes forth that goes beyond individual motives and differences (Owen, 1985). 'Strong ties' reflect cohesiveness within a group (Granovetter, 1973) and 'connectedness' characterizes such a group (O'Reilly&Roberts, 1977).

Cohesiveness tends to be higher in teams where members are homogeneous in age, attitudes, beliefs, needs and backgrounds. The size of the team also affects

cohesiveness, where small teams get more cohesive due to the higher chance of member interaction leading the members get to know each others' competencies more, agreeing more easily on decisions (Schermerhorn, Hunt, Osborn, 1997).

a. Determinants of team cohesiveness:

□ *Team interaction*

The greater the amount of contact among team members and the more time spent together, the greater the cohesiveness (Daft, 1997).

□ *Shared goals*

The more the members agree on goals and direction the more cohesive the team is (Daft, 1997).

□ *Personal attraction to the team*

If members have similar attitudes and values, cohesiveness increases (Daft, 1997).

Teams that are diverse in terms of age, gender and race might have difficulty in developing cohesiveness when compared with homogeneous teams (Johns, 1996).

□ *Presence of competition and threat*

As the competition with other teams increases, cohesiveness increases (Daft, 1997).

Competition with other teams makes team members band together to defeat the enemy (Bateman & Zeithaml, 1993).

In response to competition or threat, teams become more cohesive because they might feel a need to improve communication and cooperation to better cope with the situation. Team is perceived more attractive under such a situation because it is seen more capable of doing what has to be done to beat the threat or win against competition (Johns, 1996).

❑ *Team success*

Success in a team task increases cohesiveness (Daft, 1997). The experience of winning brings teams closer together (Bateman & Zeithaml, 1993).

❑ *Favorable evaluation by others*

When the success of the team is recognized by others, cohesiveness increases (Daft, 1997).

The team becomes more attractive to its members when it successfully accomplishes some important goal such as defending itself against a threat or winning a prize (Johns, 1996).

❑ *Infrequent membership changes*

Time is required to sort out desirable and undesirable behaviors within the team. Therefore, if members do not change frequently, it will be easier to establish certain way of behaviors that will be predictable by all (Bateman& Zeithaml, 1993).

❑ *Higher status congruence*

Due to elements of interpersonal attraction, harmony concerning status qualifications leads to less anxiety and more openness in interpersonal relations resulting in more cohesiveness (Bateman& Zeithaml, 1993).

❑ *High entrance and socialization standards*

Groups and organizations that are difficult to get into have more prestige. If individuals succeed at a difficult interview, selection or training process to be accepted as a team member, they will be proud of their accomplishment and feel more attachment to the group.

❑ *Tie rewards to team performance*

Teams are motivated if they do the things that are rewarded. If high performing teams get the rewards they deserve while the poorly producing teams get relatively few rewards, the team will get more cohesive to perform better and to reap their rewards (Bateman& Zeithaml, 1993).

❑ *Size*

Larger teams might have difficulty in becoming and staying cohesive because they would have more difficult time in agreeing on goals and more problems communicating and coordinating effort to attain these goals (Johns, 1996).

b. Consequences of Team Cohesiveness

In cohesive teams the morale and satisfaction are high due to increased communication, friendly climate, maintenance of membership because of commitment to the team, loyalty and member participation in team decisions and activities (Daft, 1997).

The more frequent the communication, the more likely that the interacting members will become similar in terms of their beliefs and and perceptions of the organization and how it operates (Wagner, Pfeffer, O'Reilly III, 1984). Also, the conformity increases within cohesive groups (Kiesler and Kiesler, 1969) besides the members developing attitudinal similarity over time (Newcomb, 1956).

The degree of productivity depends on the relationship between the team and management (Daft, 1997).

Although cohesive teams are good for their members, they may not be good for the organization. If a team is cohesive, the members will conform more to the norms. If the team norms are positive in a highly cohesive team, The members will work hard to achieve the team goals to contribute more to the organization. Of course, this is the most desired situation. However, if the team is cohesive but the norms are negative, the members will again conform to norms, which do not serve to the needs of the organization, and the organization will suffer from poor performance results (Schermerhorn, Hunt, Osborn, 1997).

Management should be careful in following the norms of the teams and ensure that positive norms are adopted by team members.

Seven Steps to Positive Norms (Schermerhorn, Hunt, Osborn, 1997):

- ❖ Act as positive role model
- ❖ Hold meetings to agree on goals
- ❖ Select members who can and will perform
- ❖ Provide training and support for members
- ❖ Reward desired behaviors
- ❖ Hold meetings for feedback and performance review
- ❖ Hold meetings to make improvements

6. *Team Norms*

Team norm is a standard of conduct that is shared by team members and guides their behavior (Daft, 1997).

a. *Characteristics of Norms*

- informal
- not written
- define boundaries of acceptable behavior
- provide a frame of reference for what is right or wrong
- identify key values, clarify role expectations and facilitate team survival

b. Why Norms Are Enforced (Kreitner&Kirichi, 1998)

- Help the team and organization survive
- Specify behavioral expectations
- Help individuals avoid embarrassing situations
- Specify the organization's and the team's main values

c. Development of Norms

- *Critical events*

Critical events in a team's history identify the important prior instances. If a bystander is injured while standing too close to a machine, this event will lead the other members to monitor each other regularly to make sure that no one other than the operator gets close to the machine (Daft, 1997).

- *Primacy*

The first behavior pattern that emerges in a team most often develops behavior expectations in a team (Daft, 1997). If at the first meeting, formal interaction between the members or between the members and supervisors are observed, the future meetings are expected to be conducted in the same way (Kreitner&Kirichi, 1998).

- *Carryover behaviors*

Team members bring with them expectations from other teams of which they have been members. Therefore, when new members join a team, those that are similar

in background and experience to the current ones are preferred in order to prevent expectations and behaviors inconsistent with the rest of the team (Daft, 1997).

- *Explicit statements*

Often the statements made by team's supervisor or a powerful member may help in developing team norms.

Statements such as 'no personal calls are allowed during working hours' or 'coffee breaks are to be kept to ten minutes' may be helpful in forming norms (Daft, 1997).

d. *Common Classes of Norms*

- *Performance-related norms*

Work teams may provide members some cues on how hard to work, how to get the job done, their level of output, appropriate communication channels etc. These norms can shape the employees' performance according to the requirements of the norms (Robbins, 1996).

- *Appearance factors*

These norms include suitable dress, loyalty to the team or organization, when to look busy or when it is acceptable to goof off (Robbins, 1996).

- *Informal social arrangements*

These norms manage social interactions within the team such as with whom team members can eat lunch, friendships on and off the job, social games and the like (Robbins, 1996).

- *Allocation of resources*

These norms regulate pay, assignment of difficult jobs, and allocation of new tools and equipment (Robbins, 1996).

XII. EFFECTIVE WORK TEAMS

A. Criteria for Team Effectiveness

Team effectiveness is judged according to three criteria:

- Productivity
- Satisfaction of personal needs
- Commitment of team members to working together

In fact, the factors that affect team effectiveness start with the organizational context that includes formal structure, environment, culture, strategy and reward, control system. Teams evolve within this context. There are also factors related with the team that influence effectiveness. These are internal factors such as team type, team size, team roles and team composition in terms of attributes, knowledge and skills. These team characteristics affect team processes that include stages of development, team norms and cohesiveness, which in turn affect productivity and satisfaction. These

team processes should be carefully handled by the leaders and members of the team to direct these processes in a positive manner to establish an effective team (Daft, 1997).

B. Ingredients for Team Effectiveness

The team effectiveness is influenced by the three important sources (Bateman&Zeithaml, 1993). These are:

1. The amount of effort put forth into the work by the team members

The amount of effort is very closely related with the motivation provided by the work accomplishment. If the tasks enable members to use variety of skills, provide task identity, significance, autonomy and performance feedback, the members will be motivated more and generate more effort.

2. The amount of skill and knowledge provided by members

The skills and knowledge provided are a function of team composition. The size of the team, cohesiveness and heterogeneity of the team should be appropriate for the task to be accomplished. Talented members who have skills and knowledge suitable for the task will affect the effectiveness positively.

3. The suitability of the task performance strategies applied to the work by the team

If positive norms that emphasize high performance through setting high performance goals are developed, it will affect the effectiveness positively. At the same time, rewarding policies, leadership provided should be in line with the task being performed.

C. Characteristics of an Effective Team

1. Size of work teams

The best work teams tend to be small while as the size increases, it gets harder to develop cohesiveness, commitment and accountability that leads to high performance (Robbins, 1996).

2. Abilities and attitudes of members

The members of the team should possess required skills-technical skills, problem-solving and decision-making skills and interpersonal skills –to achieve high performance. The right mix of these skills is necessary for successful task accomplishment (Robbins 1996).

For a team to be successful, the members should build positive attitude toward being a member of the team, be willing to share information with others, committed to the goals and be confident that the team will be successful (Robbins, 1996).

3. Allocating roles and promoting diversity

Individuals tend to be more productive when they are put into jobs in the team that are compatible with their personalities.

Successful teams have all the roles distributed based on people's skills and preferences (Robbins, 1996).

4. Having a commitment to a specific purpose

Effective teams have a common and meaningful purpose that provides direction, momentum and commitment to members. This purpose should be set up by all team members, by discussing, shaping and agreeing on a certain goal that belongs to them both individually and collectively (Robbins, 1996).

5. Establishing specific goals

The common purpose should be translated into specific measurable and realistic performance goals that will stimulate clear communication and focus the members on getting results (Robbins, 1996).

6. Leadership and Structure

Leadership can be provided by the management or by the team members themselves as they fulfill team roles.

The team should determine:

- How schedules will be set
- What skills need to be developed
- How the conflicts be resolved
- How the decisions will be made and modified

Management must empower teams in accordance with their abilities rather than dictating employee behavior (Robbins, 1996).

7. Good communication

Another important characteristic of an effective team is good communication, which means members are able to convey messages between each other in a readily and clearly understood form. Feedback from team members and management is also necessary for good communication because it helps guide the team members and take corrective action in case of misunderstanding (Robbins & Coulter, 1996).

8. Social loafing and accountability

Successful teams identify the individual and group responsibility and take measures against the tendency for hiding inside a group (Robbins, 1996).

9. Appropriate performance evaluation and Reward systems

Team effort and commitment should be encouraged by establishing group based appraisals, gain sharing, profit sharing, small group incentives in addition to individual rewarding (Robbins, 1996).

10. Developing high mutual trust

- Show you are working for others' interests as well as your own
- Be a team player
- Practice openness
- Be fair
- Speak your feelings
- Show consistency in the basic values that guide your decision making
- Maintain confidences
- Demonstrate competence

11. Market position

The organization should consider whether the increased productivity provided by the effective team would be met by the demand in the market. That is, the increased productivity provided by the effective team should have enough demand in the market to be consumed up (Wright&Noe, 1997).

XIII. TEAM HETEROGENEITY AND EFFECTIVENESS

As mentioned before, teams are preferred by many organizations as a means of increasing effectiveness. Teams are also used to make important decisions in the organizations. However, teams should have certain characteristics to be effective. As listed above, teams may differ in terms of size, structure, roles member play, type and composition. All these characteristics, in turn, will have an effect on the effectiveness of the team. Team effectiveness is not a single, uniform measure and it is based on two outcomes: productive output and personal satisfaction (Sundstrom, De Meuse & Futrell, 1990). *Satisfaction* refers to the team's ability to meet the personal needs of its members and as a result keep their membership and commitment. *Productive output* refers to the quality and quantity of task outputs as stated by team goals. As Hackman (1987) and Sundstrom et al (1990) state, effectiveness in a team is indicated by

- Group-produced outputs (quantity, quality, speed, customer satisfaction and so on)
- The consequences of group for its members. These result in attitudinal outcomes such as employee satisfaction, commitment and trust in management or behavioral outcomes such as absenteeism, turnover or safety.

- Enhancement of a team's capability to perform effectively in the future.

In deciding whether the team will be effective or not, it should be considered whether the right conditions exist for the successful teamwork. Team effectiveness can be influenced by many factors such as compatibility of work processes with the team, willingness and ability of the members to work, an appropriate leadership provided, appropriate team size, organizational climate and so on. However, in this paper I would like to focus on the relationship between team composition and effectiveness.

As mentioned above, team composition refers to the nature and attributes of group members and it is the most frequently studied group design variable.

Pfeffer (1983) claims that team demography is an important causal variable that affects a number of intervening variables and processes and through them, a number of organizational outcomes.

Creating organizational support systems (training opportunities)

Campion et al (1993) studied 80 work teams in a financial services firm and as a result revealed relationship between effectiveness and

- Team job design (amount of self-management in the team)
- Interdependence among team members
- Composition (heterogeneity of members)
- Intra-group processes
- Contextual factors (managerial support)

As a result of this study, team size was found to be positively related to effectiveness, whereas heterogeneity of members' background and expertise unrelated or negatively related to effectiveness measured in terms of productivity, employee satisfaction and manager ratings of performance. The types of the teams studied were production and service teams and the researchers, however, suggested that they have got these results because their sample might have varied little in terms of background and expertise. If it did, they could have got different results.

Magjuka & Baldwin (1991) studied 72 teams in two manufacturing firms that were also production and service teams. In this study, heterogeneity was measured in terms of various job categories within computer manufacturing teams. As a result, they found team effectiveness to be correlated with larger team size, greater within team heterogeneity and greater access to information. The researchers explained the results

in various ways such as heterogeneous teams' better use of member knowledge, better communication and cooperation with external groups.

Two other studies analyzed the effect of diversity on performance. Eisenhardt and Tabrizi (1995) discovered that functional diversity was related with faster time-to-market for new product development efforts in the computer industry. They claim that functional diversity enables development steps to be integrated, linking technical, marketing, and manufacturing activities.

Ancona and Caldwell (1992) analyzed organizational tenure diversity and functional diversity among 45 new product teams, which were project and development teams, in five high-technology companies. They found out that the two types of diversity did not affect performance, tenure diversity being positively related to conflict within the team and functional diversity being positively related to external communication.

Wiersema and Bird (1993) also, discovered that the more heterogeneous the team members in terms of team tenures, the more the turnover is in Japanese society and organizations. This is the only study that studied team tenure diversity in non-U.S. settings. They also found out that the differences in the prestige of the university attended by Japanese top management team members predicted top team turnover.

These findings reveal that heterogeneity, which means dissimilarity among the team members in terms of age, race, religion, knowledge, skills, abilities, education, gender, personality, culture, functional experience and socioeconomic background may not always lead to team effectiveness. It is important to realize that heterogeneity

of the team might increase effectiveness in certain jobs, while have no or negative effects in some others. While heterogeneity in organizational tenure has not influenced performance in Ancona and Caldwell's study (1992) as mentioned above, functional diversity in terms of various job categories within computer manufacturing teams increased effectiveness in Magjuka and Baldwin's study (1991). It is also important to distinguish on which attributes the team is to be heterogeneous since in the studies mentioned above, the teams were either diverse in functional experience, expertise or organizational tenure and team tenure.

Jackson (1992) drew attention to the need to distinguish between two types of heterogeneity: heterogeneity of personal attributes (such as age, race, gender, personality etc.) and task related attributes (such as specific skills and abilities required to perform the job). This distinction has limited application for most research on top management teams since the combination of both personal and skill-based attributes are used in describing the major dimensions of team members (Hambrick, Cho & Chen, 1996).

People with diverse characteristics will bring in diverse opinions and views into the teamwork, which will profit the team and the organization. Therefore, heterogeneity may be especially helpful for tasks requiring creativity and cognitive processing because the more diverse the team members are, the more probable that more novel, varied opinions will be generated. In tasks requiring creativity, as the range of ideas generated increases, the quality of the decision may increase. A homogeneous team is more likely to make poor decisions due to the lack of variety of information and viewpoints that exist in teams with dissimilar members.

Hoffman (1959) and Hoffman & Maier (1961) stated that diversity of team members help especially in bringing diverse perspectives to the decision-making process.

On the contrary, Jackson et al's (1991) study revealed that heterogeneity among members of top management teams in bank holding companies was positively related to turnover.

Contrary to his previous study, in a more recent study, Jackson et al (1995) found that heterogeneity was positively related to the creativity and decision-making effectiveness of the teams.

Jackson (1996) claimed that team diversity in terms of personality, training, background, leadership abilities, attitudes and gender is very essential for high-quality team decision making in creative decision-making tasks. Especially, cultural heterogeneity contributes on tasks that require a variety of viewpoints. Culturally heterogeneous teams might be more likely to have difficulty in learning to work with

selected aspects of task performance (generating alternative solutions, applying many perspectives in analyzing business cases).

All these findings support the positive relationship between heterogeneity and effectiveness of the team. Heterogeneous team members will both profit the team and themselves because in such an environment the team members will drive each other to think in ways that have not been thought of previously. This, in turn will widen the team and personal perspectives of the members. However in homogenous teams, members have not got such an opportunity while they are very similar in many aspects with the rest of the team. The end result might be a harmonious environment where everybody agrees with each other and arrives at conclusions very easily. However, this harmony in homogeneous team is imaginary because members trust each other so much that sometimes they might not search for external sources for further information. This might create an imaginary harmonious relationship where personal relationships are blooming but the effectiveness suffers. Heterogeneous teams on the other hand, will increase openness to new ideas because of extensive discussion of issues by the members which will lead to multiple interpretations, increased flexibility and problem-solving skills. Therefore, although it takes longer to reach harmony in heterogeneous teams, once the members get used to working with each other, this harmony in work will not be as imaginary as in harmonious teams.

Therefore, the heterogeneous teams might not have a harmonious context for its members since the differences between members will produce very diverse solutions to problems, which will lead to conflict. In my opinion this conflict, in turn might be very constructive for the team and the organization and after all, functional conflict is

something that the organizations encourage, not repress. Functional conflict might lead people to consider the issues from many perspectives and spend much more time to defend themselves or listen to others' opinions, therefore keeping the team viable, self-critical and creative. Research carried out at 35 major hospitals in 3 regional health authorities across the United Kingdom by Michael A. West – University of Sheffield and Neil R. Anderson- Goldsmiths College, revealed that constructive task-oriented conflict influences the quality of the innovations introduced.

Although heterogeneity might make it more difficult to reach agreements and harmonize the team, it is more likely that the quality of the decision will surpass the decision of a homogenous team due to the multiple perspectives brought to the decision, thus increasing the likelihood of creative and unique solutions. Heterogeneous teams will also increase openness to new ideas because of members getting used to dealing with different opinions and views. However, in routinized jobs that are repeated frequently and can be performed based on previous experience, homogeneous teams will be more effective since they can accomplish it quickly. In such a case, it will be just a waste of time and energy to utilize heterogeneous teams since the work requires no creativity.

However, another important factor is that teams operate in organizations. The basic concept in organization theory is that organizations must coordinate and control activities and behaviors of the people who make up the organization. Organizations may use different types of control strategies ranging from informal cultures and systems of values to socialize and control member behavior to more formal mechanisms such as values and regulations (Ouchi, 1980). Pfeffer (1983) stated that

socialization and internal control would be most effective when the team is homogeneous due to the similarity of background, joint experience and shared perspective providing a common vocabulary and the basis for mutual understanding. Therefore, informal control will be more effective with homogeneous teams.

However, since heterogeneous teams are less predictable in their attitudes and behaviors due to dissimilarities among members, uncertainties of goal and information between the team members, impersonal bureaucratic rules, regulations and processes might be required to coordinate and control the behaviors of people and deal with uncertainties (Eisenhardt, 1989). This formalization would in return adversely affect the organizational performance by hindering the team's capacity to function responsive to change and increasing the administration cost.

This increased bureaucracy in return might affect the effectiveness of the heterogeneous teams especially in high velocity environment because

- Bureaucracy limits the team's capacity to work by directing time and energy toward team maintenance rather than achieving goals (Smith,et.al, 1994).
- Rules and regulations will increase the burden on CEO. Rules and regulations to monitor these teams will increase administrative costs that will negatively affect organizational performance (Smith,et.al, 1994).
- Due to bureaucracy, the organization will become less responsive to competitive changes in the high-velocity environments. As a result their performance will suffer because they are not able to respond to changes quickly (Burns, Stalker,

1961). If the organizations are to survive they should respond to changes in the environment.

In fact, in my opinion homogeneity might create a threat to the organization in the long run by the members feeling very comfortable with those members similar to themselves and rejecting those who are not and using informal control to direct the behaviors of the members. Schneider (1987) explains this issue in his ASA (attraction-selection-attrition) theory and Pfeffer (1983) in organizational demography model.

These two theories characterize the psychological and sociological approaches of teams.

Both theories claim that personal attributes of the individuals who constitute an organization's work force and the interpersonal context created by the mix of personal attributes represented in the work force are key determinants of behavior.

Both models also suggest that similarity is one of the most important determinants of interpersonal attraction, which in turn creates a social context for relationships among organizational members

ASA model drawn from the perspective of interactional psychology emphasizes the role of person effects on behavior in organizations. Schneider argued that through the process of attraction, selection and attrition, organizations evolve toward a state of interpersonal homogeneity. Early in the process similarity- attraction effect results in people being attracted to organizations whose members they perceive similar and

their attraction to organization leads people to seek organizational membership. Current members are also attracted by the similar new entrants. After entering the organization, the new member and the more tenured members get better acquainted and the similarity-attraction effect can affect the feelings and behaviors of both parties. If this match is judged unsatisfactory, pressures form to encourage dissimilar ones to leave the organization. Overtime these processes create homogeneous work teams (George, 1990).

Pfeffer refers to the demographic composition of formal organization and states that this composition affects many behavioral patterns such as communication, job transfers, promotion, and turnover. Demographic variables include age, gender, tenure, race, socioeconomic background and religion. Sociological studies and market research both show that differences in people's attitudes and values are reliably associated with differences in their demographic characteristics. Pfeffer reflects a sociological perspective.

As it is suggested above, as a result of this attraction by similarity, organizations would have standard level of people who think, behave and react similarly and this might be very dangerous for creativity and innovation in the organization.

Moreover, this state of behavior might also imply groupthink because the homogeneous work teams will accept those who accept their way of thinking and practice domination over the dissimilar minority. As explained in Schneider's ASA model, personality, interests and values are dimensions of the similarity and homogeneity of these dimensions is the determinant of the organization's unique

quality. Pfeffer's claim on demographic composition affecting many behavioral patterns also constitutes homogeneity within the team. People's assigning so much value on similarity might create discomfort for dissimilar ones, as suggested by Schneider, leading to turnover. Increase in turnover on the other hand might have a negative effect on effectiveness of the team and organizational performance. As Wiersema & Bird (1993) stated turnover was found to be dysfunctional for team effectiveness.

As stated earlier, organizations have started using teams recently as a means of increasing their effectiveness. If a team is effective, it will be effective for the organization. That is, it might not be possible for an ineffective team to be effective for the organization it is working for. Therefore, heterogeneity of team members will have an effect on setting organization's direction, identifying environmental opportunities and threats, interpreting relevant information, considering organizational capabilities and constraints, formulating and implementing strategic change. Therefore, the characteristics of the team members will influence the assessment and direction of the firm's strategy.

As Tushman & Romanelli (1985) claims a team's decision to initiate changes in strategy will be affected by the members' perceptions of opportunities and threats. Therefore, the more heterogeneous the team members are, the more they will be effective in setting up strategies beneficial to the team and to the organization. Because the members of such teams will produce many diverse ideas that will enable members to perceive the environment in a way so much different than perceived

alone. As a result, diversity in information sources and perspectives will increase creativity and innovativeness in decision making.

Organization's performance also depends on the environmental factors and how the organization deals with these changes. The environment is not stable and due to technological discontinuities (Hughes, 1983; Tushman & Anderson, 1986), regulatory changes (Miles, 1982) and changes in competitive conditions (Lawrence & Dyer, 1983) and strikes (Meyer, 1982), there might be environmental shifts. Organizations should adopt their competencies and decision-making processes to these changes. Therefore, teams, especially executive teams should give up routinized problem solving to more careful environmental scanning and problem solving to deal with the changes in the environment (Ancona, 1989; Eisenhardt, 1989).

Moreover, organizations go through reorientations which are discontinuous changes throughout the organization that include simultaneous changes in strategy, structure, power and control (Miller, Mintzberg & Friesen, 1984; Tushman & Romanelli, 1985). Again, during organizational reorientations, the executive teams, should adopt new modes of action (Hedberg, 1981; Lant & Mezias, 1992) and change standard operating procedures, and understandings within the organization (Nystrom & Starbuck, 1984; Starbuck, Greve & Hedberg, 1978).

Consistent with the above claims, research report by Sara L. Keck and Michael L. Tushman (1993) resulting from analysis of longitudinal data gathered in the United States from 104 cement factory revealed that technological discontinuities,

environmental jolts and organizational reorientations are positively associated with team heterogeneity. That is, heterogeneous teams are more effective in environments where the technology changes, organization is going through certain changes or when the environment is not stable.

Management team studies analyzed demographic variables, the differences in these variables, which is also called diversity and the size of the team as the factors affecting performance and behavioral outcomes. Many studies over the last ten years have found strong correlation between the demographic composition of the top management teams and organizational characteristics. Top management teams are especially important due to the role they play in making strategic decisions concerning the organization.

Studies have demonstrated that young, short-tenure and highly educated teams tend to be relatively innovative, even after controlling for the type of industry. (Bantel & Jackson, 1989; O'Reilly & Flatt, 1989). Organizational tenure of top management team members was found to be strongly associated with strategic persistence, or absence of change (Finkelstein & Hambrick, 1990; Grimm & Smith, 1991; Wiersema & Bantel, 1992). In other studies, organizational effectiveness has been found to related with the mix of functional backgrounds (Thomas, Litschert, Ramaswamy, 1991), industry experience (Eisenhardt & Schoonhoven, 1990) and turnover of top management teams (Virany, Tushman and Romanelli, 1992). Wagner, Pfeffer and O' Reilly (1984) have found out that heterogeneity in organizational tenure to be positively associated with high turnover in top management and the more

distant an individual an individual executive was from the average of the other team members, the more likely he/she was to depart.

Bantel and Jackson (1989) discovered that top management team heterogeneity in educational level and functional background was positively associated with innovativeness in a large sample of banks.

Bantel (1994) found functional heterogeneity to be positively associated with strategic planning openness in retail banks. Lant et al (1992) discovered functional heterogeneity in both the furniture and software industry to be positively associated with strategic re-orientation. Bantel (1994) and Lant et al (1992) both claim that functional diversity will affect strategy formulation through diversity of perspectives applied to strategic questions, resulting in a greater search for information, more extensive discussion of options to settle disagreements and the generation of more original ideas

The impact of top management teams on organizational decisions is emphasized in Hambrick and Mason's (1984) upper-echelon perspective. In their view, the organization is a reflection of its top executives and the characteristics and performance of the top management team have greater potential for predicting organizational outcomes because of the decisions they are empowered to make for the organization. These managers in the top management team make decisions consistent with their cognitive base, which is in part a function of their personal experiences and values. Therefore their personal experiences and values can be linked to organizational outcomes.

Cognitive base is defined as assumptions about future events, knowledge of alternatives and the consequences attached to alternatives (Hambrick and Mason, 1984)

Cognitive base affects an individual's perceptual process by

- influencing the manager's field of vision
- leading to selective perception due to paying attention to those stimuli in one's field of vision
- processing information by filtering through the lens of the cognitive base

Because an individual's cognitive base evolves from experiences, including training, background (Cyert, March, 1963), then demographic characteristics may be indicators of its qualities (Hambrick and Mason, 1984).

March and Simon (1958) argue that each decision maker brings his/her own set of 'givens' to an administrative situation and these givens reflect the decision maker's cognitive base:

These givens can be age, tenure in the organization, functional background, education, socioeconomic roots and financial position. These givens, in return will reflect the values, which affect principles of ordering consequences or alternatives according to preferences (Hambrick&Mason, 1984). The important thing here is that these givens that affect cognitive base may also serve to filter and distort decision

maker's perception of what is going on and what should be done about it. Selectivity in perception and interpretation of a situation will be affected again by cognitive base and values.

I think that these givens mentioned by March and Simon and values will be highly effective in the team decisions too. That is, members similar in values and givens will be approaching the problems in similar ways. However, members of a team who are more diverse will be bringing in different approaches to the same situation. These diverse approaches, in my opinion, will be more likely to increase the quality of the decision taken.

In relation to the upper-echelon theory, many scholars have linked top management teams to organizational innovation (Bantel & Jackson, 1989; O'Reilly & Flatt, 1989), strategy (Finkelstein & Hambrick, 1990; Michel & Hambrick, 1992), strategic change (Grimm & Smith, 1991; Wiersema & Bantel, 1992), performance (O'Reilly & Flatt, 1989; Michel & Hambrick, 1992; Hambrick & D'Aveni, 1992). The main concepts of the upper-echelon theory are *team demography* that includes the external characteristics of the team such as team size, heterogeneity and tenure, *process* which includes the team's actions such as communication, conflict, consensus, psychological dimensions such as social integration and *organizational performance*.

Hambrick, Seung Cho and Chen (1996) claimed that the top team could be considered as the aggregate informational and decisional entity through which competitive moves are made. These moves are taken as a result of scanning of the environment, perceiving problems and opportunities, interpreting other external stimuli, developing

potential moves, bargaining, processing and deciding on moves and executing actions (Mintzberg, Raisinghani, Theoret, 1976; Fredrickson and Iaquinto, 1989). Since the top management team heterogeneity are expected to influence these internal processes which in turn will affect the competitive behaviors Hambrick, Seung Cho and Chen (1996) studied the relationships between top management team heterogeneity and three major dimensions of a company's actions and responses. These are :

- its competitive propensity or relative tendency to undertake actions and respond to competitors' actions
- the competitive magnitude or the relative importance of the company's actions and responses
- competitive speed or how quickly the firm executes its actions and responds to other actions

Competitive actions are considered creative initiatives and Jackson (1992) claims that it is in creative and unstructured tasks, the heterogeneity has its most positive effect. Since a heterogeneous team has broader cognitive resources leading to wider field of vision and broader external contracts, it can more easily observe threats and opportunities or any other external stimuli and provide greater scope of actions to be taken (Hoffman & Maier, 1961; Jackson, 1992).

Hambrick, Seung Cho and Chen (1996) analyzed a large sample of actions and responses of 32 U.S. airlines over eight years. In this study, they had found out that heterogeneous top management teams in terms of functional background, education and company tenure exhibited relatively higher propensity for action. The

heterogeneity was also found to be positively related to the magnitude of competitive actions. The magnitude of an action is characterized by its strategic significance, its noteworthiness and its scope. Hambrick, Seung Cho and Chen assumed that these characteristics will reflect the firm's degree of boldness and innovation in its competitive initiatives. Therefore, the firm undertaking strategic and highly noteworthy actions needs to perform differently than a firm taking primarily tactical, little-noted and narrowly restricted moves. As also supported in this study, as the significance, noteworthiness of the decisions increase, the team heterogeneity needs to increase to enhance creativity and innovation. Marketing innovations such as American Airlines' frequent-flyer program in the early 1980's have been attributed to the top management team diversity (Labich, 1990). A similar association between the functional diversity of top management teams in tobacco companies and strategic adaptation has been observed by Chaganti and Sambharya (1987). However, heterogeneous teams were slower in their action execution than homogeneous teams in this study. This can be attributed to the difficulty in communication and decision-making in heterogeneous teams due to the different perspectives and vocabularies (O'Reilly, Caldwell & Barnett, 1989). Homogeneous teams may take fewer actions when compared to heterogeneous teams. But when the potential actions fall within the team's field of vision, preferences and repertoire, it can act very quickly. However, top management team heterogeneity will affect the amount of time taken to execute an action.

Eisenhardt and Schoonhoven (1990) also found that growth rates of semi-conductor companies were positively related to the top management team's heterogeneity in industry tenure. As Hoffman and Maier (1961) explains it, the positive effect of

heterogeneity shows itself in breadth of perspective, cognitive resources and overall problem-solving capacity of the group.

The most important benefit of a heterogeneous team is that its members' diverse points of views will lead to diverse set of recommended solutions (Wanous & Youtz, 1986). Researchers have indicated that a need to harmonize diverse solutions arouses effective group discussion that leads to high quality decisions. Many studies have considered solution diversity to be a vital factor. Examples are Maier's work on creative group decisions (Maier, 1963, 1967, 1970; Hoffmani, Harburg & Maier, 1962) and Janis's (1972, 1982) accounts of groupthink. Janis is concerned about ways to prevent or overcome effects of groupthink and recommends increasing the diversity of solutions to problems that groups consider as one way. Diverse solutions can be possible through heterogeneous team members.

It is important to understand the difference between demographic trait and diversity effects in order to understand the influence of team demography on decision making.

Demographic diversity refers to heterogeneity or homogeneity of a team. Research has suggested that homogeneity will be linked to a team's propensity to maintain the strategic status quo. Homogeneity on demographic traits leads to perceptions of similarity with and attraction to others (Byrne, 1961; Kanter, 1977; Pfeffer, 1981)

Byrne & Wong, (1962); Lott & Lott, (1965); Rokeach, (1960); Zander, (1970) state that homogenous groups exhibit more conformity and lack of openness to information. Social psychological research reveals that members' perceptions of similarity with

others on values, beliefs and attitudes increases group identification and cohesion. Cohesion on the other hand, might be associated with high conformity (Back, 1951; Janis, 1972; Kiesler & Kiesler, 1969; Lott & Lott, 1961, 1965; Zander, 1977), high commitment to previous courses of action (Janis, 1972), lack of openness to information and interference with a group's ability to fully use information (Whitney & Smith, 1983).

Hambrick and Mason (1984) presented in their model that heterogeneous teams will gather information from a variety of sources and have diverse interpretations and perspectives. Dutton and Duncan (1987) asserted that differentiation in an organization's belief structure, defined as high complexity with low consensus encourages the search for information, the perception that change is feasible and the momentum for change. Moreover Katz (1982) and Weick (1969) postulated that high member diversity and variety strengthen the ability of an organization to adopt.

Bantel & Jackson (1989), Katz (1982), Murray (1989), Wanous & Youtz (1986) associated group heterogeneity with high levels of creativity and innovation assuming that the members' different point of views will lead to diversity, novelty and comprehensiveness in the set of recommended solutions to a problem. Hoffmann & Maier (1961) suggest that members of such a team will be able and willing to challenge each other's viewpoints.

Ghiselli & Lodahl (1958), Hoffman (1959), Hoffman & Maier (1961) and Sorenson (1968) also suggest that a need to harmonize diverse solutions and viewpoints activates effective group discussion and, in turn, high quality decisions.

XIV. CONCLUSION AND DISCUSSION

Although various research has been carried out concerning the effects of heterogeneity in teams, the conclusions have been contradictory. Even the same researcher has come up with different results concerning different types of teams at different time settings.

However, team composition has been considered as one of the most important attribute of a team that affects its performance. Most of the research, as briefly reviewed here, has concluded the beneficial effects of heterogeneity. Evidence from the academic studies reviewed reveal that team composition, which refers to the homogeneity or heterogeneity of the members, should be established according to the requirements of the tasks to be performed, and the conditions of the environment and the organization in which the team is operating. Therefore, it is not correct to conclude that heterogeneous team will be always effective whereas homogeneous teams will not or vice versa. For example, the heterogeneous teams might be beneficial for some type of task but not for some others.

From the studies reviewed, the following conclusions can be drawn about the composition of the team:

- ✓ If the task to be performed requires creative and innovative decision-making, heterogeneous teams will be more effective than homogeneous teams. The team heterogeneity, especially in educational level and functional background, will be

affecting innovation, diversity and creativity, which in turn will add to the quality of the tasks performed or decisions taken. Heterogeneity in such tasks improves the scope of perspectives, cognitive resources and as a result problem-solving capacity of the group. However, homogeneous teams will be more suitable for routinized tasks, which do not require new perspectives to be performed.

- ✓ In project and development teams, especially in tasks using high technology, such as computer industry, heterogeneity in functional background seems to produce better results. Since the technology changes frequently in the computer industry, the members of the team should not stick to traditional way of operation and should find ways of adopting the new technology. Therefore, heterogeneous teams that are composed of diverse members will be more able to generate alternatives for the innovations and modify the system.
- ✓ If the organization is established in a static environment where the rate of change is high, the organization faces with conflicting requirements from various constituencies that promote structural differentiation (e.g. the restriction in the import of a certain raw material might lead the organization to find other alternatives for that product or trying ways to produce it). Therefore, the teams operating in such an organization should try to deal with this differentiation. Under such an environment, the heterogeneous teams seem to be more effective due to cognitive diversity that can deal with novel problem-solving situations by increasing the scope of information and perspectives at hand among team members. As stated earlier, the heterogeneous teams have better external communication than the homogeneous teams. This will be very helpful in a

dynamic environment where careful scanning of the environment to discover threats and opportunities is essential.

- ✓ Corporate strategy is also an important element affecting the composition of the team. For example, in managing a firm that goes through diversification, heterogeneous teams will be more effective because different functional backgrounds, education, age and even organizational tenure will be essential in such a case. This heterogeneity will bring in a wider range of knowledge and points of views to handle the business when the firm is going through the diversification.
- ✓ Another important point of team composition is the degree of heterogeneity within the team. The level of heterogeneity should be established such that the members are not so distant from each other. That is to say, too extreme diversity may never lead the members to agreement. Since heterogeneous teams have problems with the communication frequency and quality, which create problems at achieving cohesion and consensus especially at the stage of forming, the degree of heterogeneity is an important issue. Therefore, it seems as an open question because when heterogeneity is demanded, how much of it is needed to be effective is not clear yet.
- ✓ It is a fact that heterogeneity in certain characteristics are more vital in leading to effectiveness. Among these characteristics, education, functional background, socioeconomic background, experience, age and organizational tenure are the most important ones when effectiveness is considered since these factors will play

an important role in determining the level of skills, knowledge and abilities within the team. In return, knowledge, skills and abilities will affect the quality of the task performed.

As mentioned before, before deciding on the composition of the team to get effective results, it should be taken into consideration whether the right conditions exist for the teamwork. It should be considered whether the work performed is compatible for teamwork, whether the team members are willing and able to work, whether the team has the right size. Therefore, due to the lack of these conditions a heterogeneous team might be ineffective. That is to say, if the work to be performed is not suitable for teamwork, or if the members are not willing or not able to work, it does not matter how heterogeneous a team you have because it will not be effective. Therefore, all these other dimensions should also be considered.

Another important issue is to match the heterogeneity with the right type of team. That is, in my opinion team heterogeneity might be an asset for some types of team, whereas it might not be needed at all in some other types. For example, team heterogeneity might be mostly essential for self-managing teams, advice/ involvement teams and project/development teams. Cohen & Bailey (1997) reported that functional diversity had no significant effect on performance in production/service teams (work teams), a positive effect on advice/ involvement teams (parallel teams) and a mixed effect on project/development and management teams (negative impact in one study and no effect in another study).

It should also be made clear what type of effectiveness is desired. As discussed before, effectiveness can be measured in terms of productivity or in terms of personal satisfaction that the members get. Although the productivity of the heterogeneous team is high which increases the profitability of the organization, the members of the team might be unmotivated and looking for ways to leave the organization or just the opposite might occur. Of course, the most desired condition is to have both member satisfaction and productivity. However for teams of short duration, member satisfaction might be overlooked and productivity might become more important.

Based on the findings in the literature and the conclusions drawn, this study aims to look at the relationship between team composition and effectiveness.

A. Variables of the Research

Dependent variables	Independent variables
Effectiveness	Team composition

B. Operational Definitions

1. *Team composition* in this study refers to the heterogeneity or homogeneity of the teams depending on the demographic characteristics of the team members.

Therefore;

- a. Teams that have members with different demographical characteristics in terms of age, marital status, place of birth, number of children and educational background are referred to as *heterogeneous teams* in this study.
- b. Teams that have members with similar demographical characteristics in age, marital status, place of birth, number of children and educational background are referred to as *homogeneous teams* in this study.

2. *Team effectiveness* is defined in terms of four dimensions in this study:

a. *Creativity* of the solutions

Creativity is defined according to three criteria (*as defined by E. Paul Torrance*)

- i. *the number of alternatives (fluency)* generated to a given problem without looking at the quality of the opinion
 - ii. *range of perspectives (flexibility)* which refer to the different categories of ideas generated
 - iii. *originality* of the solutions generated which refers to a completely new thought alternative which has not been tried out in the past and which has not been thought out before
- b. *Time spent* for taking a decision, which is measured by counting the number of minutes in taking the decision. In other terms it is the speed in taking the decision.

c. *Quality* of the decision is defined according to three criteria:

Quality of the decision is defined according to three criteria

- i. *cost* that will be incurred in terms of TL by putting the decision into application and in terms of manpower needed.
 - ii. *applicability* of the decision which is measured by the ease with which the decision will be put into use.
 - iii. *time* that will be spent in putting the decision into use.
- d. *Job satisfaction* for the members which is measured by how well the members meet their personal needs as a result of the work performed and as a result of their membership in the team.

C. Hypotheses

H1: Heterogeneous teams will perform better than homogeneous teams in generating more creative solutions to an identified problem.

H2: Heterogeneous teams take better quality decisions than homogeneous teams.

H3: Homogeneous teams spend less time in reaching a solution to a problem than heterogeneous teams.

H4: Members of heterogeneous teams experience more job satisfaction than homogeneous teams.

METHOD

I. RESEARCH SETTING AND THE SAMPLE

The design of the study is experimental. The experiment was conducted in a factory site of a multinational organization. The organization is manufacturing fast-moving consumer goods specialized in cleaning agents. The unit of analysis is teams. Twelve teams were formed for the study. The individuals working in the factory are used to form teams with either heterogeneous or homogeneous characteristics. Since, in the factory all operators except two were males, the teams were all composed of men. The study is cross-sectional because the data is gathered at one shot in order to test the hypotheses.

Although the experiment setting is somewhat more natural than a typical experimental laboratory study, it is not equal to a field setting due to two reasons.

- The work teams were not permanent teams, they were developed only for this study. Although the teams are being used by the organization for daily work activities, the teams developed by the experimenter are not the actual teams used in the factory.

- Although the task given to be resolved was a problem being experienced among the workers and has been informed to come up as part of their job, among the many problems experienced this problem was prepared by the experimenter and the Human Resources Department to be solved as the task. It is not a natural occurrence.

The sampling is a convenience sampling since the experiment is carried out in one factory site, which is conveniently available to provide this condition for the experimental study.

As stated above, the experiment is conducted in one factory of the organization, which is located at Gebze. The total number of operators in the factory is 87. The Gebze factory was established in 1997. The operators for the factory had been recruited either from other factories or technical high schools in Gebze region. Gebze is an hour distance from Istanbul. There is no labor union in the factory.

TABLE 2 (Gebze Factory: Demographic Information about the Workers)

		Operator	Assistant	Leader	Total
Number of staff		87	10	6	103
Education	High school	82	8	0	90
	University	5	1	4	10
	Master	0	1	2	3
Average age		27	30	37	29
Experience		2	4	11	3
Average tenure		2	2	2	2

Each subject in the study has become a member of one of the 12 teams. Each work team was composed of five members and the subjects stayed within the same team throughout the study, over approximately one and a half-hour period. During this period, team members were allowed to interact only with the same team members not with the members of other teams.

The factory has approximately eighty operators in total, out of which, sixty were allowed to participate in the study due to the arrangement of production. However, since all sixty operators could not be withdrawn from the production at the same time and since there were three shifts, the study was conducted at two consecutive periods. That is, the operators at the 8h-16h shift has participated the study after their shift, whereas those operators at the 16h-24h shift have come to the factory two hours before their shift to participate in the study and started their work after the application. By this way, it was ensured that the two shifts have no interaction with each other before they participated in the study.

This study was an experimental design where only the posttest scores of two different types of team were taken.

Team	Task	Outcome
Heterogeneous teams	X	O1
Homogeneous teams	X	O2

Difference in effectiveness was measured as O1-O2

Since in this study twelve teams were used in two different shifts, there was a need for five experimenters besides the researcher. Therefore, the researcher had to train all the other five experimenters to establish uniformity in all twelve applications. As a result, the researcher first gave training to five experimenters and then conducted a pilot study, as a live example for them to observe and to depict possible problems that might come up and finally conducted the experiment at the factory.

A. Training

The experimenters are from the Marmara University, Department of Business Administration. As stated before, five experimenters were helping the researcher in this study and to keep uniformity between teams all experimenters were females.. The training was conducted at Marmara University in the researcher's office. The researcher had distributed the Appendix 2 to the experimenters and explained them how the study would be conducted.

All of the experimenters were told to pay attention to the following rules of managing the team discussion to keep harmony between different teams:

- At the beginning, experimenters need to greet the participants warmly and try to create a friendly climate to encourage the participants speak up.
- The beginning speech giving the aim of the study and rules of discussion would follow the greeting (Appendix 2). Here the experimenter should be careful in setting the tone of the discussion. She should not be too rigid or too informal.

- After the purpose of the discussion session is stated, it would be emphasized that at the idea generation section, there is no right or wrong answers, but rather differing points of view. Therefore, the participants should be comfortable in sharing their differing points of views.
- It would be reminded that this is just a research project and it is important that everybody speaks up ensuring only that one person speaks at a time. It would be reminded that as a project, the main interest is in ideas not in who said what. The alternatives brought up here would merely used in the thesis study, but recommendations would be made to the factory to improve the conditions in this site, based on the participants' suggestions.
- The experimenters were only concerned with directing the discussion, keeping the idea generation and discussion flowing and taking notes.
- Experimenters should be careful in listening to others suggestions.
- Experimenters needed to be careful that note taking did not interfere with the spontaneous nature of the team discussion; if it did, the participants should pause while the experimenter took notes and the discussion would hardly be comfortable, free- flowing and relaxed.

B. Pilot Study

Before the experiment was actualized in Gebze factory, a pilot study was carried out in another factory of the organization where the researcher demonstrated to the other five experimenters how the instructions were given and how different measurements needed to be performed in the real setting. This pilot study also helped in identifying any problems that could come up related with the actual application which would be helpful for the researcher to take precautions before the actual experiment.

During the pilot study conducted just two weeks before the actual application, no problem occurred. The participants were willing to communicate but they were only unwilling to make a decision. Here the researcher stated that it was very important that they made their team decision together because this would be helpful to see what is the most important issue from their point of view in solving the problem on hand. Afterwards, they were convinced and everybody participated in decision-making. However, the team wanted to make more than one decision, but the researcher did not let it and emphasized that only one decision would be taken. However, after reviewing this situation with the advisor, it was decided that in the actual application the teams would be allowed to make more than one decision if they requested; otherwise it would be an interference in the team's decision which would not reflect natural flow of making decisions.

C. Actual Application

The actual application took place at Gebze site two weeks after the pilot study. It is explained in detail in the Task section.

II. FORMATION OF THE EXPERIMENTAL GROUPS

In the study, initially the demographic characteristics of the individuals were collected through the personnel files in the factory. After all the information was gathered, heterogeneous and homogeneous teams were formed by the experimenter depending on the demographic characteristics of the individuals.

Heterogeneous teams were formed by members with different demographic characteristics and homogeneous teams were formed by members with similar demographic characteristics.

After the teams were formed, a task requiring both idea generation to a specific problem in the factory field and decision-making was given to both the heterogeneous and homogeneous teams.

As stated above, while forming the teams, the characteristics considered for homogeneity and heterogeneity are educational background, place of birth, marital status, date of birth and having a child or not. However, since this experiment has been carried out in a factory site where there are 81 workers, out of which 60 were used, it was not easy to match the homogeneous teams in all the characteristics. Therefore, each characteristic was given a degree of vitality in affecting the

homogeneity and as a result a degree of homogeneity was calculated for each team to reveal the homogeneity differences between the teams. (for example: education was put in the first in order of vitality thinking that it would affect the similarity in way of thinking more than marital status). The degree of vitality for each characteristic is summarized in Table 3

TABLE 3 (Degree of vitality)

Education	5 points
Place of birth	4 points
Marital status	3 points
Having a child or not	2 points
Date of birth	1 point

The teams and their degree of homogeneity are given in Appendix 5.

III. TASK

The task consists of a problem for which solutions to be generated. It is defined by the researcher and the human resources manager of the factory and the human resources director of the head office. It is stated by the company management that the decrease in motivation, unwillingness to restart working and difficulty in getting concentrated at work after long vacation or yearly time-offs have being experienced among the workers for a certain time period and this was leading to increases in accidents at the work place. The managers have proposed this case to be given as a problem for which

solutions to be generated and a decision to be taken. It would be also useful for the company management in trying to find a solution to this long-lasting problem.

In the factory, this task was given to each of the twelve teams, out of which six was homogeneous and six was heterogeneous. The teams were asked to generate a list of alternatives that might be utilized in solving the problem and afterwards decide which of the alternatives they thought was the most effective for solving the problem. As a result, each team ended up with a decision.

Before the task, a warm-up session was carried out in each team by asking the members to introduce the member sitting beside him. Although the members were acquainted with each other since they were working at the same site, this exercise was used as 'ice breaker'. The experimenters introduced themselves to the teams before giving information about how the study would be conducted.

As stated above, the first session included only idea generation. To ensure that every team member had equal chance to speak up, a round robin in which each team member presented his ideas to the team was set up. The alternatives generated by each team was recorded by an experimenter responsible for her team. The experimenters did not interfere during the idea generation or decision-making process; they only gave the directions at the beginning and wrote down the alternatives generated on the flip chart where every member could easily see. It was emphasized that at this session no discussion of ideas would occur and people would only express their suggestions until every person's ideas had been presented and written down for general viewing. For the participants to clearly understand how the session shall proceed, a one-tour

exercise was conducted with a different problem created at that moment. This first example was designed to engage all participants one at a time in the discussion, which would also help in breaking the ice and get each participant talk.

After all the ideas are presented, open discussion of ideas took place for the purpose of clarification and evaluation. This part of the discussion was spontaneous. An observation form was presented to the experimenters by the researcher before the experiment. The open-ended questions (Appendix 1) form enabled the experimenters to write their observations about the process after the experiment was over. The assistant could note the individuals who tended to dominate the team, who considered themselves as experts or who were shy and quiet. Here the experimenter would also be able to evaluate the mechanism each team used for arriving a decision.

IV. MEASURES OF EFFECTIVENESS

In measuring *team effectiveness* the four dimensions (creativity, speed, quality and satisfaction) were measured separately.

A. Creativity

Creativity has three aspects: Number of alternative solutions, originality of the solutions and the range of perspectives.

1. The number of alternatives

Alternative solutions generated to the problem by each team was counted by the researcher.

2. The range of perspectives

The ideas generated by each team were given to the experimenters that helped in the application of the experiment. There was a total of six people together with the researcher. They were asked to evaluate the alternatives individually and categorize the alternatives. Afterwards, the average of the six persons was taken to calculate the number of categories in each team..

3. Originality of the solutions

The problem was given to a sample of sixty people for generating alternative solutions. The number of alternative solutions generated by the teams in the factory site was listed by the researcher. A score of zero was assigned to alternative solutions that were repeated by five or more percent of the respondents. A score of one was assigned to alternative solutions that were repeated by two to four percent of the respondents. A score of two was assigned to an alternative repeated by one percent or less of the respondents. As a result each alternative was given an originality weight which would help in scoring the originality score of the team by summing up the scores of each alternative in each team.

B. Time spent

The experimenter responsible for each team recorded time in taking the decision.

C. Quality of the decision

Quality of the decision was rated according to three criteria: cost, applicability and the time required for application of the decision.

The whole list of decisions generated by the teams was given to the human resources management department in the head office and the factory with an evaluation form as in Appendix 3. Since some of the teams had come up with more than one decision, there were a total of seventeen decisions. Therefore, before evaluating the decisions in terms of cost, applicability and the time required for application of the decision, the evaluators were asked to depict the decisions that were irrelevant with the problem, ambiguous or about which the company could not do anything. As a result, those decisions were not evaluated and only those, not eliminated were taken into consideration in the evaluation.

The evaluators of the decisions were three people, one of whom was specialized in psychology, one in sociology and one in human resource management. Therefore for each decision there were three test scores. The average of the three persons' evaluation of the decision was taken to be able to come up with one cost, applicability and time required for application score. The most important thing here is the lower the

score, the better the quality of decision is. An overall quality score was also evaluated by taking the average of the cost, applicability and time required for application.

1. Cost

The decisions that were not eliminated were evaluated on a four-point scale in terms of cost that would be incurred in TL by putting the decision into application. As a result, each decision was having a cost score ranging from one to four which made each team's cost score to be easily calculated. The less the cost, the better the quality of the decision. Evaluation form is attached as Question 1 in Appendix 3.

2. Applicability

The decisions that were not eliminated were evaluated on a six-point scale. Each decision was having an applicability score ranging from one to six which makes each team's applicability score to be easily calculated. The less the score, the easier the applicability of the decision. Evaluation form is attached as Question 2 in Appendix 3.

3. Time

The decisions that were not eliminated were evaluated on a six-point scale. Each decision was having a time score ranging from one to six which made each team's time score to be easily calculated. The less the time spent, the better the quality of the decision. Evaluation form is attached as Question 3 in Appendix 3.

D. Job satisfaction

Personal satisfaction was measured by a five-item questionnaire, having a six-point scale. The questionnaire is given in Appendix 4. The questionnaires were distributed to the subjects just after the completion of the task at the factory.

V. STATISTICAL ANALYSES

Two types of analyses were conducted for this study because there are two units of analysis. One unit of analysis is individuals (while measuring satisfaction) and the other unit of analysis is teams. For the individual unit of analysis t- tests were used because the sample size was thirty individuals per each type of team. However, for team unit of analysis Mann-Whitney U- Wilcoxon Rank Sum test was used since the sample size was six for each type of team.

In conducting the statistical analyses, first of all, the means of each team were calculated in relation to creativity, time spent for reaching the decision, the quality of the decision and the job satisfaction.

For creativity, each team had certain number of alternatives, the number of categories that the alternatives can be classified and originality score. The means of homogeneous and heterogeneous teams were calculated to see if any differences exist.

For the time spent for reaching a solution, again each team had certain minutes of time, which enables the calculation of means for both homogeneous and heterogeneous teams.

For the quality of the decision, each team had a score for three criteria: cost, applicability and the time required for application of the decision. Again, here the means of homogeneous and heterogeneous teams were calculated.

After comparing the means, Mann-Whitney U- Wilcoxon Rank Sum test was used which is an equivalent of t-test for non-parametric analysis. The non-parametric test was used due to the small size of the sample.



RESULTS

As stated before, the objective of this study is to look at the relationship between team composition and effectiveness where the team composition is manipulated to see its impact on effectiveness. The hypotheses of the study claim that heterogeneous teams are more creative in generating solutions to problems, take better quality decisions and more satisfied with their jobs, whereas homogeneous teams are faster in taking decisions. The calculation of means reveal the following results listed on Table 4.

TABLE 4 (Summary of means)

	Homogeneous Teams (means)	Heterogeneous Teams (means)
Creativity		
Number of alternatives	22.6	24.6
Originality	23.8	29.5
Range of perspectives	7.25	7.81
Time to make a decision	12.83	14.67
Decision quality	4.12	3.29
Cost	3.44	2.83
Applicability	4.33	3.38
Time required	4.61	3.67
Job satisfaction (total)	24.9	24.76
Satisfaction with the alternatives	4.8	4.76
Satisfaction with the decision	4.83	4.63
Satisfaction with the teammates	5.13	5.20
Desire to make such a study again	5.36	5.1
Desire to work with the same teammates	4.76	5.07

Here, as illustrated on Table 4, the number of alternative solutions, the originality of the solutions and the number of categories that the alternatives can be classified are slightly higher for heterogeneous teams than homogeneous teams as hypothesized.

The time required for reaching a decision for heterogeneous teams is again slightly higher than the homogeneous teams as hypothesized.

For the decision quality, the heterogeneous teams' mean scores are lower than homogeneous teams for cost, applicability, time for application and the overall quality of the decision, which imply the better quality of decision as hypothesized.

However, as opposed to the hypotheses, homogeneous teams' mean satisfaction scores with the decision taken, with idea generation and with the job is slightly higher than heterogeneous teams. On the other hand, heterogeneous teams show slightly more satisfaction with their teammates and more willing to work with the same teammates again in the future.

After the calculation of the means, the results of the Mann-Whitney U- Wilcoxon Rank Sum test for the teams reveal the following mean rank results.

Table 5 summarizes the results of the differences between homogeneous and heterogeneous teams in terms of the number of ideas generated. Since, the ideas generated are ranked in the descending order, this analysis reveals that heterogeneous

teams generated more alternative solutions since their mean rank is 5.83, whereas homogeneous teams' is 7.17.

TABLE 5 (Differences between the number of ideas)

	No of Cases	Mean rank	Z	2-Tailed P
Homogeneous Teams	6	7.17	-0.6405	0.5218
Heterogeneous Teams	6	5.83		

Table 6 summarizes the results of the differences in mean ranks between homogeneous and heterogeneous teams in terms of the originality of ideas generated. Again due to the ranking in descending order, the analysis reveals that heterogeneous teams' solutions are more original since their mean rank is 5.33, whereas homogeneous teams' is 7.67.

TABLE 6 (Differences between the originality of ideas)

	No of Cases	Mean rank	Z	2-Tailed P
Homogeneous Teams	6	7.67	-1.1229	0.2615
Heterogeneous Teams	6	5.33		

Table 7 summarizes the results of the differences in mean ranks between homogeneous and heterogeneous teams in terms of the number of categories the

alternative solutions can be classified (range of perspectives). Again due to the ranking in descending order, the analysis reveals that heterogeneous teams' range of perspectives are higher since their mean rank is 5.75, whereas homogeneous teams' is 7.25.

TABLE 7 (Differences between the categories of solutions)

	No of Cases	Mean rank	Z	2-Tailed P
Homogeneous Teams	6	7.25	-0.7270	0.4673
Heterogeneous Teams	6	5.75		

As illustrated in Table 5, 6 and 7, results did not support Hypothesis 1 which claimed that heterogeneous teams would perform better than homogeneous teams in generating more creative solutions to an identified problem, where creativity was measured in terms of three dimensions: number of ideas generated, originality and the range of perspectives of the ideas. Although the difference was not significant, in all three dimensions heterogeneous teams' mean rank was lower than the homogeneous teams' means as hypothesized.

Hypothesis 2 claiming heterogeneous teams would take better quality decisions than homogeneous teams was not supported as illustrated in Table 8. As stated in the Measures of Effectiveness section (page 120), the decisions taken by each team were evaluated for cost, applicability and time required for application. On the following tables (Tables 8, 9, 10), the mean ranks are given. Table 10 gives an overall picture of

the quality evaluation. The most important thing here is the lower the score, the better the quality of decision is. Since in the Mann-Whitney U- Wilcoxon Rank Sum test, the ranking is done in descending order, the higher ranked decisions show better quality in all three dimensions and overall quality. Therefore the higher the rank, the better the quality of the decision is.

TABLE 8 (Quality of decision in terms of cost)

	No of Cases	Mean rank	Z	2-Tailed P
Homogeneous Teams	6	5.58	-0.8998	0.3682
Heterogeneous Teams	6	7.42		

TABLE 9 (Quality of decision in terms of applicability)

	No of Cases	Mean rank	Z	2-Tailed P
Homogeneous Teams	6	6.33	-0.1615	0.8717
Heterogeneous Teams	6	6.67		

TABLE 10 (Quality of decision in terms of time required for application)

	No of Cases	Mean rank	Z	2-Tailed P
Homogeneous Teams	6	5.50	-0.9693	0.3324
Heterogeneous Teams	6	7.50		

TABLE 11 (Difference between the overall quality of decisions)

	No of Cases	Mean rank	Z	2-Tailed P
Homogeneous Teams	6	5.83	-0.6416	0.5211
Heterogeneous Teams	6	7.17		

Although on the average, heterogeneous teams took better quality decisions than homogeneous teams, the mean rank difference was not significant (1.34).

Hypothesis 3 which claimed that homogeneous teams spend less time in reaching a solution to a problem than heterogeneous teams was not supported either, but between-group difference is again as hypothesized (Table 12). Homogeneous teams mean rank is 6.83 whereas heterogeneous teams' is 6.17. Since ranking is performed in descending order, lower rank shows more time spent on decision-making.

TABLE 12 (Difference between homogeneous and heterogeneous teams in terms of time required to make a decision)

	No of Cases	Mean rank	Z	2-Tailed P
Homogeneous Teams	6	6.83	-0.3208	0.7483
Heterogeneous Teams	6	6.17		

As opposed to Hypothesis 4, claiming, members of heterogeneous teams experience more job satisfaction than homogeneous teams, no difference was found in terms of job satisfaction between differently composed teams as a result of t-tests conducted, as illustrated in Table 13.

TABLE 13 (Difference between homogeneous and heterogeneous teams in terms of job satisfaction)

	No of Cases	Mean	SD	2-Tail. Sig
Homogeneous Teams' members	30	24.9000	4.302	0.897 (eq)
Heterogeneous Teams' members	30	24.7667	3.636	0.897 (eq)

Mean Difference = 0.1333

Levene's test for Equality of Variance: F= 0.677 P=0.414

As shown on Table 13, homogeneous teams' members mean satisfaction score is slightly higher than the heterogeneous teams', but the difference is not a significant one.

In order to see whether there exists a difference between homogeneous and heterogeneous teams in terms of each item asked on the questionnaire, different analyses were made for each item as illustrated in Tables 14, 15, 16, 17, and 18.

There is no difference again between homogeneous and heterogeneous teams' members in terms of satisfaction with the idea generation and decision-making stage of the application although homogeneous teams' members mean satisfaction score is slightly higher than the heterogeneous teams' (Table 14&15)

TABLE 14 (Satisfaction with the idea generation; Analysis of item 1 on job satisfaction questionnaire)

	No of Cases	Mean	SD	2-Tail. Sig
Homogeneous Teams' members	30	4.8000	0.997	0.900 (eq)
Heterogeneous Teams' members	30	4.7667	1.040	0.900 (eq)

Mean difference: 0.0333

Levene's test for Equality of Variance: F= 0.449 P=0.505

TABLE 15 (Satisfaction with the decision; Analysis of item 2 on job satisfaction questionnaire)

	No of Cases	Mean	SD	2-Tail. Sig
Homogeneous Teams' members	30	4.83	1.289	0.525 (eq)
Heterogeneous Teams' members	30	4.63	1.129	0.525 (eq)

Mean difference: 0.2000

Levene's test for Equality of Variance: F= 0.399 P=0.530

There is no difference again between homogeneous and heterogeneous teams' members in terms of satisfaction with the other team members, although this time homogeneous teams' members mean satisfaction score is slightly lower than the heterogeneous teams'. (Table 16)

TABLE 16 (Satisfaction with the teammates; Analysis of item 3 on job satisfaction questionnaire)

	No of Cases	Mean	SD	2-Tail. Sig
Homogeneous Teams' members	30	5.133	0.860	0.752 (eq)
Heterogeneous Teams' members	30	5.200	0.761	0.752 (eq)

Mean difference: -0.0667

Levene's test for Equality of Variance: F= 0.214 P=0.645

When asked whether the operators would be willing to do a similar session again, both homogeneous and heterogeneous teams' members were willing, the mean scores were quite high, and there is no significant difference between the two different teams composition. (Table 17)

TABLE 17 (Willingness to participate in a similar study again; Analysis of item 4 on job satisfaction questionnaire)

	No of Cases	Mean	SD	2-Tail. Sig
Homogeneous Teams' members	30	5.3667	0.809	0.336 (eq)
Heterogeneous Teams' members	30	5.1000	1.269	0.336 (eq)

Mean difference: 0.2667

Levene's test for Equality of Variance: $F=4.971$ $P=0.030$

When asked whether the operators would be willing to work with same team members again if a similar session conducted in the future, both homogeneous and heterogeneous teams' members were willing. Again, the mean scores are quite high and there is no significant difference between the two different teams composition although heterogeneous teams scored slightly higher (Table 18).

TABLE 18 (Willingness to work with the same teammates ; Analysis of item 5 on job satisfaction questionnaire)

	No of Cases	Mean	SD	2-Tail. Sig
Homogeneous Teams' members	30	4.7667	1.278	0.285 (eq)
Heterogeneous Teams' members	30	5.0667	0.828	0.286 (eq)

Mean difference: - 0.3000

Levene' test for Equality of Variance: F= 4.206 P=0.045

CONCLUSION AND DISCUSSION

The central argument of this study is that heterogeneous teams are more effective than homogeneous teams in terms of generating creative solutions to a specific problem, quality of the decision taken and job satisfaction they experience, whereas homogeneous teams are more effective in making a decision more quickly. Although the four hypotheses that were claimed, were not supported, the differences in the means and mean ranks between homogeneous and heterogeneous teams showed that the effectiveness scores of heterogeneous teams were higher than homogeneous teams. Furthermore, although nonsignificant, all of the differences were always in the direction as hypothesized.

As seen on Table 4 (on page 124), the results of the mean calculations revealed that heterogeneous teams generated more creative solutions than homogeneous teams and the means of the number of alternatives, the originality of the opinions and the range of perspectives of the alternatives were higher than homogeneous teams. However, the difference was not significant.

Again when the quality of the decision is analyzed, heterogeneous teams' decisions were again better than homogeneous teams in terms of cost, applicability and time required for application as again summarized on Table 4, although the difference was not significant.

When the time required for decision-making is analyzed, this time homogeneous teams made their decisions faster than heterogeneous teams as predicted in Hypothesis 3 although again the difference was not significant (Table 18, page 124).

The results of the mean ranks calculated through Mann-Whitney U- Wilcoxon Rank Sum also reveal the similar findings as summarized below in Table 19.

Table 19 (Summary of the mean ranks)

	Homogeneous Teams' mean ranks	Heterogeneous Teams' mean ranks
Creativity		
Number of alternatives	7.17	5.83
Originality	7.67	5.33
Categories	7.25	5.75
Quality of Decision	5.83	7.17
Cost	5.58	7.42
Applicability	6.33	6.67
Time for application	5.50	7.50
Time to make decision	6.83	6.17

As seen on Table 19, the mean ranks also are in the direction as hypothesized.

Although Hypothesis 4 was not supported showing that both homogeneous and heterogeneous teams were equally satisfied with the job and the teammates, this time homogeneous teams' satisfaction score was slightly more than heterogeneous teams in relation to generation of alternatives and decision taken as opposed to the hypothesis. However, heterogeneous teams' satisfaction with teammates was slightly more than the homogeneous teams.

The most important point here is that even though a strong support did not emerge in the study for the importance of similarity or dissimilarity of demographic characteristics of the team members affecting the effectiveness, heterogeneous teams were showing slightly better performance in all the dimensions expected except for satisfaction.

The findings on job satisfaction of the team members in twelve different teams are of particular interest. Both homogeneous and heterogeneous teams were highly satisfied with the work performed and their teammates which revealed that they were enthusiastic about being a part of such a study. As stated in the Measures section on page 118, the six-point scale was used to measure job satisfaction. The total satisfaction scores of each member should be ranging from 6 (not satisfied at all) to 30 (extremely satisfied). The average of homogeneous and heterogeneous teams is around 25 which shows members of twelve teams are very satisfied with the application. Table 20 summarizes the distribution of satisfaction scores when the individual satisfaction scores are analyzed for both homogeneous and heterogeneous teams.

TABLE 20 (Distribution of satisfaction scores)

Satisfaction score	Homog. Teams	Heter. Teams
26-30	16	15
21-25	10	11
16-20	3	4
11-15	1	0
Less than 10	0	0

As revealed in the above Table, out of 60 members, 31 members were extremely satisfied, 21 very satisfied, 7 moderately and 1 little satisfied with the job they performed during this study.

The reason for this very high satisfaction scores might be due to the nature of the study because as mentioned in the Task section, every operator participated in the study was given a chance to express his opinion until no one has got any idea to express. The eagerness of the participants were observed and recorded by each experimenter responsible of her team. They had mentioned on their notes (Appendix 1) that there was nobody who did not participate in the idea generation session. Even though some leaders emerged in some of the teams, they were not dominating the teams, rather they were acting as facilitators, asking all of the participants' views on the decision when they were taking the decision. It was observed that participants were happy and willing to participate. This is also expressed on the satisfaction questionnaires while the participants both in homogeneous and heterogeneous teams were mentioning that they were willing to make such a study again (Table 4: mean scores = 5.36; 5.1).

Although it was stated by the Human Resource Department that teamwork had started to be applied in the factory and the operators were used to having their opinions taken

on emerging problems and the organization was trying to establish its worldwide management system known as 'High performance-high commitment' in the Gebze site. The fundamental of this system is based on learning organization concept and encounters a five-step group development plan.

The Team Development Model is summarized as below.

Steps:

1. Team development: One-to-one controller

1. Central management: Team leader

2. Shared leadership: Team coordinator

3. Self-management: Border leader

4. Complete self-management

Throughout the process, the organization is planning to reach up to the fifth step.

Sharing of information and participation in decision-making has been the main objectives of this system.

This application was completely different from what they were used to. As stated in that model, the last step would be 'self-management' which they were planning to reach in a rather long period of time. However, in this study, the self-management was applied because there was no leader, no coordinator appointed for the team. It was especially mentioned in each team that the experimenters were only there to record their opinions and the decision on the board and a round ribbon method was especially used to give everybody a chance to talk. As stated above, even if a leader

emerged in the team, it was again their choice to accept him or not. No intervention by the experimenters occurred. As recorded by experimenters, these naturally emerging leaders were not dominating teams but they were trying to include those who were speaking less than the others, in the decision-making session. It is also very important that leaders, if emerged, did so in the decision-making session. In the alternative generation session, everybody was very polite to each other's view, listening and not interrupting before his turn has come up. At the beginning of the study, it was mentioned to each team that these small teams were developed because it was important to get each person's opinion on the issue while the problem was theirs and it was them who needed to choose the best solution for them. This is also something new for them because although they had teamwork in the workplace, these teams were not so small, and although their opinions on related issues were being taken, this was more likely carried out as brainstorming where everybody might not get the chance to talk or social loaf, thinking other friends were anyway performing as required. The Human Resourcer in the factory stated that when there was a problem, operators were asked to make their suggestions written on paper and leave it in the 'Suggestion Box'.

As a result, the satisfaction of both homogeneous and heterogeneous teams was high and no significant difference was found, although the satisfaction of homogeneous teams was slightly more (mean difference: 0.2) than heterogeneous teams in idea generation and decision-making. However, heterogeneous teams were slightly more satisfied with their teammates and willing to participate in a similar study with the same teammates (mean difference: 0.3).

As stated in the Results section, no significant difference was found between homogeneous and heterogeneous teams in relation to generating creative solutions to the problem. However, consistent with findings of Magjuka & Baldwin (1991) heterogeneity of the teams increased the effectiveness of the teams in this study slightly (Table 4), because alternatives generated by heterogeneous teams were slightly more original, greater in amount and had more range of perspectives although the difference was not significant. As stated by Hoffman (1959) and Hoffman & Maier (1961) diversity of team members helped in bringing diverse perspectives to the decision-making process.

Homogeneous teams, consistent with the theories, arrived at a decision faster than heterogeneous teams, while the difference was not significant as illustrated on Tables 4 & 19. The quality of the decisions made by heterogeneous teams, on the other hand, exceeded the homogeneous teams slightly again consistent with the theories in the literature. As stated by Jackson (1996) team diversity in terms of personality, training, background, leadership abilities, attitudes and gender is very essential for high-quality team decision making in creative decision-making tasks. Especially, cultural heterogeneity contributes on tasks that require a variety of viewpoints. Culturally heterogeneous teams might be more likely to have difficulty in learning to work with each other or solving problems and this might lead to spending greater time in reaching solutions (Robbins, 1996). But again, due to the restrictions on the sample size, the differences were not significant in this study.

This might be due to the restricted sample number. In this study, because it was experimental, it was difficult to increase the number of sample, therefore it was

carried out with twelve teams, six of which homogeneous and six heterogeneous. Although many factories were contacted to conduct the study, they were unwilling to participate in such a study, because they had to give up from their production time to include their workers in the application. However, the factory where the study carried out was willing and let us use their sixty workers for the intended application. Therefore, if the sample size were to be increased, these slighter differences in the intended direction might have increased with a significant result.

This study provides new insights into team composition and effectiveness. Identification and demonstration of the importance of demographic characteristics might contribute to the future research if the studies are carried out with larger number of teams. Organizations might be constrained significantly in terms of diversity among workers, which might hinder the effectiveness of already established teams. However, this study illustrates that demographic heterogeneity might be helpful in increasing effectiveness when there is a need for creative opinions and better quality decisions. It should also be considered that, not only demographic characteristics, but also heterogeneity in culture, personality characteristics might help in increasing effectiveness. If in this study, instead of demographic characteristics, cultural or personality characteristics were taken for identifying the composition of the team, different conclusions might have been arrived.

Another important feature of the factory where the study was conducted, is the rotation of the workers every two months. Operators were rotating between different jobs which enable them to be equipped well and get to know what each other is doing. Therefore, the demographic characteristic of educational background might not have

affected very much the way participants look at the issue. In top management teams, educational and functional backgrounds are the two important factors with which the management develops heterogeneous teams. Because these two factors are affecting the way people look at the problems or bring solutions to the problems while they affect the cognitive base (Hambrick&Mason, 1984) mentioned in the Literature review section on page 96. Due to this rotation practice while developing the teams, functional background was not included as one of the characteristics because it was thought that it would not bring any difference between people in terms of perceiving a problem or processing information. However, although educational background was included as a demographic characteristic, it seems that it did not have much effect too. It might be that since the operators are involved with each other's works so much, by the time, the differences in education are disappearing and bringing no more diversity to problem solution, because through rotation everybody becomes to have the same experiences.

As a result, another implication of this study is that homogeneous teams might become as effective as heterogeneous teams by practicing rotation among different sets of work. Instead of trying to increase effectiveness by heterogeneity, the homogeneous teams in the hands of the management might be trained to be effective by rotation or by job enlargements which would enable them to perceive things from different perspectives and be more creative.

It might be concluded that this study, although not significantly supported the relationship between team composition and effectiveness, had arrived at results showing a slightly higher effectiveness of heterogeneous teams over homogeneous

teams in tasks requiring creativity and higher quality decisions in the direction as hypothesized. However, to test the hypotheses again, future research might be carried out with greater sample size and in different settings. In selecting the setting, it might be ensured that workers do not rotate between different works so that they can purely reflect their differences in educational and functional background to the problem solution.



REFERENCES

Adler, N.J. (1997). *International dimensions of organizational behavior* (3rd Ed.) Cincinnati, OH: South-Western College Publishing. Cited in Kirkman, L. Bradley & Shapiro, L. Debra. (1997). The Impact of Cultural Values on Employee Resistance to Teams: Toward a Model of Globalized Self-Managing Work Team Effectiveness. *Academy of Management Review*, Vol. 22, No: 3, 730-757.

Alderfer, C.P. (1977). (eds. Hackman, J.R. & Suttle, J.L.) Group and Intergroup Relations. In *Improving the Quality of Work Life*, 227-296. Pallisades, CA: Goodyear. Cited in Guzzo, A. Richard & Dickson, W. Marcus. (1996). Teams in Organizations: Recent Research on Performance and Effectiveness. *Annual Review of Psychology*, 47, 307-338.

Allen, T.J. (1986). Organizational structure, information technology and R&D Productivity. *IEEE Transactions on Engineering Management*. EM.334; 212-217. Cited in DeSanctis, Gerardine & Poole, Scott Marshall (1997). Transitions in Teamwork in New Organizational Forms. *Advances in Group Processes*, Volume 14, 157-176.

Ancona, D. (1989). Top management teams: Preparing for the revolution. In J. Carroll (Ed.), *Social Psychology in Business Organizations*, 99-128. New York: Erlbaum.

Cited in Keck, L.Sarah & Tushman, L., Michael (1993). Environmental and Organizational Context and Executive Team Structure. *Academy of Management Journal*, Vol. 36, No: 6, 1314-1344.

Ancona, D., G & Caldwell, D., F. (1992). Demography and design: Predictors of new product team performance. *Organization Science*, 3(3), 321-341. Cited in Cohen, G. Susan & Bailey, E. Diane (1997). What Makes Teams Work: Group Effectiveness Research from the Shop Floor to the Executive Suite. *Journal of Management*, Vol.23, No: 3, 239-290.

Back, K.W. (1951). Influence through social communication. *Journal of Abnormal and Social Psychology*, 46: 9-23. Cited in Mudrack, E. Peter. (1989). Group Cohesiveness and Productivity: A Closer Look. *Human Relations*, Vol.42, No: 9, 771-785.

Bantel, K.A. & Jackson S.E. (1989). Top management and innovations in banking: Does composition of the top teams make a difference?. *Strategic Management Journal*, 10: 107-124 (Special issue). Cited in Guzzo, A. Richard & Dickson, W. Marcus. (1996). Teams in Organizations: Recent Research on Performance and Effectiveness. *Annual Review of Psychology*, 47, 307-338.

Bateman, S. Thomas & Zeithaml, P. Thomas. (1993). *Management - Function & Strategy* (2nd Ed.) Boston: Richard D. Irwin Inc.

Bhagat, R.S., Kedia, B.L., Crawford, S.E., & Kaplan, M.R. (1990). Cross-cultural issues in organizational psychology: Emergent trends and directions for research in the 1990s. In C.L. Cooper & I.T. Robertson (Eds.), *International Review of Organizational Psychology*, vol. 5, 59-99. New York: Wiley. Cited in Kirkman, L. Bradley & Shapiro, L. Debra. (1997). The Impact of Cultural Values on Employee Resistance to Teams: Toward a Model of Globalized Self-Managing Work Team Effectiveness. *Academy of Management Review*, Vol. 22, No: 3, 730-757.

Blau, P.M. (1970). A formal theory of differentiation in organizations. *American Sociological Review*, 35, 201-218. Cited in Halebian, J. & Finkelstein, S. (1993). Top management team size, CEO dominance and firm performance: The moderating roles of environmental turbulence and discretion. *Academy of Management Review*, Vol: 36, No: 4, 844-863.

Boyacigiller, N.A., & Adler, N.J. (1991). The parochial dinosaur: Organizational science in a global context. *Academy of Management Review*, 16: 262-290. Cited in Kirkman, L. Bradley & Shapiro, L. Debra. (1997). The Impact of Cultural Values on Employee Resistance to Teams: Toward a Model of Globalized Self-Managing Work Team Effectiveness. *Academy of Management Review*, Vol. 22, No: 3, 730-757.

Burns, T. & Stalker, M.G. (1961). *The Management of Innovation*. London: Tavistock. Cited in Smith, G. Ken & Smith, A. Ken & Olian, A. Judy & Sims, P. Henry Jr. & O'Bannon, P. Douglas & Scully, A. Judith. (1994). Top Management

Team Demography and Process: The Role of Social Integration and Communication. *Administrative Science Quarterly*, 39, 412-438.

Bushe, G.R. & Shani, A.B. (1991). Parallel learning structures. Increasing innovation in bureaucracies. Reading MA: Addison Wesley. Cited in Cohen, G. Susan & Bailey, E. Diane (1997). What Makes Teams Work: Group Effectiveness Research from the Shop Floor to the Executive Suite. *Journal of Management*, Vol.23, No: 3, 239-290.

Byrne, D. (1961). Interpersonal attraction as a function of affiliation need and attitude similarity. *Human Relations*, 14:63-70. Cited in Wiersema, F. Margerethe & Bantel, A.Karen (1992). Top Management Team Demography and Corporate Strategic Change. *Academy of Management Journal*, Vol.35, No.1, 91-121.

Byrne, D., & Wong, T.J. (1962). Racial prejudice, interpersonal attraction and assumed dissimilarity of attitudes. *Journal of Abnormal and Social Psychology*, 65: 246-253. Cited in Wiersema, F. Margerethe & Bantel, A.Karen (1992). Top Management Team Demography and Corporate Strategic Change. *Academy of Management Journal*, Vol.35, No.1, 91-121.

Campbell P. John & Campbell J. Richard and Associates (1988). *Productivity in Organizations- New Perspectives from Industrial and Organizational Psychology*. San Fransisco: Jossey-Bass Publishers.

Campion M.A., Medsker G.J., Higgs A.C.(1993). Relation between work group characteristics and effectiveness: implications for designing effective work groups. *Personnel Psychology*, 46: 823-850. Cited in Guzzo, A. Richard & Dickson, W. Marcus. (1996). Teams in Organizations: Recent Research on Performance and Effectiveness. *Annual Review of Psychology*, 47, 307-338.

Cannon-Bowers, J.A., Oser, R., & Flanagan, D.L. (1992). Work teams in industry: A selected review and proposed framework . In R.W. Swezey & E. Salas (Eds.), *Teams: Their training and performance*: 355-377. Norwood, NJ: Ablex. Cited in Kirkman, L. Bradley & Shapiro, L. Debra. (1997). The Impact of Cultural Values on Employee Resistance to Teams: Toward a Model of Globalized Self-Managing Work Team Effectiveness. *Academy of Management Review*, Vol. 22, No: 3, 730-757.

Chaganti, Rajeswararao & Sambharya, Rakesh (1987). Strategic orientation characteristics of upper management. *Strategic Management Journal*, 8, 393-401. Cited in Hambrick, C. Donald & Cho, Seung Theresa & Cher, Ming-Jer. (1996). The Influence of Top Management Team Heterogeneity on Firms' Competitive Moves. *Administrative Science Quarterly*, December, 659-684.

Cohen, G. Susan & Bailey, E. Diane (1997). What Makes Teams Work: Group Effectiveness Research from the Shop Floor to the Executive Suite. *Journal of Management*, Vol. 23, No: 3, 239-290.

Cohen, S.G., & Ledford, G.E., Jr. (1994). The effectiveness of self-managing teams: A quasi-experiment. *Human Relations*, 47, 13-43. Cited in Kirkman, L. Bradley & Shapiro, L. Debra. (1997). The Impact of Cultural Values on Employee Resistance to Teams: Toward a Model of Globalized Self-Managing Work Team Effectiveness. *Academy of Management Review*, Vol. 22, No: 3, 730-757.

Cordery, J.L., Mueller, W.S., & Smith, L.M. (1991). Attitudinal and behavioral effects of autonomous group working: A longitudinal field study: *Academy of Management Journal*, 34, 464-476. Cited in Kirkman, L. Bradley & Shapiro, L. Debra. (1997). The Impact of Cultural Values on Employee Resistance to Teams: Toward a Model of Globalized Self-Managing Work Team Effectiveness. *Academy of Management Review*, Vol. 22, No: 3, 730-757.

Cummings, L.L., Huber, G. P., Arendt, E. (1974). Effects of team size and spatial arrangements on group decision-making. *Academy of Management Journal*, 17, 460-475. Cited in Halebian, J. & Finkelstein, S. (1993). Top management team size, CEO dominance and firm performance: The moderating roles of environmental turbulence and discretion. *Academy of Management Review*, Vol: 36, No: 4, 844-863.

Cummings, T. (1978). Self-regulating work groups: A socio-technical synthesis. *Academy of Management Review*, 3; 625-634. Cited in Kirkman, L. Bradley & Shapiro, L. Debra. (1997). The Impact of Cultural Values on Employee Resistance to Teams: Toward a Model of Globalized Self-Managing Work Team Effectiveness. *Academy of Management Review*, Vol. 22, No: 3, 730-757.

Cyert, Richard, M., & March, James G. (1963). *A Behavioral Theory of the Firm*. Englewood Cliffs, NJ: Prentice Hall. Cited in Hambrick, C. Donald & Cho, Seung Theresa & Cher, Ming-Jer. (1996). The Influence of Top Management Team Heterogeneity on Firms' Competitive Moves. *Administrative Science Quarterly*, December, 659-684.

Daft, L. Richard (1997). *Management* (4th Ed.) Fort Worth: Dryden Press.

Denison, D.R. (1982). Sociotechnical design and self-managing work groups: The impact on control. *Journal of Occupational Behavior*, 3, 297-314. Cited in Kirkman, L. Bradley & Shapiro, L. Debra. (1997). The Impact of Cultural Values on Employee Resistance to Teams: Toward a Model of Globalized Self-Managing Work Team Effectiveness. *Academy of Management Review*, Vol. 22, No: 3, 730-757.

Dutton, J., & Duncan, R. (1987). The creation of momentum for change through the process of strategic issue diagnosis. *Strategic Management Journal*, 8: 279-296. Cited in Wiersema, F. Margerethe & Bantel, A. Karen (1992). Top Management Team Demography and Corporate Strategic Change. *Academy of Management Journal*, Vol. 35, No. 1, 91-121.

Dyer, W., G. (1977). *Team Building*. Reading, MA: Addison-Wesley. Cited in Sundstrom E. De Meusse KP, Futrell D. (1990). Work teams: application and effectiveness. *American Psychology*, 45, 120-133.

Eisenhardt, Katleen, M. (1989). Speed and strategic choice: How managers accelerate decision making. *California Management Review*, 32, 533-576. Cited in Hambrick, C. Donald & Cho, Seung Theresa & Cher, Ming-Jer. (1996). The Influence of Top Management Team Heterogeneity on Firms' Competitive Moves. *Administrative Science Quarterly*, December, 659-684.

Eisenhardt, Katleen, M. (1989). Making fast strategic decisions in high-velocity environments. *Academy of Management Journal*, 32, 543-576. Cited in Smith, G. Ken & Smith, A. Ken & Olian, A. Judy & Sims, P. Henry Jr. & O'Bannon, P. Douglas & Scully, A. Judith. (1994). Top Management Team Demography and Process: The Role of Social Integration and Communication. *Administrative Science Quarterly*, 39, 412-438.

Eisenhardt, Katleen, M. & Schoonhoven, Claudia B. (1990). Politics of strategic decision making in high velocity environment: Toward a mid-range theory. *Academy of Management Review*, 32: 533-576. Cited in Hambrick, C. Donald & Cho, Seung Theresa & Cher, Ming-Jer. (1996). The Influence of Top Management Team Heterogeneity on Firms' Competitive Moves. *Administrative Science Quarterly*, December, 659-684.

Eisenhardt, K., M. & Tabrizi, B., N. (1995). Accelerating adaptive processes: Product innovation in the global computer industry. *Administrative Science Quarterly*, 4; 84-110. Cited in Cohen, G. Susan & Bailey, E. Diane (1997). What Makes Teams Work: Group Effectiveness Research from the Shop Floor to the Executive Suite. *Journal of Management*, Vol.23, No: 3, 239-290.

Eisenstadt, S.N. (1956). *From generation to generation: Age groups and social structure*. Glencoe, IL: Free press. Cited in Wagner, W. Gary & Pfeffer, Jeffrey & O'Reilly III., A. Charles. (1984). Organizational Demography and Turnover in Top Management Groups. *Administrative Science Quarterly*, 29, 74-92.

Elder, Glen., Jr. (1975). 'Age differentiation and life course.' In A. Inkeles, J.Coleman and N. Smelser (eds.). *Annual Review of Sociology*.1: 165-190. Palo Alto, CA: Annual Reviews. Cited in Wagner, W. Gary & Pfeffer, Jeffrey & O'Reilly III., A. Charles. (1984). Organizational Demography and Turnover in Top Management Groups. *Administrative Science Quarterly*, 29, 74-92.

Finkelstein, Sydney & Hambrick, D., C. (1990). Top management team tenure and organizational outcomes: The moderating role of managerial discretion. *Administrative Science Quarterly*, 35, 484-503. Cited in Hambrick, C. Donald & Cho, Seung Theresa & Chen, Ming-Jer. (1996). The Influence of Top Management Team Heterogeneity on Firms' Competitive Moves. *Administrative Science Quarterly*, December, 659-684.

Fredrickson, W. James & Iaquinto, L. Anthony (1989). Inertia and creeping rationality in strategic decision processes. *Academy of Management Journal*, 32, 516-542. Cited in Hambrick, C. Donald & Cho, Seung Theresa & Chen, Ming-Jer. (1996). The Influence of Top Management Team Heterogeneity on Firms' Competitive Moves. *Administrative Science Quarterly*, December, 659-684.

George, J.M. & Bettenhausen, K. (1990). Understanding prosocial behavior, sales performance and turnover: a group-level analysis in a service context. *Journal of Applied Psychology*, 75:698-709. Cited in Guzzo, A. Richard & Dickson, W. Marcus. (1996). Teams in Organizations: Recent Research on Performance and Effectiveness. *Annual Review of Psychology*, 47, 307-338.

Gersick, C.J.G. (1988). Time and transition in work teams: Toward a new model of group development. *Academy of Management Journal*, 31, 9-41. Cited in Sundstrom E. De Meusse KP, Futrell D. (1990). Work teams: application and effectiveness. *American Psychology*, 45, 120-133.

Ghiselli, E., & Lodahl, T. (1958). Patterns of managerial traits and group effectiveness. *Journal of Abnormal Social Psychology*, 57:61-65. Cited in Wiersema, F. Margerethe & Bantel, A. Karen (1992). Top Management Team Demography and Corporate Strategic Change. *Academy of Management Journal*, Vol.35, No.1, 91-121.

Glickman, A.S., Zimmer, s. Montero, R. C., Guerette, P.J., Campbell, W.J., Morgan, B., & Salas, E. (1987). The evolution of teamwork skills : An empirical assessment with implications for training (Tech. Report 87-016). Orlando, FL: Office of Naval Research, Human Factors Division. Cited in Sundstrom E. De Meusse KP, Futrell D. (1990). Work teams: application and effectiveness. *American Psychology*, 45, 120-133

Goodman, P.S. (1979). *Assessing Organizational Change: The Rushton Quality of Work Experiment*. New York: Wiley-Interscience. Cited in Campbell P. John & Campbell J. Richard and Associates (1988). *Productivity in Organizations- New Perspectives from Industrial and Organizational Psychology*. San Fransisco: Jossey-Bass Publishers.

Goodman , P.S., Ravlin, E.C., & Argote, L. (1986). Current thinking about groups: Setting the stage for new ideas. In P. Goodman (Ed.), *Designing effective work groups*:1-33. San Fransisco: Jossey-Bass. Cited in Kirkman, L. Bradley & Shapiro, L. Debra. (1997). The Impact of Cultural Values on Employee Resistance to Teams: Toward a Model of Globalized Self-Managing Work Team Effectiveness. *Academy of Management Review*, Vol. 22, No: 3, 730-757.

Goodman, P.S., Devadas, R., & Griffith-Hughson, T.L. (1988).Groups and productivity: Analyzing the effectiveness of self-managing teams. IN J.P. Campbell &R.J. Campbell (Eds.), *Productivity in organizations: New perspectives from industrial and organizational psychology*: 295-327. San Fransisco: Jossey-Bass. Cited in Kirkman, L. Bradley & Shapiro, L. Debra. (1997). The Impact of Cultural Values on Employee Resistance to Teams: Toward a Model of Globalized Self-Managing Work Team Effectiveness. *Academy of Management Review*, Vol. 22, No: 3, 730-757.

Gordon, R. Judith. (1991). *A Diagnostic Approach to Organizational Behavior* (3rd Ed.) Boston: Allyn and Bacon.

Gordon, J. (1992). Work teams: How far have they come? *Training*, October: 59-65.
Cited in Cohen, G. Susan & Bailey, E. Diane (1997). What Makes Teams Work: Group Effectiveness Research from the Shop Floor to the Executive Suite. *Journal of Management*, Vol.23, No: 3, 239-290.

Granovetter, M.S. (1973). The strength of weak ties. *American Journal of Sociology*, 78, 1360-1380. Cited in Mudrack, E. Peter . (1989). Group Cohesiveness and Productivity: A Closer Look. *Human Relations*, Vol.42, No: 9, 771-785.

Gray, L. Jerry & Starke A. Frederick. *Organizational Behavior – Concepts and Applications* (3rd Ed.) USA: Charles E. Merrill Publishing Company.

Grimm, C., m. & Smith, K., G. (1991). Management and organizational change: A note on the railroad industry. *Strategic Management Journal*, 12, 557-562. Cited in Hambrick, C. Donald & Cho, Seung Theresa & Chen, Ming-Jer. (1996). The Influence of Top Management Team Heterogeneity on Firms' Competitive Moves. *Administrative Science Quarterly*, December, 659-684.

Guzzo, A. Richard &. Dickson, W. Marcus. (1996). Teams in Organizations: Recent Research on Performance and Effectiveness. *Annual Review of Psychology*, 47, 307-338.

Hackman, J.R. (1976). The design of self-managing work groups. (tech.Rep.No.11). New Haven,CT: Yale University, School of Organization and Management. Cited in Kirkman, L. Bradley & Shapiro, L. Debra. (1997). The Impact of Cultural Values on

Employee Resistance to Teams: Toward a Model of Globalized Self-Managing Work Team Effectiveness. *Academy of Management Review*, Vol. 22, No: 3, 730-757.

Hackman, J.R. (1987). (ed. Lorsch, JW) The Design of Work Teams . In *Handbook of Organizational Behavior*, 315-342. Englewood Cliffs, NJ; Prentice Hall. Cited in Guzzo, A. Richard &. Dickson, W. Marcus. (1996). Teams in Organizations: Recent Research on Performance and Effectiveness. *Annual Review of Psychology*, 47, 307-338.

Hambrick, C. Donald & Mason, A. Phyllis. Upper Echelons: The Organization as a Reflection of its Top Managers. *Academy of Management Review*, 1984, Vol.9, No: 2, 193-206.

Hambrick, C. Donald & D'Aveni, R. A. (1992). Top team deterioration as part of the downward spiral of large corporate bankruptcies. *Management Science*, 38: 1445-1466. Cited in Haleblan, J. & Finkelstein, S. (1993). Top management team size, CEO dominance and firm performance: The moderating roles of environmental turbulence and discretion. *Academy of Management Review* , Vol: 36, No: 4, 844-863.

Hambrick, C. Donald & Cho, Seung Theresa & Chen, Ming-Jer. (1996). The Influence of Top Management Team Heterogeneity on Firms' Competitive Moves. *Administrative Science Quarterly*, December, 659-684.

Hare, A.P. (1952). Interaction and consensus in different sized groups. *American Sociological Review*, 17, 261-67. Cited in Scott, E. W., Jr. & Cummings, L.(1973). *Readings In Organizational Behavior and Human Performance* . USA: Richard D. Irwin Inc.

Hare, A.P. (1976). *Handbook of small group research*. New York: Free Press. Cited in Haleblian, J. & Finkelstein, S. (1993). Top management team size, CEO dominance and firm performance: The moderating roles of environmental turbulence and discretion. *Academy of Management Review* , Vol: 36, No: 4, 844-863.

Harkins, G., Stephen & Petty, E. Richard (1982). The effects of task difficulty and task uniqueness on social loafing. *Journal of Personality and Social Psychology*, No: 43, 1214-1229. Cited in Earley P. Christopher (1989). Social Loafing and Collectivism: A Comparison of the United States and the People's Republic of China. *Administrative Science Quarterly*, No: 34, 565-581.

Harkins, G., Stephen & Petty, E. Richard (1983). Social context effects in persuasion. In Paul B. Paulus (ed.), *Basic Group Processes*:149-178. New York: Springer-Verlag. Cited in Earley P. Christopher (1989). Social Loafing and Collectivism: A Comparison of the United States and the People's Republic of China. *Administrative Science Quarterly*, No: 34, 565-581.

Harrison, E.F. (1975). *The managerial decision-making process*. Boston: Houghton Mifflin. Cited in Halebian, J. & Finkelstein, S. (1993). Top management team size, CEO dominance and firm performance: The moderating roles of environmental turbulence and discretion. *Academy of Management Review*, Vol: 36, No: 4, 844-863.

Hedberg, B. (1981). How organizations learn and unlearn. In P. Nystrom & W. Starbuck (Eds.), *Handbook of organization design*: 8-27. Oxford: Oxford University Press. Cited in Keck, L.Sarah & Tushman, L., Michael (1993). Environmental and Organizational Context and Executive Team Structure. *Academy of Management Journal*, Vol. 36, No: 6, 1314-1344.

Hill, G.W. (1982). Group versus individual performance: Are $n+1$ heads better than one?. *Psychological Bulletin*, 91, 517-539. Cited in Halebian, J. & Finkelstein, S. (1993). Top management team size, CEO dominance and firm performance: The moderating roles of environmental turbulence and discretion. *Academy of Management Review*, Vol: 36, No: 4, 844-863.

Ho, Y.F., David (1978). The concept of man in Mao Tse-Tung's thought. *Psychiatry*, 41, 391-402. Cited in Earley P. Christopher (1989). Social Loafing and Collectivism: A Comparison of the United States and the People's Republic of China. *Administrative Science Quarterly*, No: 34, 565-581.

Hoffman, L. R. (1959). Homogeneity of member personality and its effect on group problem-solving. *Journal of Abnormal and Social Psychology*, 58, 27-32. Cited in

West, A. Michael & Anderson, R. Neil. (1996). Innovation in Top Management Teams. *Journal of Applied Psychology*, Vol. 81; No: 6, 680-693.

Hoffman, L. R. (1979). Applying experimental research on group problem solving to organizations. *Journal of Applied Behavioral Science*, 15, 375-391. Cited in Haleblan, J. & Finkelstein, S. (1993). Top management team size, CEO dominance and firm performance: The moderating roles of environmental turbulence and discretion. *Academy of Management Review*, Vol: 36, No: 4, 844-863.

Hoffman, L. R. & Maier, N.R.F. (1961). Sex differences, sex composition and group problem-solving. *Journal of Abnormal and Social Psychology*, 63: 453-456. Cited in West, A. Michael & Anderson, R. Neil. (1996). Innovation in Top Management Teams. *Journal of Applied Psychology*, Vol. 81; No: 6, 680-693.

Hoffman, L. R. & Maier, N.R.F. (1961). Quality and acceptance of problem-solutions by members of homogeneous and heterogeneous groups. *Journal of Abnormal and Social Psychology*, 58,27-32. Cited in Haleblan, J. & Finkelstein, S. (1993). Top management team size, CEO dominance and firm performance: The moderating roles of environmental turbulence and discretion. *Academy of Management Review*, Vol: 36, No: 4, 844-863.

Hofstede, Geert (1980). *Culture's Consequences: International differences in work related values*. Beverly Hills, CA: Sage. Cited in Earley P. Christopher (1989). Social Loafing and Collectivism: A Comparison of the United States and the People's Republic of China. *Administrative Science Quarterly*, No: 34, 565-581.

Hughes, T. (1983). *Networks of power: Electrification in Western society, 1890-1930*. Baltimore: John Hopkins Press. Cited in Keck, L.Sarah & Tushman, L., Michael (1993). Environmental and Organizational Context and Executive Team Structure. *Academy of Management Journal*, Vol. 36, No: 6, 1314-1344.

Hultman, K.E. (1979). The path of least resistance: Preparing employees for change. Austin. TX: Learning Concepts. Cited in Kirkman, L._Bradley & Shapiro, L. Debra. (1997). The Impact of Cultural Values on Employee Resistance to Teams: Toward a Model of Globalized Self-Managing Work Team Effectiveness. *Academy of Management Review*, Vol. 22, No: 3, 730-757.

Hultman, K.E. (1995). Scaling the wall of resistance. *Training &Development*, October: 15-18. Cited in Kirkman, L. Bradley & Shapiro, L. Debra. (1997). The Impact of Cultural Values on Employee Resistance to Teams: Toward a Model of Globalized Self-Managing Work Team Effectiveness. *Academy of Management Review*, Vol. 22, No: 3, 730-757

Ingham, Allan G., Levinger George, Graves James, and Peckham Vaughn (1974). The Ringelman effect: Studies of group size and group performance. *Journal of Experimental Social Psychology*, No: 10, 371-384. Cited in Earley P. Christopher (1989). Social Loafing and Collectivism: A Comparison of the United States and the People's Republic of China. *Administrative Science Quarterly*, No: 34, 565-581.

Jackson, E. Susan, Brett, F. John, Sessa, I. Valerie, Cooper, M. Dawn, Julin A. Johan & Peyronnin, Karl. (1991). Some differences make a difference: Individual dissimilarity and group heterogeneity as correlates of recruitment, promotions and turnover. *Journal of Applied Psychology*, Vol. 76, No: 5, 675-689.

Jackson S.E., May, K.E., & Whitney K. (1995). Understanding the dynamics of diversity in decision-making teams. See Guzzo & Salas, 1995. pp.204-261. Cited in Guzzo, A. Richard & Dickson, W. Marcus. (1996). Teams in Organizations: Recent Research on Performance and Effectiveness. *Annual Review of Psychology*, 47, 307-338.

Jackson, S., E. (1992). Consequences of group composition for the interpersonal dynamics of strategic issue processing. In P. Shrivastava, A. Huff & J. Dutton (Eds.). *Advances in Strategic Management Journal*, 14, 215-235. Cited in Halebian, J. & Finkelstein, S. (1993). Top management team size, CEO dominance and firm performance: The moderating roles of environmental turbulence and discretion. *Academy of Management Review*, Vol: 36, No: 4, 844-863.

Jackson, S.E. (1996). The consequences of diversity in multidisciplinary work teams. In M.A. West (ed.), *Handbook of work group psychology*, Chichester, England: Wiley. Cited in West, A. Michael & Anderson, R. Neil. (1996). Innovation in Top Management Teams. *Journal of Applied Psychology*, Vol. 81; No: 6, 680-693.

Janis, I. (1972). *Victims of groupthink*, Boston: Houghton-Mifflin. Cited in Wiersema, F. Margerethe & Bantel, A.Karen (1992). Top Management Team Demography and Corporate Strategic Change. *Academy of Management Journal*, Vol.35, No.1, 91-121.

Johns, Gary (1996). *Organizational Behavior: Understanding and Managing Life at Work* (4th Ed.). New York: HarperCollins College Publishers

Judson, A.S. (1991). *Changing behavior in organizations: Minimizing resistance to change*. Cambridge, MA: Basil Blackwell. Cited in Kirkman, L. Bradley & Shapiro, L. Debra. (1997). The Impact of Cultural Values on Employee Resistance to Teams: Toward a Model of Globalized Self-Managing Work Team Effectiveness. *Academy of Management Review*, Vol. 22, No: 3, 730-757

Kanter, R. (1977). *Men and women of the corporation*. New York: Basic Books. Cited in Wiersema, F. Margerethe & Bantel, A.Karen (1992). Top Management Team Demography and Corporate Strategic Change. *Academy of Management Journal*, Vol.35, No.1, 91-121.

Katz, R.L. (1982). The effects of group longevity on project communication and performance. *Administrative Science Quarterly*, 27: 81-104. Cited in Guzzo, A. Richard & Dickson, W. Marcus. (1996). Teams in Organizations: Recent Research on Performance and Effectiveness. *Annual Review of Psychology*, 47 307-338

Katzenbach, J.R. & Smith, D.K. (1993). *The wisdom of teams: Creating the high performance organization*. Boston MA: Harvard Business School Press. Cited in Cohen, G. Susan & Bailey, E. Diane (1997). What Makes Teams Work: Group Effectiveness Research from the Shop Floor to the Executive Suite. *Journal of Management*, Vol.23, No: 3, 239-290

Katzenbach, J.R., & Smith, D.K. (1993). The discipline of teams. *Harvard Business Review*, March/April. Cited in Torrington, D. & Hall L. (1998). *Human Resource Management* (4th Ed.) Italy: Prentice Hall Europe

Keck, L.Sarah & Tushman, L., Michael (1993). Environmental and Organizational Context and Executive Team Structure. *Academy of Management Journal*, Vol. 36, No: 6, 1314-1344.

Ketchum, L. (1984). How redesigned plants really work. *National Productivity Review*, 3, 246-254. Cited in Sundstrom E. De Meusse KP, Futrell D. (1990). Work teams: application and effectiveness. *American Psychology*, 45, 120-133.

Kiesler, Charles A., and Sara B. Kiesler. (1969). *Conformity*. Reading, MA: Addison-Wesley. Cited in Wagner, W. Gary & Pfeffer, Jeffrey & O'Reilly III., A. Charles. (1984). Organizational Demography and Turnover in Top Management Groups. *Administrative Science Quarterly*, 29, 74-92.

Kirkman, B. L. & Rosen, B. (1996). Testing a model of team empowerment: An empirical investigation of the antecedents and outcomes of empowered self-managing work-teams. Paper presented at the annual meeting of the Academy of Management, Cincinnati, OH. Cited in Kirkman, L. Bradley & Shapiro, L. Debra. (1997). The Impact of Cultural Values on Employee Resistance to Teams: Toward a Model of Globalized Self-Managing Work Team Effectiveness. *Academy of Management Review*, Vol. 22, No: 3, 730-757.

Kirkman, L. Bradley & Shapiro, L. Debra. (1997). The Impact of Cultural Values on Employee Resistance to Teams: Toward a Model of Globalized Self-Managing Work Team Effectiveness. *Academy of Management Review*, Vol. 22, No: 3, 730-757.

Kluckhohn, R., Florence & Strodtbeck, L. Fred. (1961). *Variations in Value Orientations*. Evanston, IL: Row, Peterson. Cited in Earley P. Christopher (1989). Social Loafing and Collectivism: A Comparison of the United States and the People's Republic of China. *Administrative Science Quarterly*, No: 34, 565-581.

Kotter, J.P., & Schlesinger, L.A. (1979). Choosing strategies for change. *Harvard Business Review*, March-April: 106-114. Cited in Kirkman, L. Bradley & Shapiro, L. Debra. (1997). The Impact of Cultural Values on Employee Resistance to Teams: Toward a Model of Globalized Self-Managing Work Team Effectiveness. *Academy of Management Review*, Vol. 22, No: 3, 730-757.

Kreitner, R., & Kinicki, A. (1998). *Organizational Behavior*. (4th Ed.) USA: Irwin/McGraw Hill Inc.

Labich, Kenneth (1990). American takes on the world. *Fortune*, 122, 40-48. Cited in Hambrick, C. Donald & Cho, Seung Theresa & Chen, Ming-Jer. (1996). The Influence of Top Management Team Heterogeneity on Firms' Competitive Moves. *Administrative Science Quarterly*, December, 659-684.

Lai, G., Tse-leung & Lam, C., Yip-wai. (1986). A study of work-related values of managers in the People's Republic of China. *The HongKong Manager*, Dec.85/Jan.86, 19-51. Cited in Earley P. Christopher (1989). Social Loafing and Collectivism: A Comparison of the United States and the People's Republic of China. *Administrative Science Quarterly*, No: 34, 565-581.

Lant, T. & Mezias, S. (1992). An organization model of convergence and reorientation. *Organization Science*, 3, 47-71. Cited in Keck, L.Sarah & Tushman, L., Michael (1993). Environmental and Organizational Context and Executive Team Structure. *Academy of Management Journal*, Vol. 36, No: 6, 1314-1344.

Latane, Bibb., Williams, K.D. and Harkins, Stephen (1979). Many hands make light the work: The causes and consequences of social loafing. *Journal of Personality Social Psychology*, No: 37, 822-832. Cited in Earley P. Christopher (1989). Social Loafing and Collectivism: A Comparison of the United States and the People's Republic of China. *Administrative Science Quarterly*, No: 34, 565-581.

Lawler, E.E.III. (1988). Substitutes for Hierarchy. *Organizational Dynamics*, 17(1), 4-15. Cited in DeSanctis, Gerardine & Poole, Scott Marshall (1997). Transitions in Teamwork in New Organizational Forms. *Advances in Group Processes*, Volume 14, 157-176.

Lawler, E.E.III., Mohrman, S.A. & Ledford G.E.Jr. (1995). *Creating high performance organizations: Practices and results of employee involvement and total quality management in Fortune 1000 companies*. San Francisco: Jossey-Bass. Cited in Cohen, G. Susan & Bailey, E. Diane (1997). What Makes Teams Work: Group Effectiveness Research from the Shop Floor to the Executive Suite. *Journal of Management*, Vol.23, No: 3, 239-290.

Lawrence, P. & Dyer, D. (1983). *Renewing American industry*. New York: Free Press. Cited in Keck, L.Sarah & Tushman, L., Michael (1993). Environmental and Organizational Context and Executive Team Structure. *Academy of Management Journal*, Vol. 36, No: 6, 1314-1344.

Lewin, K. (1951). *Field Theory in Social Science*. New York: Harper&Row. Cited in Campbell P. John & Campbell J. Richard and Associates (1988). *Productivity in Organizations- New Perspectives from Industrial and Organizational Psychology* San Francisco: Jossey-Bass Publishers.

Locke, E.A., & Schweiger, D.M. (1979). 'Participation in Decision Making: One more Look.' *Research in Organizational Behavior*. Vol.1. Greenwich, Conn.: JAI Press. Cited in Campbell P. John & Campbell J. Richard and Associates (1988). *Productivity*

in Organizations- New Perspectives from Industrial and Organizational Psychology.
San Fransisco: Jossey-Bass Publishers.

Lott, Albert,J., & Lott, Bernice E. (1961). Group cohesiveness, communication level and conformity. *Journal of Abnormal and Social Psychology*, 62: 408-412. Cited in Wiersema, F. Margerethe & Bantel, A.Karen (1992). Top Management Team Demography and Corporate Strategic Change. *Academy of Management Journal*, Vol.35, No.1, 91-121.

Lott, Albert,J., & Lott, Bernice E. (1965). Group cohesiveness and interpersonal attraction: A review of relationships with antecedent and consequent variables. *Psychological Bulletin*, 64; 259-302. Cited in Wiersema, F. Margerethe & Bantel, A.Karen (1992). Top Management Team Demography and Corporate Strategic Change. *Academy of Management Journal*, Vol.35, No.1, 91-121.

Luthans, Fred (1995) *Organizational Behavior* (7thEd.) Istanbul: Literatür Yayıncılık.

Magjuka, R.J. & Baldwin, T.T. (1991). Team-based employee involvement programs: effects of design and administration. *Personnel Psychology*, 44, 793-812. Cited in Guzzo, A. Richard & Dickson, W. Marcus. (1996). Teams in Organizations: Recent Research on Performance and Effectiveness. *Annual Review of Psychology*, 47, 307-338.

Manz, C.C., & Sims, H.P.,Jr. (1986). Leading self-managed groups: A conceptual analysis of a paradox. *Economic and Industrial Democracy* , 7, 141-165. Cited in

Manz, C.C. (1992). Self-leading work teams: Moving beyond self-management myths. *Human Relations*. Vol. 45, No: 11, 1119-1140.

Manz, C.C., & Sims, H.P., Jr. (1987). Leading workers to lead themselves: The external leadership of self-managed work teams. *Administrative Science Quarterly*, 32, 106-128. Cited in Manz, C.C. (1992). Self-leading work teams: Moving beyond self-management myths. *Human Relations*. Vol. 45, No: 11, 1119-1140.

Manz, C.C., & Sims, H.P., Jr. (1993). *Business without bosses: How self-managing teams are building high performance companies*. New York: Wiley. Cited in Kirkman, L. Bradley & Shapiro, L. Debra. (1997). The Impact of Cultural Values on Employee Resistance to Teams: Toward a Model of Globalized Self-Managing Work Team Effectiveness. *Academy of Management Review*, Vol. 22, No: 3, 730-757

March, James G., Herbert, A. Simon. (1958). *Organizations*. New York: Wiley. Cited in Wagner, W. Gary & Pfeffer, Jeffrey & O'Reilly III., A. Charles. (1984). Organizational Demography and Turnover in Top Management Groups. *Administrative Science Quarterly*, 29, 74-92.

Mathieu, J. E & Zajac, D. M (1990). A review and meta analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological Bulletin*, No:108, 171-194. Cited in Kirkman, L. Bradley & Shapiro, L. Debra. (1997). The Impact of Cultural Values on Employee Resistance to Teams: Toward a Model of Globalized Self-Managing Work Team Effectiveness. *Academy of Management Review*, Vol. 22, No: 3, 730-757.

McGrath, J.E., Futoran, G.C., & Kelley, J.R. (1986). *Complex temporal patterning in interaction and task performance: A report of progress in a program of research on the social psychology of time. (Technical Report No: 86-1)*. Urbana- Champaign: University of Illinois, Psychology Department. Cited in Sundstrom E. De Meusse KP, Futrell D. (1990). Work teams: application and effectiveness. *American Psychology*, 45, 120-133.

McKeachie, W. J. (1963). Research on teaching at the college and university level. In N.Gage (ED.), *Handbook of research on teaching*. Chicago,III.: Rand McNally,1118-72. Cited in Scott, E. W., Jr. & Cummings, L.(1973). *Readings In Organizational Behavior and Human Performance* . Homewood,Illionois: Richard D. Irwin Inc.

Mead, Margaret. (1967). *Cooperation and Competition among Primitive People*. Boston: Beacon. Cited in Earley P. Christopher (1989). Social Loafing and Collectivism: A Comparison of the United States and the People's Republic of China. *Administrative Science Quarterly*, No: 34, 565-581.

Meyer, A. (1982). Adapting to environmental jolts. *Administrative Science Quarterly*, 27, 515-537. Cited in Keck, L.Sarah & Tushman, L., Michael (1993). Environmental and Organizational Context and Executive Team Structure. *Academy of Management Journal*, Vol. 36, No: 6, 1314-1344.

Mohrman, S.A, Cohen, S.G & Mohrman, A.M. (1995). Designing team-based organizations: New forms for knowledge work. San Francisco: Jossey-Bass. Cited in Cohen, G. Susan & Bailey, E. Diane (1997). What Makes Teams Work: Group Effectiveness Research from the Shop Floor to the Executive Suite. *Journal of Management*, Vol.23, No: 3, 239-290.

Moxon, P. (1993). Building a Better Team. Aldershot: Gower in Association with ITD. Cited in Torrington, D. & Hall L. (1998). *Human Resource Management* (4th Ed.) Italy: Prentice Hall Europe

Mudrack, E. Peter . (1989). Group Cohesiveness and Productivity: A Closer Look. *Human Relations*, Vol.42, No: 9, 771-785.

Murray, A. (1989). Top management group heterogeneity and firm performance. *Strategic Management Journal*, 10: 125-141. Cited in Wiersema, F. Margerethe & Bantel, A.Karen (1992). Top Management Team Demography and Corporate Strategic Change. *Academy of Management Journal*, Vol.35, No.1, 91-121.

Nadler, D.A. & Ancona, D. (1992). Teamwork at the top: Creating executive teams that work. Pp.209-231 in D.A. Nadler, M.S. Gerstein, R.H.Shaw & Associates (Eds.). *Organizational architecture: Design for changing organizations*. San Francisco: Jossey-Bass. Cited in Cohen, G. Susan & Bailey, E. Diane (1997). What Makes Teams Work: Group Effectiveness Research from the Shop Floor to the Executive Suite. *Journal of Management*, Vol.23, No: 3, 239-290.

Newcomb, T. (1956). 'The prediction of interpersonal attraction.' *American Psychologist*, 11: 575-586. Cited in Wagner, W. Gary & Pfeffer, Jeffrey & O'Reilly III., A. Charles. (1984). Organizational Demography and Turnover in Top Management Groups. *Administrative Science Quarterly*, 29, 74-92.

Newstrom, W., John & Davis Keith. (1997). *Organizational Behavior-Human Behavior at Work*. (10th Ed.). USA: McGraw Hill Companies Inc.

Nystrom, P. & Starbuck, W. (1984). To avoid organizational crises, unlearn. *Organizational Dynamics*, 12(4), 53-65. Cited in Keck, L. Sarah & Tushman, L., Michael (1993). Environmental and Organizational Context and Executive Team Structure. *Academy of Management Journal*, Vol. 36, No: 6, 1314-1344.

Odiome, G.S.(1981). *The change resisters: How they prevent progress and what managers can do about them*. Englewood Cliffs, NJ: Prentice Hall. Cited in Kirkman, L. Bradley & Shapiro, L. Debra. (1997). The Impact of Cultural Values on Employee Resistance to Teams: Toward a Model of Globalized Self-Managing Work Team Effectiveness. *Academy of Management Review*, Vol. 22, No: 3, 730-757.

Olson, Mancur. (1971). *The Logic of Collective Action*. Cambridge, MA: Harvard University Press. Cited in Earley P. Christopher (1989). Social Loafing and Collectivism: A Comparison of the United States and the People's Republic of China. *Administrative Science Quarterly*, No: 34, 565-581.

O'Reilly, III., A. Charles & Roberts K.H. (1977). Task group structure, communication and effectiveness in three organizations. *Journal of Applied Psychology*, 62, 674-681. Cited in Mudrack, E. Peter . (1989). Group Cohesiveness and Productivity: A Closer Look. *Human Relations*, Vol.42, No: 9, 771-785.

O'Reilly III., A. Charles & Flatt, Sylvia (1989). Executive team demography, organizational innovation and firm performance. Working paper, University of California, Berkeley. Cited in Hambrick, C. Donald & Cho, Seung Theresa & Chen, Ming-Jer. (1996). The Influence of Top Management Team Heterogeneity on Firms' Competitive Moves. *Administrative Science Quarterly*, December, 659-684.

O'Reilly III., A. Charles & Caldwell, F. David & Barnett, P. William (1989). Work group demography, social integration and turnover. *Administrative Science Quarterly*, 34, 21-37.

Orsaburn, J.D., Moran, L., Musselwhite, E. & Zenger, J.H. (1990). *Self-directed work teams: The new American challenge*. Homewood II: Business One Irwin. Cited in Cohen, G. Susan & Bailey, E. Diane (1997). What Makes Teams Work: Group Effectiveness Research from the Shop Floor to the Executive Suite. *Journal of Management*, Vol.23, No: 3, 239-290.

Osterman, P. (1994). How common is workplace transformation and who adopts it? *Industrial and Labor Relations Review*, 47: 173-188. Cited in Kirkman, L. Bradley & Shapiro, L. Debra. (1997). The Impact of Cultural Values on Employee Resistance to

Teams: Toward a Model of Globalized Self-Managing Work Team Effectiveness. *Academy of Management Review*, Vol. 22, No: 3, 730-757.

Ouchi, G., William (1980). Markets, bureaucracies and clans. *Administrative Science Quarterly*, 34, 121-137. Cited in Smith, G. Ken & Smith, A. Ken & Olian, A. Judy & Sims, P. Henry Jr. & O'Bannon, P. Douglas & Scully, A. Judith. (1994). Top Management Team Demography and Process: The Role of Social Integration and Communication. *Administrative Science Quarterly*, 39, 412-438.

Owen, W.F. (1985). Metaphor analysis of cohesiveness in small discussion groups. *Small Group Behavior*, 16, 415-424. Cited in Mudrack, E. Peter . (1989). Group Cohesiveness and Productivity: A Closer Look. *Human Relations*, Vol.42, No: 9, 771-785.

Parker, G.M (1994). *Cross-functional teams. Working with allies, enemies and other strangers*. San Francisco: Jossey Bass Publishers. Cited in Cohen, G. Susan & Bailey, E. Diane (1997). What Makes Teams Work: Group Effectiveness Research from the Shop Floor to the Executive Suite. *Journal of Management*, Vol.23, No: 3, 239-290.

Parsons, Talcott & Shils, A., Edward. (1951). *Toward a General Theory of Action*. Cambridge, MA: Harvard University Press. Cited in Earley P. Christopher (1989). Social Loafing and Collectivism: A Comparison of the United States and the People's Republic of China. *Administrative Science Quarterly*, No: 34, 565-581.

Pearce, J.A.,II, & Ravlin, E.C.(1987). The design and activation of self-regulating work groups. *Human Relations*, 40, 751-782. Cited in Kirkman, L. Bradley & Shapiro, L. Debra. (1997). The Impact of Cultural Values on Employee Resistance to Teams: Toward a Model of Globalized Self-Managing Work Team Effectiveness. *Academy of Management Review*, Vol. 22, No: 3, 730-757.

Peterfreund, S. (1982). Face-to-face at Pacific Northwest Bell. In R. Zager& M.P. Rosow (Eds.), *The innovative organization* (pp.21-43). New York: Pergamon. Cited in Sundstrom E. De Meusse KP, Futrell D. (1990). Work teams: application and effectiveness. *American Psychology*, 45, 120-133.

Pfeffer, Jeffrey. (1981). Power in organizations. Pitman. Cited in Wiersema, F. Margerethe & Bantel, A.Karen (1992). Top Management Team Demography and Corporate Strategic Change. *Academy of Management Journal*, Vol.35, No.1, 91-121.

Pfeffer, Jeffrey. (1983). 'Organizational demography' In Larry L. Cummings and Barry M. Staw (eds.)*Research in Organizational Behavior*, 5:299-357. Greenwich, CT:JAI Press. Cited in Wagner, W. Gary & Pfeffer, Jeffrey & O'Reilly III., A. Charles. (1984). Organizatinal Demography and Turnover in Top Management Groups. *Administrative Science Quarterly*, 29, 74-92.

Robbins, P. Stephen. (1996). *Organizational Behavior* (7th Ed.) USA: Prentice Hall.

Robbins, P. Stephen & Coultar, Mary (1996). *Management* (5th Ed.) New Jersey: Prentice Hall Inc.

Rokeach, M. (1960). *The open and closed mind*. New York: Basic Books. Cited in Wiersema, F. Margerethe & Bantel, A.Karen (1992). Top Management Team Demography and Corporate Strategic Change. *Academy of Management Journal*, Vol.35, No.1, 91-121.

Salem, M., Lazarus, H., & Cullen, J. (1992). Developing self-managing teams: structure and performance. *Journal of Management Development*, Vol:11, No:3, 24-32. Cited in Torrington, D. & Hall L. (1998). *Human Resource Management* (4th Ed.) Italy: Prentice Hall Europe

Schermerhorn, John, R. Jr., Hunt, G. James, Osborn, N., Richard (1997). *Organizational Behavior*. (6TH Ed.). Canada: JohnWiley & Sons Inc.

Schneider, B. (1987). The people make the place. *Personnel psychology*, 40, 437-453. Cited in Jackson, E. Susan, Brett, F. John, Sessa, I. Valerie, Cooper, M. Dawn, Julin A. Johan & Peyronnin, Karl. (1991). Some differences make a difference: Individual dissimilarity and group heterogeneity as correlates of recruitment, promotions and turnover. *Journal of Applied Psychology*, Vol. 76, No: 5, 675-689.

Scott, E. W., Jr. & Cummings, L.(1973). *Readings In Organizational Behavior and Human Performance* . Homewood, Illionois: Richard D. Irwin Inc.

Senge, M. Peter (1996). *Beşinci Disiplin: Öğrenen Organizasyon Düşünüşi ve Uygulaması*. İstanbul: Yapı Kredi Yayınları

Shaw, M.E. (1976). *Group Dynamics*. New York: Mc Graw Hill. Cited in Haleblan, J. & Finkelstein, S. (1993). Top management team size, CEO dominance and firm performance: The moderating roles of environmental turbulence and discretion. *Academy of Management Review*, Vol: 36, No: 4, 844-863.

Shaw, M.E. (1981). *Group Dynamics*. New York: Mc Graw Hill. Cited in Haleblan, J. & Finkelstein, S. (1993). Top management team size, CEO dominance and firm performance: The moderating roles of environmental turbulence and discretion. *Academy of Management Review*, Vol: 36, No: 4, 844-863

Shaw, M.,E. & Harkey, B. (1976). Some effects congruency of member characteristics and group structure upon group behavior. *Journal of Personality and Social Psychology*, 34: 412-418. Cited in Haleblan, J. & Finkelstein, S. (1993). Top management team size, CEO dominance and firm performance: The moderating roles of environmental turbulence and discretion. *Academy of Management Review*, Vol: 36, No: 4, 844-863

Shull, F.A., Delbecq, A.,L. & Cummings, L.L. (1970). *Organizational decision making*. New York: McGraw Hill. Cited in Haleblan, J. & Finkelstein, S. (1993). Top management team size, CEO dominance and firm performance: The moderating roles of environmental turbulence and discretion. *Academy of Management Review*, Vol: 36, No: 4, 844-863.

Slater, P.E. (1958). Contrasting correlates of group size. *Sociometry*, 21, 129-139.

Cited in Scott, E. W., Jr. & Cummings, L. (1973). *Readings In Organizational Behavior and Human Performance*. Homewood, Illinois : Richard D. Irwin Inc.

Smith, G. Ken & Smith, A. Ken & Olian, A. Judy & Sims, P. Henry Jr. & O'Bannon, P. Douglas & Scully, A. Judith. (1994). Top Management Team Demography and Process: The Role of Social Integration and Communication. *Administrative Science Quarterly*, 39, 412-438.

Sorenson, T. (1968). *Decision making in the White House*. New York: Columbia University Press. Cited in Wiersema, F. Margerethe & Bantel, A. Karen (1992). Top Management Team Demography and Corporate Strategic Change. *Academy of Management Journal*, Vol. 35, No. 1, 91-121.

Starbuck, W., Greve, A. & Hedberg, B. (1978). Responding to crisis. *Journal of Business Administration*, 9(2), 111-137. Cited in Keck, L. Sarah & Tushman, L., Michael (1993). Environmental and Organizational Context and Executive Team Structure. *Academy of Management Journal*, Vol. 36, No: 6, 1314-1344.

Steiner, D. Ivan. (1972). *Group Process and Productivity*. New York: Academic Press. Cited in Earley P. Christopher (1989). Social Loafing and Collectivism: A Comparison of the United States and the People's Republic of China. *Administrative Science Quarterly*, No: 34, 565-581.

Sundstrom E. De Meusse KP, Futrell D. (1990). Work teams: application and effectiveness. *American Psychology*, 45, 120-133.

Swap, W., C. (1984). Group decision making. Beverly Hills: Sage. Cited in Haleblian, J. & Finkelstein, S. (1993). Top management team size, CEO dominance and firm performance: The moderating roles of environmental turbulence and discretion. *Academy of Management Review*, Vol: 36, No: 4, 844-863.

Thomas, A., S. & Litschert, R., T. & Ramaswamy, K. (1991). The performance impact of strategy –manager coalignment: An empirical examination. *Strategic Management Journal*, 12, 509-522. Cited in Hambrick, C. Donald & Cho, Seung Theresa & Chen, Ming-Jer. (1996). The Influence of Top Management Team Heterogeneity on Firms' Competitive Moves. *Administrative Science Quarterly*, December, 659-684.

Thomas, E.,J. & Fink, C., F. (1963). Effects of group size. *Psychological Bulletin*, 60, 371-384. Cited in Haleblian, J. & Finkelstein, S. (1993). Top management team size, CEO dominance and firm performance: The moderating roles of environmental turbulence and discretion. *Academy of Management Review*, Vol: 36, No: 4, 844-863.

Thompson, P.C. (1982). Quality circles at Martin Marietta Corporation, Denver Aerospace/Michoud Division. In R. Zager & M. Rosow (Eds.), *The innovative organization* (pp. 3-20). New York: Pergamon. Cited in Sundstrom E. De Meusse KP, Futrell D. (1990). Work teams: application and effectiveness. *American Psychology*, 45, 120-133.

Torrance, E. Paul (1974) *Torrance Tests of Creative Thinking, Directions, Manual and Scoring Guide*. Massachusetts: Personnel Press/Ginn and Company.

Torrington, D. & Hall L. (1998). *Human Resource Management* (4th Ed.) Italy: Prentice Hall Europe

Towers Perrin. (1990). *Workforce 2000 Today: A bottom-line concern*. Towers Perrin. Cited in Kirkman, L. Bradley & Shapiro, L. Debra. (1997). The Impact of Cultural Values on Employee Resistance to Teams: Toward a Model of Globalized Self-Managing Work Team Effectiveness. *Academy of Management Review*, Vol. 22, No: 3, 730-757.

Triandis, C., Harry & Bontempo, Robert & Villareal J., Marcelo & Asai, Masaaki & Lucca, Nydia (1988). Individualism and collectivism: Cross-cultural perspectives on self-ingroup relationships. *Journal of Personality and Social Psychology*, 54, 323-338. Cited in Earley P. Christopher (1989). Social Loafing and Collectivism: A Comparison of the United States and the People's Republic of China. *Administrative Science Quarterly*, No: 34, 565-581.

Trist, E.L. & Bamforth K.W. (1951). Some social and psychological consequences of the Long Wall method of coal getting. *Human Relations*, 4, 3-38. Cited in Kirkman, L. Bradley & Shapiro, L. Debra. (1997). The Impact of Cultural Values on Employee Resistance to Teams: Toward a Model of Globalized Self-Managing Work Team Effectiveness. *Academy of Management Review*, Vol. 22, No: 3, 730-757.

Trist, E.L., Higgins, G.W., Murray, H. & Pollock, A.B. (1963). *Organizational choice*. London: Tavistock Publications. Cited in Sundstrom E. De Meusse KP, Futrell D. (1990). Work teams: application and effectiveness. *American Psychology*, 45, 120-133.

Trist, E.L., Susman, G.L., & Brown, G.R. (1977). An experiment in autonomous working in an American underground coal mine. *Human Relations*, 30, 201-236. Cited in Kirkman, L. Bradley & Shapiro, L. Debra. (1997). The Impact of Cultural Values on Employee Resistance to Teams: Toward a Model of Globalized Self-Managing Work Team Effectiveness. *Academy of Management Review*, Vol. 22, No: 3, 730-757.

Tuckman, B.W. (1965). Developmental sequence in small groups. *Psychological Bulletin*, 63, 384-389. Cited in Sundstrom E. De Meusse KP, Futrell D. (1990). Work teams: application and effectiveness. *American Psychology*, 45, 120-133.

Tushman, M. & Anderson, P. (1986). Technological discontinuities and organizational environments. *Administrative Science Quarterly*, 31, 439-465. Cited in Keck, L. Sarah & Tushman, L., Michael (1993). Environmental and Organizational Context and Executive Team Structure. *Academy of Management Journal*, Vol. 36, No: 6, 1314-1344.

Tushman, M., & Romanelli, E. (1985). Organization evolution: A metamorphosis model of convergence and reorientation. In L.L. Cummings & B.M. Staw (Eds.), *Research in organizational behavior*, 7, 171-222. Cited in Wiersema, F. Margerethe &

Bantel, A.Karen (1992). Top Management Team Demography and Corporate Strategic Change. *Academy of Management Journal*, Vol.35, No.1, 91-121.

Virany, B. & Tushman, M. & Romanelli, E. (1992). Executive succession and organization outcomes in turbulent environments: An organization learning approach. *Organization Science*, 3, 72-91. Cited in Hambrick, C. Donald & Cho, Seung Theresa & Chen, Ming-Jer. (1996). The Influence of Top Management Team Heterogeneity on Firms' Competitive Moves. *Administrative Science Quarterly*, December, 659-684.

Wagner, W. Gary & Pfeffer, Jeffrey & O'Reilly III., A. Charles. (1984). Organizational Demography and Turnover in Top Management Groups. *Administrative Science Quarterly*, 29, 74-92.

Wall, T.D., Kemp, N.J., Jackson, P.R., & Clegg, C.W. (1986). Outcomes of autonomous work-groups: A long-term field experiment. *Academy of Management Journal*, 29, 280-304. Cited in Kirkman, L. Bradley & Shapiro, L. Debra. (1997). The Impact of Cultural Values on Employee Resistance to Teams: Toward a Model of Globalized Self-Managing Work Team Effectiveness. *Academy of Management Review*, Vol. 22, No: 3, 730-757.

Walton, R.E. (1972). 'How to Counter Alienation in the Plant.' *Harvard Business Review*, Nov/Dec, (70-81). Cited in Campbell P. John & Campbell J. Richard and Associates (1988). *Productivity in Organizations- New Perspectives from Industrial and Organizational Psychology* San Francisco: Jossey-Bass Publishers.

Wanous, P. John & Youtz, A. Margaret. (1986). Solution Diversity and The Quality of Group Decisions. *Academy of Management Journal*, Vol. 29, No:1, 149-159.

Watson W.E, Kumar, K., Michaelson, L.K. (1993). Cultural diversity's impact on interaction process and performance : comparing homogeneous and diverse work groups. *Academy of Management Journal*, 36: 590-602. Cited in Guzzo, A. Richard &. Dickson, W. Marcus. (1996). Teams in Organizations: Recent Research on Performance and Effectiveness. *Annual Review of Psychology*, 47, 307-338.

Weick, K. (1969). *The social psychology of organizing*. Reading,MA: Addison-Wesley. Cited in Wiersema, F. Margerethe & Bantel, A.Karen (1992). Top Management Team Demography and Corporate Strategic Change. *Academy of Management Journal*, Vol.35, No.1, 91-121.

Weick, K.E. (1976). Educational organizations as loosely coupled systems. *Administrative Science Quarterly*, 21, 1-19. Cited in Mudrack, E. Peter . (1989). Group Cohesiveness and Productivity: A Closer Look. *Human Relations*, Vol.42, No: 9, 771-785.

Weldon, Elizabeth & Gargano, Elisa (1988). Cognitive Loafing: The effects of accountability and shared responsibility on cognitive effort. *Personality and Social Psychology Bulletin*, No: 14, 159-171. Cited in Earley P. Christopher (1989). Social Loafing and Collectivism: A Comparison of the United States and the People's Republic of China. *Administrative Science Quarterly*, No: 34, 565-581.

Wellins, R.S., Byham, W.C. & Wilson J.M. (1991). *Empowered teams: Creating self-directed work groups that improve quality, productivity and participation*. San Francisco: Jossey-Bass. Cited in Cohen, G. Susan & Bailey, E. Diane (1997). What Makes Teams Work: Group Effectiveness Research from the Shop Floor to the Executive Suite. *Journal of Management*, Vol.23, No: 3, 239-290.

Wellins, R.S., Wilson, R., Katz, A.J., Laughlin, P., Day, C.R., Jr., & Price, D. (1990). *Self-directed teams: A study of current practice*. Pittsburgh: DDI. Cited in Kirkman, L. Bradley & Shapiro, L. Debra. (1997). The Impact of Cultural Values on Employee Resistance to Teams: Toward a Model of Globalized Self-Managing Work Team Effectiveness. *Academy of Management Review*, Vol. 22, No: 3, 730-757.

Welsh, D.H.B., Luthans, F., Sommer, S.M. (1993). Managing Russian factory workers: The impact of U.S. based behavioral and participative techniques. *Academy of Management Journal*, 36, 58-79. Cited in Kirkman, L. Bradley & Shapiro, L. Debra. (1997). The Impact of Cultural Values on Employee Resistance to Teams: Toward a Model of Globalized Self-Managing Work Team Effectiveness. *Academy of Management Review*, Vol. 22, No: 3, 730-757.

West, A. Michael & Anderson, R. Neil. (1996). Innovation in Top Management Teams. *Journal of Applied Psychology*, Vol. 81; No: 6, 680-693.

Whitney, J., & Smith, R. (1983). Effects of group cohesiveness on attitude polarization and the acquisition of knowledge in a strategic planning context. *Journal of Marketing Research*, 20, 167-176. Cited in Wiersema, F. Margerethe & Bantel,

A.Karen (1992). Top Management Team Demography and Corporate Strategic Change. *Academy of Management Journal*, Vol.35, No.1, 91-121.

Wiersema, F. Margerethe & Bantel, A.Karen (1992). Top Management Team Demography and Corporate Strategic Change. *Academy of Management Journal*, Vol.35, No.1, 91-121.

Wiersema, M.F. & Bird, A. (1993). Organizational demography in Japanese firms: group heterogeneity, individual dissimilarity and top management team turnover. *Academy of Management Journal*, 36, 996-1025.

Wilson, J.M., George, J., Wellins, R.S., & Byham W.C.(1994). Leadership trapeze: Strategies for leadership in team-based organizations. San Fransisco: Jossey-Bass. Cited in Kirkman, L. Bradley & Shapiro, L. Debra. (1997). The Impact of Cultural Values on Employee Resistance to Teams: Toward a Model of Globalized Self-Managing Work Team Effectiveness. *Academy of Management Review*, Vol. 22, No: 3, 730-757.

Wright, M. Patrick & Noe, A. Raymond (1996). *Management of Organizations*. USA: Richard D. Irwin

Yukl, A. Gray & Wexley, N. Kenneth (1971). *Readings in Organizational and Industrial Psychology*. USA: Oxford University Press

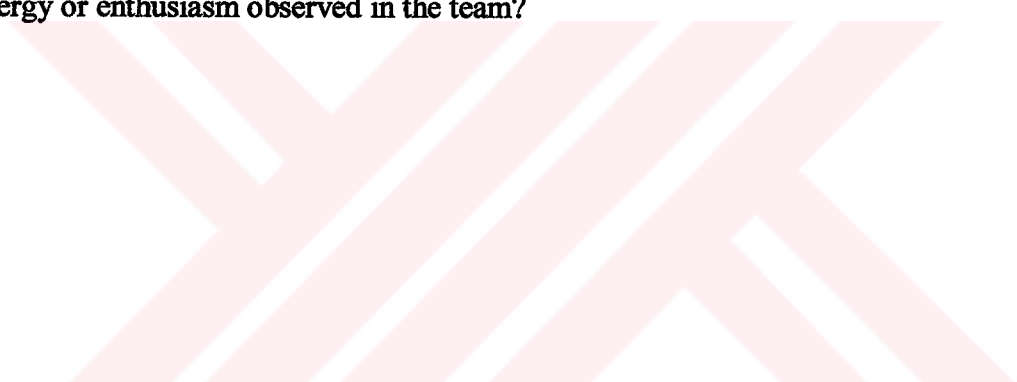
Zaltman, G., & Duncan, R. (1977). *Strategies for planned change*. New York: Wiley.

Cited in Kirkman, L. Bradley & Shapiro, L. Debra. (1997). The Impact of Cultural Values on Employee Resistance to Teams: Toward a Model of Globalized Self-Managing Work Team Effectiveness. *Academy of Management Review*, Vol. 22, No: 3, 730-757.

Zander, A. (1977). *Groups at work*. San Fransisco: Jossey-Bass. Cited in Wiersema, F. Margerethe & Bantel, A. Karen (1992). Top Management Team Demography and Corporate Strategic Change. *Academy of Management Journal*, Vol.35, No.1, 91-121.

Ziller, R., C. (1957). Group size: A determinant of the quality and stability of group decisions. *Sociometry*, 20, 165-173. Cited in Haleblian, J. & Finkelstein, S. (1993). Top management team size, CEO dominance and firm performance: The moderating roles of environmental turbulence and discretion. *Academy of Management Review*, Vol: 36, No: 4, 844-863.

APPENDIX 1

1. During the decision-making process, has any leader emerged in the team?
 2. Is there any struggle among two or three members to become the leader of the team?
 3. In the alternative generation process, is there anybody who never speaks up?
 4. In the decision-making process, is there anybody who never speaks up?
 5. Has the group developed a procedure for decision-making (such as developing criteria, measuring time etc.)
 6. Have the alternatives generated revolved around the same concept?
 7. Has any energy or enthusiasm observed in the team?
- 

APPENDIX 2

Öncelikle bize zaman ayırdığınız için teşekkür ederiz.

Kendimizi tanıtalım:

Örnek: Ben Güler İslamoğlu

M. U. Sosyal Bilimler Enstitüsü İngilizce İşletme Bölümü Örgütsel Davranış Ana Bilim dalında doktora yapıyorum. Aynı Bölümün Yönetim ve Organizasyon Ana Bilim dalında araştırma görevlisi olarak çalışmaktayım.

Bu çalışma M. U. Sosyal Bilimler Enstitüsü İngilizce İşletme Bölümü Örgütsel Davranış Ana Bilim Dalında yapılmakta olan doktora tezine yardımcı olması amacıyla gerçekleştirilmektedir. Daha önce başka fabrikalarda yapılan çalışmalar ve okuduğumuz bir çok araştırma sonucunda yıllık izin veya tatil dönüşü işe başlamada belirli bir süre yaşanan rehabet, dikkat dağınılığı ve motivasyondaki düşüşün çalışanların işe tekrar konsantre olmasını güçleştirdiğini ve hatta iş kazalarında belirli bir oranda artışlar olduğunu göstermiştir. Daha önce bu konuda yapılan araştırmalarda bu sorunu çözmek için akademisyenler, araştırmacılar çeşitli öneriler getirmiştir. Fakat, dikkat ettiğimiz bir nokta bu sorunu çözmek için sorunu en çok yaşayan kişilerin fikirlerinin alınmamış olmasıdır. Bu nedenle fabrika ortamında en fazla zamanını geçiren kişiler olarak ve bu sorunu en yakından yaşayanların sizler olduğunu düşünerek, bizler bu çalışmada sorunun çözümü için gerekli önerileri sizlerden almak istedik. Bize bu çalışmamızda yardımcı olursanız, biz de bu çalışma sonucunda fabrikanızda bu sorunu düzeltmek için alınabilecek önlemler konusunda sizin yapacağınız öneriler doğrultusunda yönetime bazı tavsiyelerde bulunabiliriz.

Çalışmamıza başlamadan önce birbirimizi kısaca tanıtalım. Belki sizler birbirinizi daha önceden tanıyorsunuz. Bu nedenle herkes bana yanındaki arkadaşını tanıtsın. Lütfen bu kağıtlara isminizi yazıp üzerine yapıştırırsanız, birbirimize hitap etmede yardımcı olacaktır.

Şimdi önce bu çalışmayı nasıl gerçekleştireceğimizi kısaca size anlatmak istiyorum.

Lütfen bu konuda aklınıza gelen öneriyi bir cümle ile söylemenizi rica ediyoruz. Bu aşamada en önemli nokta öneriler verilirken hiç bir değerlendirme ve yargılama yapılmamasıdır. Herkesin düşüncesini rahatça söyleyebilmesi için bu küçük ekipleri kurduk. Öneriler gelirken herkese söz hakkı tanıyabilmek için saat yönünde giderek herkese düşüncesini açıklama şansı tanınacaktır. Bu süreç herkesin fikrini söyleyip, söyleyecek bir şeyi kalmayana kadar devam edecektir. İsterseniz ufak bir örnekle bu çalışmayı nasıl gerçekleştireceğimizi aydınlatalım.

Örnek: Türkiye’de eğitim sorununu nasıl çözersiniz?

Burada yargılama olursa, kişiler sıraya uymazsa ikaz edelim.

Ben burada size sadece sıranızın geldiğini belirtmek ve önerilerinizi yazmak ile görevliyim.

Bütün öneriler alındıktan kimsenin söyleyecek birşeyi kalmayınca ikinci aşamayı açıklayalım.

2.ařama:

řimdi ekip olarak nerdiğiniz bu mlerden sadece bir tanesini ekibinizin kararı olarak semenizi istiyoruz. Burada nerileri deęerlendirebilir ve zerinde tartıřabilirsiniz.

Karar vermek istemeyebilir, kararı sizin vermenizi isteyebilirler. Bu durumda sizin sadece nerileri alınan kararı not etmekle grevli olduęunuzu ve her ekibin kararını kendisinin vermesi gerektięini belirtiniz.

3.ařama

Bu beř soruluk anketi cevaplırsanız ok seviniriz.

Yardımlarınız iin teřekkrlar.

APPENDIX 3

Question 1:

Aşağıda yıllık izin veya tatil dönüşü işe başlamada yaşanan rehabet, dikkat dağılımı ve motivasyondaki düşüş sorununun çözümü için fabrikanızda çalışan işçiler tarafından verilen önerileri lütfen örgütünüz maliyeti açısından, her seçeneğin yanında verilen dörtlü ölçekte değerlendiriniz.

Çok maliyetli

Orta maliyetli

Az maliyetli

Hiç maliyeti yok

☐
☐
☐
☐


Question 2:

Aşağıda yıllık izin veya tatil dönüşü işe başlamada yaşanan rehabet, dikkat dağılımı ve motivasyondaki düşüş sorununun çözümü için fabrikanızda çalışan işçiler tarafından verilen önerilerin örgütünüzde uygulanabilirlik derecesi nedir?

Çok zor Oldukça zor Biraz zor Biraz kolay Oldukça kolay Çok kolay

☐☐☐☐☐☐

Question 3:

Aşağıda yıllık izin veya tatil dönüşü işe başlamada yaşanan rehavet, dikkat dağılımı ve motivasyondaki düşüş sorununun çözümü için fabrikanızda çalışan işçiler tarafından verilen önerileri lütfen örgütünüzde uygulanması için gerekli zaman açısından, her seçeneğin yanında verilen altılı ölçekte değerlendiriniz.

Çok fazla

Hemen yapılır

zaman alır

☐
☐
☐
☐
☐
☐


Aşağıda yıllık izin veya tatil dönüşü işe başlamada yaşanan rehabet, dikkat dağılımı ve motivasyondaki düşüş sorununun çözümü için fabrikanızda çalışan işçiler tarafından alınan kararlar belirtilmektedir. Lütfen bu kararların içinde a. belirsiz, b. konu ile ilgisi olmayan ve c. kurumun nasıl bir uygulama yapması belli değil diye düşündüklerinizi kararın yanına a, b veya c harflerinden birini koyarak belirtiniz.

1. İşini sevmek gerekir; bu nedenle izin öncesi personel tatile yavaş yavaş hem maddi hem manevi olarak hazırlanmalı ve tatil dönüşü ilk gün çalışmaktan ziyade yöneticiler ve çalışanlar bir önceki dönemin değerlendirmesini yapmalı
2. Bir iş yerinde çalışanların işe en kolay motivasyonu ve en verimli çalışması işini ve işyerini sevmesi ile mümkün olabilir.
3. Toplu izne çıkış ve dönüşlerde izin dönüşü bir gününün sosyal aktivite ile geçirilmesi
4. İş güvenliği konularına uymayı sağlamak ve teşvik etmek (gerekirse mükafat verilsin, üst yönetim dahil eğitim verilsin). Böylece herkesin kurallara uyması sağlansın.
5. İş olmayan kişi çalışma alanına girmemeli
6. İşveren ve çalışanların çıkarları doğrultusunda kişi (maddi manevi açıdan) huzurlu bir ortamdan izine ayrılıp, tatile gidebilmeli ve huzurlu bir ortamdan rahat dönmeli
7. İşini sevmek gerekir bu nedenle çalışana demokratik bir ortamda işini severek yapma imkanı sağlanmalı
8. Uzun tatil dönüşü ilk çalışma günü üretim değil de prosedürler konusunda adaptasyon eğitimi verilip konuşma yapılabilir ve makine temizliği ve bakımı gerçekleştirilebilir.
9. Kısa tatil dönüşü kişinin kendini hazırlaması gerekir ve duygusal davranmamalı. Kendini seven işini sevsin, işveren de çalışanını sevsin
10. Kişi bilgisi dışında iş yapmamalı
11. Tatil dönüşü ilk gün belirlenen üretim miktarının kaygısı olmadan işe yavaş yavaş başlanmalı ve böylece kişi çalıştığı bölüme tatil dönüşü kendisini adapte etmeli
12. Kişi izine çıkarken avans verilmeli
13. İzin tarihlerinin personele önceden bildirilmesi ve özel işleri olanlara ayrıcalık tanınması
14. İzin dönüşü işe motivasyonu arttıracak toplantı yapılmalı ve izin öncesi performansı yakalamak için kişiye zaman tanınmalı
15. Bilinçlenmek (Makine hakkında ve ürün hakkında işçi ve işveren bilinçlenmeli)
16. İşçiye iyi bir tatil yapmasını sağlayacak ekonomik imkanlar verilmeli
17. İzin dönüşü işe başlamadan toplu halde kahvaltı, iş kazaları ile ilgili kısa görsel bir eğitim alarak, kısa süreli toplu bir egzersiz yapıp işe başlama

Aşağıda yıllık izin veya tatil dönüşü işe başlamada yaşanan rahatsızlık, dikkat dağılımı ve motivasyondaki düşüş sorununun çözümü için fabrikanızda çalışan işçiler tarafından alınan kararları lütfen örgütünüzde **maliyeti açısından**, her seçeneğin altında verilen dörtlü ölçeğe değerlendiriniz. Birinci sayfada a, b veya c şıkkı ile işaretlemiş olduğunuz kararları değerlendirme dışında tutabilirsiniz.

1. İşini sevmek gerekir; bu nedenle izin öncesi personel tatile yavaş yavaş hem maddi hem manevi olarak hazırlanmalı ve tatil dönüşü ilk gün çalışmaktan ziyade yöneticiler ve çalışanlar bir önceki dönemin değerlendirmesini yapmalı

Çok maliyetli ☐ Orta maliyetli ☐ Az maliyetli ☐ Hiç maliyeti yok ☐

2. Bir iş yerinde çalışanların işe en kolay motivasyonu ve en verimli çalışması işini ve işyerini sevmesi ile mümkün olabilir.

Çok maliyetli ☐ Orta maliyetli ☐ Az maliyetli ☐ Hiç maliyeti yok ☐

3. Toplu izne çıkış ve dönüşlerde izin dönüşü bir gününün sosyal aktivite ile geçirilmesi

Çok maliyetli ☐ Orta maliyetli ☐ Az maliyetli ☐ Hiç maliyeti yok ☐

4. İş güvenliği konularına uymayı sağlamak ve teşvik etmek (gerekirse mükafat verilsin, üst yönetim dahil eğitim verilsin). Böylece herkesin kurallara uyması sağlansın.

Çok maliyetli ☐ Orta maliyetli ☐ Az maliyetli ☐ Hiç maliyeti yok ☐

5. İş olmayan kişi çalışma alanına girmemeli

Çok maliyetli ☐ Orta maliyetli ☐ Az maliyetli ☐ Hiç maliyeti yok ☐

6. İşveren ve çalışanların çıkarları doğrultusunda kişi (maddi manevi açıdan) huzurlu bir ortamdan izine ayrılıp, tatile gidebilmeli ve huzurlu bir ortamdan rahat dönmeli

Çok maliyetli ☐ Orta maliyetli ☐ Az maliyetli ☐ Hiç maliyeti yok ☐

7. İşini sevmek gerekir bu nedenle çalışana demokratik bir ortamda işini severek yapma imkanı sağlanmalı

Çok maliyetli ☐ Orta maliyetli ☐ Az maliyetli ☐ Hiç maliyeti yok ☐

8. Uzun tatil dönüşü ilk çalışma günü üretim değil de prosedürler konusunda adaptasyon eğitimi verilip konuşma yapılabilir ve makine temizliği ve bakımı gerçekleştirilebilir.

Çok maliyetli
☐

Orta maliyetli
☐

Az maliyetli
☐

Hiç maliyeti yok
☐

9. Kısa tatil dönüşü kişinin kendini hazırlaması gerekir ve duygusal davranmamalı. Kendini seven işini sevsin, işveren de çalışanını sevsin

Çok maliyetli
☐

Orta maliyetli
☐

Az maliyetli
☐

Hiç maliyeti yok
☐

10. Kişi bilgisi dışında iş yapmamalı

Çok maliyetli
☐

Orta maliyetli
☐

Az maliyetli
☐

Hiç maliyeti yok
☐

11. Tatil dönüşü ilk gün belirlenen üretim miktarının kaygısı olmadan işe yavaş yavaş başlanmalı ve böylece kişi çalıştığı bölüme tatil dönüşü kendisini adapte etmeli

Çok maliyetli
☐

Orta maliyetli
☐

Az maliyetli
☐

Hiç maliyeti yok
☐

12. Kişi izine çıkarken avans verilmeli

Çok maliyetli
☐

Orta maliyetli
☐

Az maliyetli
☐

Hiç maliyeti yok
☐

13. İzin tarihlerinin personele önceden bildirilmesi ve özel işleri olanlara ayrıcalık tanınması

Çok maliyetli
☐

Orta maliyetli
☐

Az maliyetli
☐

Hiç maliyeti yok
☐

14. İzin dönüşü işe motivasyonu arttıracak toplantı yapılmalı ve izin öncesi performansı yakalamak için kişiye zaman tanınmalı

Çok maliyetli
☐

Orta maliyetli
☐

Az maliyetli
☐

Hiç maliyeti yok
☐

15. Bilinçlenmek (Makine hakkında ve ürün hakkında işçi ve işveren bilinçlenmeli)

Çok maliyetli
☐

Orta maliyetli
☐

Az maliyetli
☐

Hiç maliyeti yok
☐

16. İşçiye iyi bir tatil yapmasını sağlayacak ekonomik imkanlar verilmeli

Çok maliyetli
☐

Orta maliyetli
☐

Az maliyetli
☐

Hiç maliyeti yok
☐

17. İzin dönüşü işe başlamadan toplu halde kahvaltı, iş kazaları ile ilgili kısa görsel bir eğitim alarak, kısa süreli toplu bir egzersiz yapıp işe başlama

Çok maliyetli
☐

Orta maliyetli
☐

Az maliyetli
☐

Hiç maliyeti yok
☐



Aşağıda yıllık izin veya tatil dönüşü işe başlamada yaşanan rahavet, dikkat dağılımı ve motivasyondaki düşüş sorununun çözümü için fabrikamızda çalışan işçiler tarafından alınan kararları, örgütünüzde uygulanabilirlik derecesi açısından her seçeneğin altında verilen altılı ölçekte değerlendiriniz. Birinci sayfada a, b veya c şıkkı ile işaretlemiş olduğunuz kararları değerlendirme dışında tutabilirsiniz

1. İşini sevmek gerekir; bu nedenle izin öncesi personel tatile yavaş yavaş hem maddi hem manevi olarak hazırlanmalı ve tatil dönüşü ilk gün çalışmaktan ziyade yöneticiler ve çalışanlar bir önceki dönemin değerlendirmesini yapmalı

Çok zor Oldukça zor Biraz zor Biraz kolay Oldukça kolay Çok kolay
☐ ☐ ☐ ☐ ☐ ☐

2. Bir iş yerinde çalışanların işe en kolay motivasyonu ve en verimli çalışması işini ve işyerini sevmesi ile mümkün olabilir.

Çok zor Oldukça zor Biraz zor Biraz kolay Oldukça kolay Çok kolay
☐ ☐ ☐ ☐ ☐ ☐

3. Toplu izne çıkış ve dönüşlerde izin dönüşü bir gününün sosyal aktivite ile geçirilmesi

Çok zor Oldukça zor Biraz zor Biraz kolay Oldukça kolay Çok kolay
☐ ☐ ☐ ☐ ☐ ☐

4. İş güvenliği konularına uymayı sağlamak ve teşvik etmek (gerekirse mükafat verilsin, üst yönetim dahil eğitim verilsin). Böylece herkesin kurallara uyması sağlansın.

Çok zor Oldukça zor Biraz zor Biraz kolay Oldukça kolay Çok kolay
☐ ☐ ☐ ☐ ☐ ☐

5. İş olmayan kişi çalışma alanına girmemeli

Çok zor Oldukça zor Biraz zor Biraz kolay Oldukça kolay Çok kolay
☐ ☐ ☐ ☐ ☐ ☐

6. İşveren ve çalışanların çıkarları doğrultusunda kişi (maddi manevi açıdan) huzurlu bir ortamdan izine ayrılıp, tatile gidebilmeli ve huzurlu bir ortamdan rahat dönmeli

Çok zor Oldukça zor Biraz zor Biraz kolay Oldukça kolay Çok kolay
☐ ☐ ☐ ☐ ☐ ☐

7. İşini sevmek gerekir bu nedenle çalışana demokratik bir ortamda işini severek yapma imkanı sağlanmalı

Çok zor Oldukça zor Biraz zor Biraz kolay Oldukça kolay Çok kolay
☐ ☐ ☐ ☐ ☐ ☐

8. Uzun tatil dönüşü ilk çalışma günü üretim değil de prosedürler konusunda adaptasyon eğitimi verilip konuşma yapılabilir ve makine temizliği ve bakımı gerçekleştirilebilir.

Çok zor ☐ Oldukça zor ☐ Biraz zor ☐ Biraz kolay ☐ Oldukça kolay ☐ Çok kolay ☐

9. Kısa tatil dönüşü kişinin kendini hazırlaması gerekir ve duygusal davranmamalı. Kendini seven işini sevsin, işveren de çalışanını sevsin

Çok zor ☐ Oldukça zor ☐ Biraz zor ☐ Biraz kolay ☐ Oldukça kolay ☐ Çok kolay ☐

10. Kişi bilgisi dışında iş yapmamalı

Çok zor ☐ Oldukça zor ☐ Biraz zor ☐ Biraz kolay ☐ Oldukça kolay ☐ Çok kolay ☐

11. Tatil dönüşü ilk gün belirlenen üretim miktarının kaygısı olmadan işe yavaş yavaş başlanmalı ve böylece kişi çalıştığı bölüme tatil dönüşü kendisini adapte etmeli

Çok zor ☐ Oldukça zor ☐ Biraz zor ☐ Biraz kolay ☐ Oldukça kolay ☐ Çok kolay ☐

12. Kişi izine çıkarken avans verilmeli

Çok zor ☐ Oldukça zor ☐ Biraz zor ☐ Biraz kolay ☐ Oldukça kolay ☐ Çok kolay ☐

13. İzin tarihlerinin personele önceden bildirilmesi ve özel işleri olanlara ayrıcalık tanınması

Çok zor ☐ Oldukça zor ☐ Biraz zor ☐ Biraz kolay ☐ Oldukça kolay ☐ Çok kolay ☐

14. İzin dönüşü işe motivasyonu arttıracak toplantı yapılmalı ve izin öncesi performansı yakalamak için kişiye zaman tanınmalı

Çok zor ☐ Oldukça zor ☐ Biraz zor ☐ Biraz kolay ☐ Oldukça kolay ☐ Çok kolay ☐

15. Bilinçlenmek (Makine hakkında ve ürün hakkında işçi ve işveren bilinçlenmeli)

Çok zor ☐ Oldukça zor ☐ Biraz zor ☐ Biraz kolay ☐ Oldukça kolay ☐ Çok kolay ☐

16. İşçiye iyi bir tatil yapmasını sağlayacak ekonomik imkanlar verilmeli

Çok zor

☐

Oldukça zor

☐

Biraz zor

☐

Biraz kolay

☐

Oldukça kolay

☐

Çok kolay

☐

17. İzin dönüşü işe başlamadan toplu halde kahvaltı, iş kazaları ile ilgili kısa görsel bir eğitim alarak, kısa süreli toplu bir egzersiz yapıp işe başlama

Çok zor

☐

Oldukça zor

☐

Biraz zor

☐

Biraz kolay

☐

Oldukça kolay

☐

Çok kolay

☐

Aşağıda yıllık izin veya tatil dönüşü işe başlamada yaşanan rehabet, dikkat dağılımı ve motivasyondaki düşüş sorununun çözümü için fabrikanızda çalışan işçiler tarafından alınan kararları lütfen örgütünüzde uygulanması için **gerekli zaman açısından**, her seçeneğin altında verilen altılı ölçekte değerlendiriniz. Birinci sayfada a, b veya c şikkı ile işaretlemiş olduğunuz kararları değerlendirme dışında tutabilirsiniz

1. İşini sevmek gerekir; bu nedenle izin öncesi personel tatile yavaş yavaş hem maddi hem manevi olarak hazırlanmalı ve tatil dönüşü ilk gün çalışmaktan ziyade yöneticiler ve çalışanlar bir önceki dönemin değerlendirmesini yapmalı

Çok fazla
zaman alır

☐
☐
☐
☐
☐

Hemen
uygulanır

☐

2. Bir iş yerinde çalışanların işe en kolay motivasyonu ve en verimli çalışması işini ve işyerini sevmesi ile mümkün olabilir.

Çok fazla
zaman alır

☐
☐
☐
☐
☐

Hemen
uygulanır

☐

3. Toplu izne çıkış ve dönüşlerde izin dönüşü bir gününün sosyal aktivite ile geçirilmesi

Çok fazla
zaman alır

☐
☐
☐
☐
☐

Hemen
uygulanır

☐

4. İş güvenliği konularına uymayı sağlamak ve teşvik etmek (gerekirse mükafat verilsin, üst yönetim dahil eğitim verilsin). Böylece herkesin kurallara uyması sağlansın.

Çok fazla
zaman alır

☐
☐
☐
☐
☐

Hemen
uygulanır

☐

5. İş olmayan kişi çalışma alanına girmemeli

Çok fazla
zaman alır

☐
☐
☐
☐
☐

Hemen
uygulanır

☐

6. İşveren ve çalışanların çıkarları doğrultusunda kişi (maddi manevi açıdan) huzurlu bir ortamdan izine ayrılıp, tatile gidebilmeli ve huzurlu bir ortamdan rahat dönmeli

Çok fazla
zaman alır

☐
☐
☐
☐
☐

Hemen
uygulanır

☐

7. İşini sevmek gerekir bu nedenle çalışana demokratik bir ortamda işini severek yapma imkanı sağlanmalı

Çok fazla
zaman alır

Hemen
uygulanır

☐ ☐ ☐ ☐ ☐ ☐

8. Uzun tatil dönüşü ilk çalışma günü üretim değil de prosedürler konusunda adaptasyon eğitimi verilip konuşma yapılabilir ve makine temizliği ve bakımı gerçekleştirilebilir.

Çok fazla
zaman alır

Hemen
uygulanır

☐ ☐ ☐ ☐ ☐ ☐

9. Kısa tatil dönüşü kişinin kendini hazırlaması gerekir ve duygusal davranmamalı. Kendini seven işini sevsin, işveren de çalışanını sevsin

Çok fazla
zaman alır

Hemen
uygulanır

☐ ☐ ☐ ☐ ☐ ☐

10. Kişi bilgisi dışında iş yapmamalı

Çok fazla
zaman alır

Hemen
uygulanır

☐ ☐ ☐ ☐ ☐ ☐

11. Tatil dönüşü ilk gün belirlenen üretim miktarının kaygısı olmadan işe yavaş yavaş başlanmalı ve böylece kişi çalıştığı bölüme tatil dönüşü kendisini adapte etmeli

Çok fazla
zaman alır

Hemen
uygulanır

☐ ☐ ☐ ☐ ☐ ☐

12. Kişi izine çıkarken avans verilmeli

Çok fazla
zaman alır

Hemen
uygulanır

☐ ☐ ☐ ☐ ☐ ☐

13. İzin tarihlerinin personele önceden bildirilmesi ve özel işleri olanlara ayrıcalık tanınması

Çok fazla
zaman alır

Hemen
uygulanır

☐ ☐ ☐ ☐ ☐ ☐

14. İzin dönüşü işe motivasyonu arttıracak toplantı yapılmalı ve izin öncesi performansı yakalamak için kişiye zaman tanınmalı

Çok fazla
zaman alır

☐
☐
☐
☐
☐

Hemen
uygulanır

☐

15. Bilinçlenmek (Makine hakkında ve ürün hakkında işçi ve işveren bilinçlenmeli)

Çok fazla
zaman alır

☐
☐
☐
☐
☐

Hemen
uygulanır

☐

16. İşçiye iyi bir tatil yapmasını sağlayacak ekonomik imkanlar verilmeli

Çok fazla
zaman alır

☐
☐
☐
☐
☐

Hemen
uygulanır

☐

17. İzin dönüşü işe başlamadan toplu halde kahvaltı, iş kazaları ile ilgili kısa görsel bir eğitim alarak, kısa süreli toplu bir egzersiz yapıp işe başlama

Çok fazla
zaman alır

☐
☐
☐
☐
☐

Hemen
uygulanır

☐

4. Bu tip bir çalışmayı bir daha yapmak ister misiniz?

Kesinlikle	Çok	Oldukça	Biraz	Çok az	Hiç
isterim	isterim	isterim	isterim	isterim	istemem
☐	☐	☐	☐	☐	☐

5. Bugün birlikte çalıştığınız arkadaşlarla ekip olarak başka bir çalışmada yer almak ister misiniz?

Kesinlikle	Çok	Oldukça	Biraz	Çok az	Hiç
isterim	isterim	isterim	isterim	isterim	istemem
☐	☐	☐	☐	☐	☐

APPENDIX 5

Teams' Homogeneity Scores

<i>Degree of vitality</i>	<i>1.team</i>	<i>2. team</i>	<i>3.team</i>	<i>4.team</i>	<i>5.team</i>	<i>6.team</i>
Education	25	25	25	25	25	25
Place of birth	20	20	20	20	16	20
Marital status	15	15	15	15	15	15
Having a child	8	10	8	8	8	10
Date of birth	5	5	5	4	4	5
Total	73	75	73	72	68	75

Note: Calculation is done as follows

For example: If all the members match with each other in terms of education, since education has a vitality degree of 5 and the team has 5 members $5*5=25$. The team gets 25 points from education similarity. All the scoring has done the same for all of the characteristics.