DIAGNOSING ORGANIZATIONAL CULTURE

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DIAGNOSING ORGANIZATIONAL CULTURE

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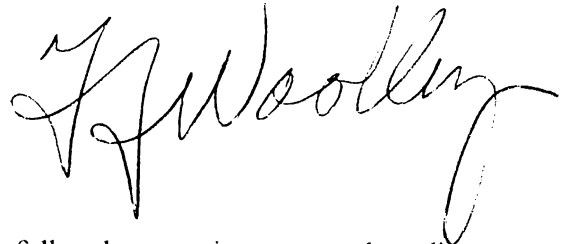
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TABLE OF CONTENTS

APPENDICES

REFERENCES

LIST OF TABLES

COMPANY GES

COMPANY SDK

COMPANY ARM

LIST OF FIGURES

LIST OF CHARTS

LIST OF ORGANIZATIONAL CHARTS

LIST OF APPENDICES

ABSTRACT

DIAGNOSING ORGANIZATIONAL CULTURE

In today's dynamic business environment concepts like organizational development, restructuring, and change management has become the most popular subjects. Although it has begun to loose some of its popularity, organizational culture is the basis for all these concepts. Since organizational culture is a concept that can hardly be defined and agreed upon, this study examines the different approaches to the definition and the different approaches on how to diagnose organizational culture. The four dimensional culture model; questionnaire developed by Harrison and Strokes is explained and applied to three companies operating in different sectors in order to obtain a general understanding of their existing and preferred culture orientations. The results indicate that the questionnaire is a valid tool to begin discussions on organizational culture. This study can be taken as the first step of a larger culture change project since it analyzes the differences between the existing and preferred culture orientations.

KEY WORDS: Organizational Culture, Diagnosing Organizational Culture, Power, Role, Achievement, Support, Orientation, Questionnaire

ÖZET

ORGANİZASYON KÜLTÜRÜNÜN İNCELEMESİ

Günümüzün dinamik iş çevresinde organizasyon gelişimi, yeniden yapılanma ve değişim yönetimi gibi konular oldukça önem kazanmıştır. Popülerliğini kısmen kaybediyor olmasına rağmen organizasyon kültürü tüm bu konuların temelini oluşturmaktadır. Organizasyon kültürü tanımlanması ve bu konuda görüş birliğine varılması oldukça zor bir konudur, bu nedenle bu tez organizasyon kültürünün tanımlanmasındaki ve incelenmesindeki değişik görüşleri ele almıştır. Harrison ve Strokes tarafından önerilen dört boyutlu organizasyon kültürü modeli ele alınmış ve bu modelin anketi, üç farklı sektörde çalışmakta olan firmalara uygulanmış; olan ve olmasını tercih ettikleri kültür arasındaki farklar hakkında genel bir görüş elde edilmeye çalışılmıştır. Sonuçlar göstermiştir ki uygulanan anket organizasyon kültürü hakkında tartışmalar başlatmak için geçerli bir araçtır. Olan ve olması gereken kültürler arasındaki farklılıkları ortaya çıkardığı için bu çalışma bir organizasyon değişimi projesinin ilk adımı olarak ele alınabilir.

ANAHTAR KELİMELER: Organizasyon Kültürü, Organizasyon Kültürünün İncelenmesi, Güç, Rol, Başarı, Destek, Yönelme, Anket.

ACKNOWLEDGMENTS

to my Mother
for her endless love & support

CHAPTER 1

ORGANIZATIONAL CULTURE

The purpose of this study is to provide a general insight into cultural issues. The definition of culture is explained and the significant studies that have been made in the field of diagnosing organizational culture are analyzed. The four dimensional culture model developed by Harrison and Strokes was applied to three companies in order to obtain a general understanding of the their cultural orientations concerning power, role, achievement and support dimensions. In this chapter the definition of culture is explored.

1.0 <u>Overview</u>:

The notion that organizations have cultures is an attractive heuristic proposition, especially when explanations derived from individual based psychology or structural sociology prove limiting. Culture implies that human behavior is partially prescribed by a collectively created and sustained way of life that cannot be personality based because it is shared by diverse individuals. Neither can a way of life be derived solely from structure, since members of separate collectives themselves occupy equivalent positions in a structural matrix. Rather, culture points to an analysis mediating between deterministic and volunteristic models of behavior in organizations (Maanen, Barley, 1986).

"My own understanding of this phenomenon came about from seeing more clearly that cultures arise in whole occupational communities and that, therefore, parts of organizations are as much

a reflection of the occupational backgrounds and experiences of some of their members as they are of their own unique organizational histories." (Schein, 1996). [1]

Like all tropes, organizational culture promises insight by bartering away other conceptual opportunities. Attributing culture to a collective not only presumes that members share common bonds, but also that commonalties are identified by contrasting one collective with another. In Weber's terms, culture presumes "consciousness of kind" as well as "consciousness of difference". Accordingly, the phrase "organizational culture" suggests that organizations bear unitary and unique cultures (Maanen, Barley, 1986). This perception makes it easier for the organizational behavioralists to define organizational culture. Since in the case of organizational culture there are many approaches as well as many definitions, thinking of organizational culture as unitary and unique defines a way on how organizational culture could be explained.

Organizational psychology is slowly evolving from an individualistic point of view toward a more integrated view based on social psychology, sociology and anthropology. (Schein, 1996). Anthropologists emphasize the close description of relatively small, remote and self contained societies. Descriptive details are organized as etnographies wherein the presence of culture is displayed by the identification and elaboration of such matters as the language, child rearing practices, totems, taboos, signifying codes, work and leisure interests, standards of behavior, social classification systems and jural procedures shared by the members of the studied society. From the description of these various domains, the analysts infer the patterns said to

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[1] Schein, Edgar H. (1996) 'Culture: The Missing Concept in Organization Studies'. Administrative Science Quarterly. Volume 41. p. 234.

simultaneously knit the society into an integrated whole and to differentiate it from the others. Whether a group's practices are found to be similar to our own or spectacularly alien, culture is cast as an all-embracing and largely taken for-granted way of life shared by those who make up the society (Maanen, Barley, 1986).

Lost are the predictability, simplicity and apparent social order of less complicated societies where all members know what other members should do. In place of single "design for living" industrial societies offer members many such designs (Maanen, Barley, 1986). In this respect, organizations themselves also created their own way of life which tend to be based on their perceptions of the outer world (external orientation) in accompaniment with their own experiences within the organization (internal integration).

Unitary culture is primarily an anthropological idea, while the notion of two subcultures is predominantly sociological. Culture can be understood as a set of solutions devised by a group of people to meet specific problems posed by the situations they face in common. Cultural manifestations evolve overtime as members of a group confront similar problems and in attempting to cope with these problems, devise and employ strategies that are remembered and passed onto new members (Maanen, Barley, 1986).

1.1 Problems with the Understanding and the Definition of Culture:

In general, economic theories are used to explained theories about the firms. Although it is a way of explaining how the firms succeed in their environment, it does not give a whole definition for

the whole story. Increasingly it appears that economic theories of the firm are naive and incomplete. The real causes of economic malaise seem to lie deep within the culture of an organization, and perhaps within the society itself. Do cultural phenomena hold the key to better economic understanding?

The expectation that the work place be designed to function as a community is a legitimate and important concern of organizational designers, one that traditional emphasis on the division of labor, as well as increased specialization and reliance on rules has largely ignored. More and more, the concept of success is being redefined, success is being interpreted in terms of the quality of life. Quality of life expectations may have profound implications for understanding and managing facets of the organization's cultural domain.

There is widespread dissatisfaction with the knowledge scholars have gained about how organizations should be structured and designed, how managers should behave and how organizations should be evaluated in terms of effectiveness. Research designs and methods commonly used in the studies of organizations should be evaluated in terms of their own effectiveness since most of them have been largely inappropriate for the study of the variables that show promise in exploring deep meanings. Furthermore, the explanatory power of most of our correlation based designs is very low (Frost, Moore, Louis, Lundberg, Martin, 1985). In today's highly dynamic business environment what used to work in organizational designs may not seem to work anymore, mostly because of their low flexibility and adaptability.

Organizations as open systems are influenced by and, in turn, influence their cultural milieu. **What works in one cultural setting may not work in another.** It is evident that the organizations have a culture of their own with their own perception of the outer world, with their artifacts, values and assumptions.

1.2 Why Culture Should Be Studied:

Organizational scholars are increasingly recognizing the limitations in the epistemological bases of traditional approaches to the study of the organizations. They are becoming more aware of alternative ways of originating and examining knowledge about the organizations. Adopting a cultural perspective may lead to an important epistemological synthesis wherein a much richer set of organizational variables is studied using a deeper theoretical frame of reference and a broader range of acceptable methods of analysis.

Conferences are being held, proceedings are being published, newsletters are being circulated, cross-disciplinary teams of researchers are being formed. Organizational practitioners are becoming more aware of the importance of understanding and enhancing the cultural life of an organization.

So an organization's culture has to do with shared assumption's, priorities, meanings and values-with patterns of beliefs among people in the organization. Talking about organizational culture seems to mean talking about the importance of symbolism -of rituals, myths, stories and legends-

and about the interpretation of events, ideas and experiences that are influenced and shaped by the groups within which they live.

There is a certain amount of disagreement as to where the organizational culture originates, whether the organizational culture plays a key role, whether there is a single organizational culture or many cultures, whether an organization's culture or cultures can be managed, whether organizations have cultures or are places to study cultures, whether and how organizational cultures can be studied and whether they should be studied at all (Frost, Moore, Louis, Lundberg, Martin, 1985).

Organizational culture has attracted the interest of many academicians as well as business people. Today the most attractive subjects dealing with organizations has become Change Management and Organizational Development. The fact that without proper diagnosis of organizational culture, applications of change management or organizational development can hardly serve their aims, should not be forgotten and should necessarily be taken into consideration.

It is sometimes stated that the organizational culture issue has been a fad in the organizational studies. It is mostly believed that organizational culture seems to lose its importance in the area of organizational sciences. One reason that people are beginning to lose their interest may be because organizational culture is very difficult to define. Until now, different views on organizational culture expressed different definitions of culture but everyone in the area agrees

that there is no proper definition of organizational culture. The best way of understanding what organizational culture means is to gather the different views on what organizational culture means.

1.3 Definition Of Culture:

The concept of organizational culture is especially relevant to gaining an understanding of the mysterious and seemingly irrational things that go on in human systems (Schein, 1985).

The word culture has different meanings and connotations. When it is combined by another word that is commonly used, for example "organization", it gains other dimensions. So it is very important to define what is meant by Organizational Culture. The following are the dominant definitions in the current literature:

1. *Observed behavioral regularities* when people interact, such as the language used and the rituals around deference and demeanor
2. The *norms* that evolve in working groups, such as the particular norm of "a fair day's work for a fair day's pay"
3. The *dominant values espoused* by an organization such as the "product quality" or "price leadership"
4. The *philosophy* that guides an organization's policy toward employees and/or customers
5. The *rules* of the game for getting along in the organization, "the ropes" that a newcomer must learn in order to become an accepted member

6. The *feeling* or *climate* that is conveyed in and organization by the physical layout and the way in which the members of the organization interact with customers or other outsiders. (Schein, 1985)

Culture, then, should be viewed as a property of an independently defined stable social unit. In this sense, culture is a learned product of group experiences and is, therefore, to be found only where there is a definable group with a significant history (Schein, 1985).

One may well find that there are several cultures within an operating social unit called the company or the organization: a managerial culture, various occupationally based cultures in functional units, groupcultures based on geographical proximity, worker cultures based on the hierarchical experiences and so on (Schein, 1996).

In attention to social systems in organizations has led researchers to underestimate the importance of culture -shared norms, values, assumptions- in how organizations function. Concepts for understanding culture in organizations have value only when they derive from observation of real behavior in organizations, when they make sense of organizational data and when they are enough to generate further study (Schein, 1996).

Artifacts and Creations	
Technology	Visible but often
Art	not decipherable
Visible & Audible Behavior Patterns	

⇧ ⇩   ↑

Values	
Testable in the Physical Environment	Greater level
Testable only by Social Consensus	of awareness

⇧ ⇩   ↑

Basic Assumptions	
Relationship to the Environment	
Nature of Reality, Time and Space	Taken for granted
Nature of Human Nature	Invisible
Nature of Human Activity	Preconscious
Nature of Human Relationships	

Figure 1: Levels of Culture & Their Interaction (Schein, 1985)

Level 1- Artifacts: The most visible level of culture is its artifacts and creations- its constructed physical and social environment. At this level one can look at the physical space, the technological output of the group, its written and spoken language, artistic productions and the overt behavior of its members (Schein, 1985).

Every facet of a group's life produces artifacts creating the problem of classification (Schein, 1985). Verbal artifacts are primarily in the form of language, stories and myths. Behavioral artifacts are presented in rituals and ceremonies, while physical artifacts can be found in the art and technology exhibited by the members of the organization. Although these artifacts are indeed key

elements of organizational culture, they are only the surface manifestations or overt expressions of cultural perspectives, values and assumptions (Dyer, 1982).

Whereas it is easy to observe artifact, even subtle ones, such as the way in which status is demonstrated by members, the difficult part is figuring out what the artifacts mean, how they interrelate, what deeper patterns, if any, they reflect (Schein, 1985).

Level 2- Values: In a sense all cultural learning ultimately reflects someone's original values in their sense of what "ought" to be, as distinct from what it is. When the group faces a new task, issue, or problem, the first solution proposed to deal with it can only have the status of a value because there is not yet a shared basis determining what is factual and real. A group can learn that the holding of certain beliefs and assumptions is necessary as a basis for maintaining the group.

Many values remain conscious and are explicitly articulated because they serve the normative or moral function of guiding members of the group in how to deal with certain key situations (Schein, 1985). Because of their broad applicability, values are more abstract then perspectives (here referred as artifacts) however the members of an organization are usually aware of them and may even attempt to articulate them in statements that represent the organization's "philosophy" (Ouchi, 1981).

A set of values that becomes embodied in an ideology or organizational philosophy thus can serve as a guide and as a way of dealing with the uncertainty of intrinsically uncontrollable or difficult events. Such values will predict much of the behavior that can be observed at the artifactual level. But if those values are not based on a prior cultural learning, they may also come to be seen only as what Argyris and Schön (1978) have called "espoused values", which predict well enough what people will *say* in a variety of situations but which may be out of line with what they actually *do* in situations where those values should be operating (Schein, 1985).

Level 3- Basic Underlying Assumptions: The term "assumptions" refers to those highly abstract, taken for granted beliefs that are at the innermost core of culture. Explicit and formal "classificatory concepts" used by societies originate in assumptions that they are not aware of and that conscious meanings are merely "rationalized interpretations" of these assumptions (Dyer, 1982). Implicit categories are the determinants of the explicit system of meanings, thus the true meaning is not the one that we are aware of, but the one hidden behind it.

When a solution to a problem works repeatedly, it comes to be taken for granted. What was once a hypothesis, supported by only a hunch or a value comes gradually to be treated as reality. Basic assumptions are different from what some anthropologists call "dominant value orientations" in that such dominant value orientations reflect the *preferred* solution among several basic alternatives, but all the alternatives are still visible in the culture, and any given member of culture could, from time to time, behave according to variant as well as dominant orientations.

What is called basic assumptions are congruent with what Argyris has identified as "theories-in-use", the implicit assumptions that actually guide behavior, that tell group members how to perceive, think about, and feel about things. Basic assumptions, like the theories-in-use, tend to be nonconfrontable and nondebatable. To relearn in the area of "theories-in-use", to resurrect, reexamine and possibly change basic assumptions, a process that Argyris and others have called "double-loop-learning", is intrinsically difficult because assumptions are, by definition, not confrontable or debatable (Schein, 1985). Culture is learned, evolves with new experiences, and can be changed if one understands the dynamics of the learning process.

CHAPTER 2

METHODOLOGIES FOR DIAGNOSING ORGANIZATIONAL CULTURE

2.0 Introduction:

"Comparing cultures is both a theoretical and an empirical problem"[2]

Depending on the definition of culture some questions arise when the concept of diagnosing culture comes on stage. Beginning from this point organizational behavioralists accept the fact that it is very hard to form a standard way of diagnosing such a concept that can hardly be defined and agreed upon.

The main issues come from the nature of relationship within the organization, among individuals, and between the organization and its environment. In every organization it is generally accepted that there are underlying values, beliefs and assumptions and the organization have a culture of its own depending on those. This uniqueness creates the question on "How to diagnose organizational culture". Since what may fit one organization would not probably fit the other. Some questions that arise can be identified as follows, like Hofstede explained in his article "Measuring Organizational Cultures":

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[2] Hofstede, Geert and Bram Neuijen, D. Daval Ohayv, Geert Sanders (1990) 'Measuring Organizational Cultures: A Qualitative and Quantitative Study Across Twenty Cases', Administrative Science Quarterly, Volume 35, p.289.

1. Can organizational cultures be "measured" quantitatively, on the basis of answers of organizational members to written questions or can they only be described qualitatively?

2. If organizational cultures can be measured in this way, which operationalizable and independent dimensions can be used to measure them, and how do these dimensions relate to what is known about organizations from existing theory and research?

3. To what extent can measurable differences among cultures of different organizations be attributed to unique features of the organization in question, such as the history and the personality of its founder? To what extent do they reflect the other characteristics of the organization, like its structure and control systems which in themselves may have been affected by culture? (Hofstede, Neuijen, Ohavy, Sanders 1990)

Advocates of qualitative methods have provided two main justifications for their choice. The first one is based on the presumed inaccessibility, depth or unconscious quality of culture. For example, according to Schein basic assumptions exist at a preconscious level and can be traced through a complex interactive process of joint inquiry between insiders and outsiders. Furthermore, Schein argues that quantitative assessment conducted through surveys is unwise because it reflects the conceptual categories not the respondent's own, presuming unwarranted generalizability. The second point concerns the possible uniqueness of an organization's culture such that an outsider cannot form a *priori* questions or measures. Smircich (1982), on the other hand, conceptualized organizational culture as a particular set of meanings that provides a group

14

with a distinctive character, which in turn leads to the formulation of social reality unique to members of a group and as such, makes it impossible for standardized measures to tap cultural processes (Xenikou, Furnham, 1996).

There should be a "contextualization" of rationality which explains both why the same man in different situations or contexts adopts different rationalities and why in the same context two men can adopt different rationalities. (Kerauderen, 1996)

Entering culture and culturalist theory is rather like walking into a maze: one cannot know where one is going or where one came from because space and perspectives never seem to be static and reliable. Indeed, it is difficult to find more than a handful of authors who use the same definition, or rather the same words to define culture. For giving some examples; "the underlying values, beliefs and principles" (Denison 1990,2) and "shared understandings about how to cope with and manage uncertainties"(Trice, Beyer 1991, 150); for others it means "the collective programming of the human mind" (Hofstede 1980, 25) or "stable structures of shared beliefs" (Abramson, Fombrun 1992,176) (Kerauderen, 1996).

Some authors recently noted that a study published in 1952 had counted no less than 164 definitions of the term culture and readers of culturalist theory know well how it is sometimes difficult to understand the theoretical subtleties of some interdisciplinary culture studies, and even worse, how it is often impossible to compare *methodologies, results* and *categories* (Kerauderen, 1996).

The fact that organizational theory is a relative newcomer in social sciences, plus the fact that the social science field is highly fragmented between disciplines and subdisciplines has made it impossible, difficult or unlikely for organizational theorists to learn the already taught lessons of cultural analysis. (Kerauderen, 1996)

The expectation of continuity in aggregate orientations follows most simply from the assumption that orientations are not superstructural reflections of objective structures but themselves invest structures and behaviour with cognitive and normative meaning (Kerauderen, 1996).

The fact that culture tends to be seen as an all-embracing explanatory concept of organizational or political life compounds the problem of categorization and dangerously facilitates conceptual stretching. In organizational theory too, the relative vagueness of the definition of the *attitudes can be measured and how they should be measured*: the multiplication of empirical works and qualitative and quantitative methodologies has not clarified and rationalized in the field of cultural studies which looks increasingly more fragmented and less comparative (Kerauderen, 1996). However, most of the early studies in organizational culture have relied almost exclusively on qualitative methods as it is clearly demonstrated by Glick (1985) who attempted to clarify the differences between the concepts of organizational culture and climate (Xenikou, Furnham, 1996).

There are good reasons for using the qualitative methods in investigating organizational culture, but the advantages may be brought at a cost as the data collected usually cannot be the basis for systematic comparison (Siehl & Martin, 1988). Fundamental theoretical aspects of the concept of

the organizational culture can be tested only by comparisons across organizations or/and organizational departments. For instance, the theoretical assumption that the consensus of organizational members on a set of cognitions and practices is the *core aspect* of culture might be tested by comparing the individual responses of members and the extent of their communality. Systematic comparisons are exceedingly difficult to be made, when only qualitative data are available. Furthermore, some qualitative data are non-parametric precluding any multivariate analysis of data which almost, always require it (Xenikou, Furnham, 1996).

Recently, most works on cultural organizational theory have been criticized for taking the analysis of culture at the single organizational level for granted. C. Geertz wrote the following about culture, "believing, with M. Weber, that a man is an animal suspended in webs of significance he himself has spun, I take culture to be those webs and the analysis of it to be therefore not an experimental science in search of law but an interpretive one in search of meaning" (Kerauderen, 1996).

"Culturalist analysis is well-founded only if it encompasses sufficiently dense and autonomous interactions; it is only legitimate if it deals with social practices to which history has given both these qualities." (Kerauderen, 1996).

There are a number of studies in organizational culture that have combined quantitative and qualitative approaches in investigating cultural phenomena. For example, Siehl and Martin (1988)

studied socialization of new employees by using what they call "a hybrid measure of culture". Their method consisted of two phases:

- in-depth interviews, ethnographic observation, archival data; help to gain an understanding of the content of culture

- qualitative data are used to construct a questionnaire; responses that can be coded quantitatively (Xenikou, Furnham, 1996)

Moreover, Hofstede, Neuijen, Ohavy and Sanders (1990) examined the culture of ten organizations by conducting in- depth, open-ended interviews in order to enrich the existing questionnaire, which could be used for statistical comparisons over organizations and overtime (Xenikou, Furnham, 1996). Since this study is one of the most well known studies of organizational culture it will be explained during the course of this study to give an idea on how organizational cultures were measured quantitatively.

2.1. Measuring Organizational Cultures; *Hofstede, Neuijen, Ohavy, Sanders*:

This Hofstede project was based on a previous research that was aiming at uncovering the differences among national cultures. The study used an existing data bank from a large business corporation (IBM) covering matched populations of employees in national subsidiaries in 64 countries.

The questions in the IBM surveys had been composed from initial in depth interviews with employees in ten countries and from suggestions by frequent travelers in the international headquarters' staffs who reported on value differences as they had noticed among subsidiaries. The structure revealed by the IBM data consisted of four largely independent dimensions of differences among national value systems. These were labeled:

- power distance

- uncertainty-avoidance

- individualism

- collectivism

- masculinity-feminity

(Hofstede, Neuijen, Ohavy, Sanders 1990)

Beginning from this point the researchers went into a **Study of Organizational Cultures,** since the cross-national research did not reveal anything about the organization's corporate culture. For making a study on the corporate cultures; instead of a cross national study a cross organizational study must be undertaken. Instead of one organization in different countries, many different organizations in one and the same country should be studied.

This briefly explains how Hofstede's study of organizational cultures came into action. The methodology that is used during the course of his study is stated as such:

2.1.1. Method:

The attempt was to cover a wide range of different work organizations, to get a feel for the size of culture differences that can be found in practice, which would then enable them to assess the relative weights of the similarities and the differences. The crucial goal was to discover what represents an organization from a cultural point of view. The sample consisted of 20 units from 10 different organizations with unit sizes varying from 60 to 2500 employees.

In the design phase of the survey the following methodology was utilized:

1. conducting in depth surveys of two to three hours to get a feel for the gestalt of the unit's culture and collect issues to be included in the questionnaire

2. administrating a standardized survey questionnaire consisting of 135 precoded questions to a random sample from the unit

3. collecting data at the level of the unit as a whole through questionnaires and interviews

The methodology used was serving the aim of explaining the manifestations of culture from shallow to deep as stated in Figure 2. Manifestations of culture is a simple way of explaining the levels of culture and getting a general understanding of the connections between the levels of culture.
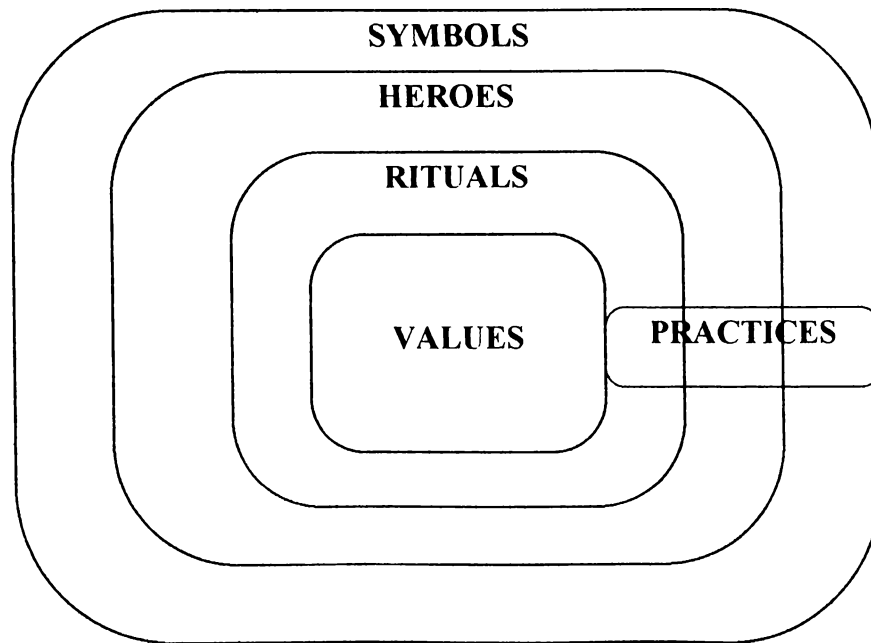
Figure 2: Manifestations of culture: From shallow to Deep

As can be seen in Figure 2, the manifestations of culture are symbols, heroes, rituals, values and

the connection among these manifestations is the practices. Each manifestation can be explained

as follows:

Symbols: A symbol is a "concrete indication of abstract values". Because virtually any object can

become a symbol of something to someone, symbols are truly ubiquitous in human society (Trice

and Beyer 1993, p.86) .

Heroes: While not leaders in the usual sense that they consciously try to influence the others,

heroes function as embodiment leaders to the degree that others are influenced by their examples

(Trice and Beyer 1993, p.86). The hero is a great motivator, the magician, the person that

everyone will count on when things get tough. They have unshakable character and style. They

do things that everyone else wants to do but is afraid to try. Heroes are symbolic figures whose deeds are out of ordinary, but not to far out. Managers are seldom heroes because heroes are not decisive but intuitive. "They do not make decisions, except one: does it fit the vision or not?" (Deal and Kennedy 1982, p.37)

Rituals: The smallest and simplest unit of cultural practice is ritual. Rituals are standardized, detailed set of techniques and behaviours that the culture prescribes to manage anxieties and express common identities; like letter writing and paperwork (Trice and Beyer 1993, p. 86).

Values: Some values can be exemplified as opportunities, stability, respect for the individual, action oriented, precise and competitive.

Practices: These are the most complex and elaborate of the cultural forms because they typically consolidate several cultural forms into one event or series of events. In rites and ceremonials, various forms come to be "intimately associated and to influence one another" (Trice and Beyer 1993, p. 80).

The checklist used for the in-depth interviews was based on a survey of literature on the ways in which the organizational cultures are supposed to manifest themselves and the researcher's own ideas. The manifestations of culture are selected as such, since the researchers believe that the four terms (symbols, heroes, rituals, values) are *mutually exclusive* and *reasonably comprehensive* and were stated to cover the field of organizational culture rather neatly.

Sample questions from the interview checklist:

1. What are the special terms here only that insiders understand? (*identification of organizational symbols*)

2. Whom do you consider as particularly meaningful persons for this organization? (*identification of organizational heroes*)

3. In what periodic meetings do you participate? How do people behave during these meetings? (*identification of organizational rituals*)

4. What is the biggest mistake one can make? Which work problems keep you awake at night? (*identification of organizational values*)

2.1.2. Survey Questionnaire and Data Analysis:

The questionnaire was aimed at collecting information on the four types of manifestations: symbols, heroes, rituals and values. The first three are subsumed under the common label "practices". Values items describe what the respondent feels "should be" practices items what he or she feels "is".

In the search of the values, there are 22 questions regarding the characteristics of an ideal job, 28 questions assessed the general beliefs, 25 other questions based on the cross national research. Both work goals and general beliefs dealt with values, but work goals represent "values as the desired" -what people want to claim for themselves- while general beliefs represent "values as the

desirable" -what people include in their world view- (Hofstede, 1980:20). Each were rated on a five point scale ranging from strongly agree to strongly disagree.

The results of the survey provides explanations in the following areas:

- Effects of organizational membership

- Dimensions of culture

- Value differences

- Practice differences

- Promotion and dismissal and relationships among values and practices

- Relationships between organizational culture and other organizational characteristics

Hofstede's study:

1. empirically shows shared perceptions of daily practices to be the core of an organization's culture

2. conclude that the values of the founders and key leaders undoubtedly shape organizational cultures but that the way these cultures affect ordinary members is through shared practices (Hofstede, Neuijen, Ohavy, Sanders 1990)

So Hofstede's study tries to explain the complex interaction and differences within culture beginning from being a member of a nation, occupation or organization. The other side of culture is where culture is learned; in family, school or workplace. The connection among these are made by the help of the values and the practices as explained in Figure 3.

LEVEL   PLACE OF SOCIALIZATION

Nation   Family

                        Values

Occupation   School

                                    Practices

Organization   Workplace
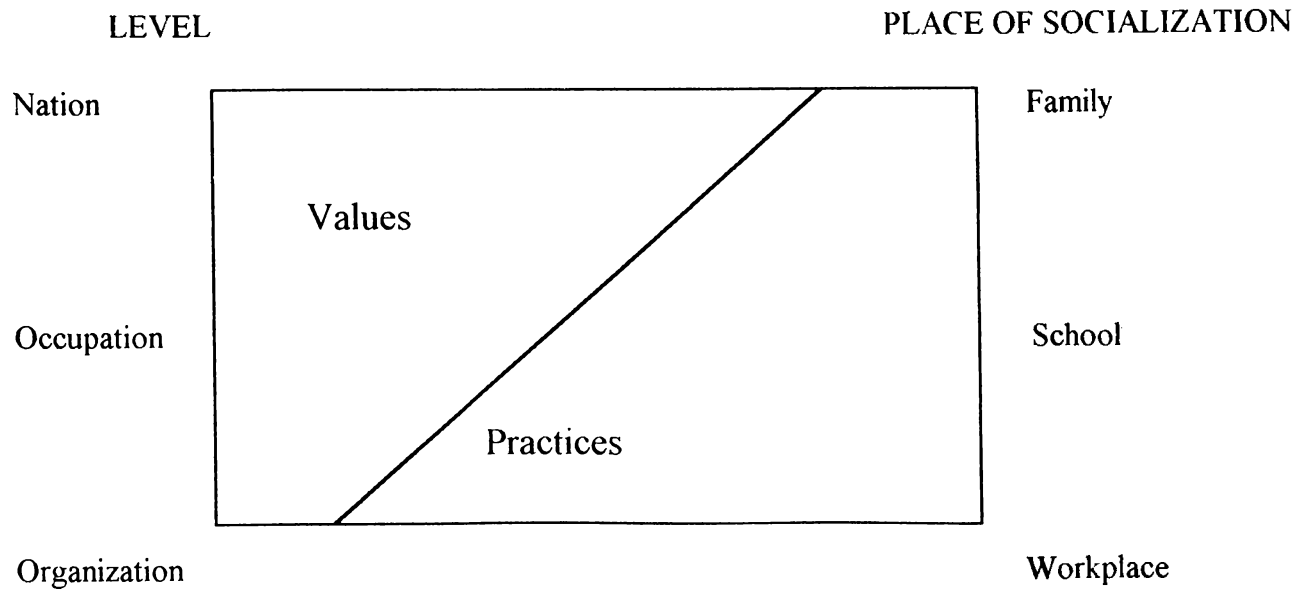
Figure 3: Cultural Differences: National, occupational and organizational levels

(Hofstede, Neuijen, Ohavy, Sanders 1990)

2.2 Other Questionnaires That Are Used For Assessing Organizational Culture:

The definitions of culture focus on either <u>values</u> or <u>behaviours</u>, this dual focus has influenced the major researchers; Williams, Dabson and Walters (1989) emphasized the role of cognition, while Deal and Kennedy (1982) defined culture as "the way we do things around here". So the available measures concentrate on two different **manifestations** of culture, values and behaviours. Rousseau (1990) integrating these approaches suggests that organizational culture has a number of layers, two of which are behavioral norms (the way people should behave) and the organizational values (the things that are highly valued) and that these layers are characterized by a

25

core theme. As a consequence, some corporate culture test constructors have focused on values, others on behaviours. Based on this theoretical construct suggested by the culture literature, two questionnaires were used in Rousseau's study that intend to measure values as priorities or preferences, while two others were concerned about behavioral norms as expectations regarding how members should behave and interact with others (Xenikou, Furnham, 1996).

Corporate values can be assessed in the Organizational Beliefs Questionnaire (OBQ) developed by Sashkin (1984) and the Corporate Culture Survey (CCS) by Glaser (1983). As far as their content is concerned, there appears to be little overlap traced between the subscales of these questionnaires. Measures of behavioral norms include the Organizational Culture Inventory (OCI) developed by Cooke and Lafferty (1989) and the Culture Gap Survey (CGS) by Kilman and Saxton (1983) which according to Rousseau (1990) show s fair amount of overlap in the dimensions used to assess organizational culture (Xenikou, Furnham, 1996).

2.2.1. *Organizational Culture Inventory (Cooke and Lafferty, 1989)*: The OCI focus on behaviours that facilitate fitting in to the organization and meeting expectations of co-workers. The 12 basic subscales are the following:

Humanistic Helpful	*Self-Actualization*	*Dependence*	*Power*
Affiliation	*Approval*	*Avoidance*	*Competitive*
Achievement	*Conventionality*	*Opposition*	*Perfectionism*

These subscales reflect the circumplical model based on the intersection of two dimensions which are task-people and security-satisfaction and which provide the four secondary subscales of the questionnaire. There are 120 items, each one rated on a 1-5 likert scale.

2.2.2. *Culture Gap Survey (Kilmann & Saxton, 1983):* The CGS was developed to measure behavioral norms. There are four subscales reflecting a 2x2 framework (Technical/Human Concern and Short/ Long Term Orientation): Task Support, Task Innovation, Social Relations and Personal Freedom.

2.2.3. *Organizational Beliefs Questionnaire (Sashkin, 1984):* This is a 50 item questionnaire with 5 point likert scales (strongly agree to strongly disagree) measuring organizational values. The inventory has 10 subscales:

Work Should be Fun	*Quality*
Being the Best	*Communicating to Get The Job Done*
Innovation	*Growth/ Profit/Other Indicators of Success*
Attention to Detail	*Hands on Management*
Worth & Value of People	*Importance of a Shared Philosophy*

The 50 were chosen to minimize social desirability: for each subscale one item is stated positively and the other negatively and the wording is constructed to make it difficult to determine the item's desirability (Sashkin & Flummer, 1985).

2.2.4. *Corporate Culture Survey (Glaser, 1983):* The development of this questionnaire is based on Deal and Kennedy's (1982) description of culture types and intends to measure organizational values. It consists of 20 items rated on a 5-point likert scale from 5 (strongly agree) to 1 (strongly disagree). The questionnaire holds four subscales which are the following:

Values   *Traditions/rituals*

Heroes/heroines   *Cultural Network*

By taking into account the expressed concerns about an inadequate testing of the convergent validity of questionnaire measures (Kilmann & Thomas, 1977), a correlational analysis was carried out on the questionnaire subscales that intent to measure the same theoretical constructs instead of correlations between the total scores on each questionnaire of correlations between the total scores on each questionnaire. The main reason for doing this is the fact that the questionnaire constructors have developed different models of culture and therefore they are tapping culture by measuring various cultural dimensions which might or might not be the same with the cultural dimensions measured by other questionnaire constructors (Xenikou, Furnham, 1996).

A scale referred in a questionnaire is referred as another scale in another questionnaire. The correlations between the scale of the OCI and the scale of the CGS are briefly summarized in Table 1:

Scale of OCI	Predicted to be Correlated with	Scale of CGS
Task Orientation		Technical Concern
People Orientation		Human Concern
Security Needs		Short-term Orientation
Satisfaction Needs		Long-term Orientation
Scale of OCI		**Scale of OBQ**
People Orientation		The Value of People
Satisfaction Needs		Innovation
Scale of CGS		**Scale of OBQ**
Human Concern		The Value of People
Long-Term Orientation		Innovation

Table 1: Predicted Correlations Among Overlapping

Subscales of OCI, CGS and OBQ

The main logic lying behind the correlations is the scope of the scales. Although the scales are

named differently, the area that they cover and the meanings that they carry fall in similar ranges

that they are found to be correlated with each other.

The dimensions measured by various tests tend to be tapping the same phenomena when their

content overlap. The fact that predicted correlations between the overlapping subscales of the

inventories were supported by the data show to some extent the convergent validity of the questionnaire measures (Xenikou, Furnham, 1996).

2.2.5. *People and Organizational Culture: A Profile Comparison Approach to Assessing Person-Organization Fit:*

As with similar fit theories of carriers (Holland, 1985), job choice (Hackman & Oldham, 1980), work adjustment (Lofquist & Dawis, 1969) and organizational climate (Joyce & Slocum, 1984), the validation of the construct of person-culture fit rests on the ability to assess relevant aspects of both person and culture. The congruence between a person and a job have embodied notions of fit: the degree to which individuals are suited to a job depends on their motives and needs and the job requirements (Hackman & Oldham, 1980).

Recent work in interactional psychology has begun to identify the characteristics of effective techniques for person-situation effects. Bem and Funder (1978) argued that, in addition to providing comprehensive measurements, effective techniques for assessing persons and situations should allows for holistic comparisons across multiple dimensions. Using "Q-methodology" (Stephenson, 1953), Bem and Allen (1974) developed a template matching technique to accommodate this dual concern with relevance and comparability. This approach focuses on the salience and configuration of variables within a person rather than on the relative standing of persons across each variable. How well individuals might do in a situation was predicted by how well they matched the ideal person-in-situation profile (O'Reilly, Chatman, Caldwell, 1991).

2.2.6. Person-Culture Fit:

Barley (1983) pointed out that all studies of culture, whatever their theoretical origin, use similar terms and constructs. Differences exist among researchers in how objective or subjective, conscious or unconscious their use of these terms and constructs is and in what they see as appropriate elements to study. Rousseau (1990) has provided an excellent description of the common elements in such sets and suggested a framework including the fundamental assumptions, values, behavioral norms and expectations and larger patterns of behaviour.

Quantitative assessment of culture is controversial. Acknowledging that some aspects of organizational culture may not be easily accessible, Rousseau also asserted that certain dimensions of culture may be appropriately studied using quantitative methods, indeed suggesting that the quantitative assessments offer the opportunity to understand the systematic effects of culture on individual behaviour (O'Reilly, Chatman, Caldwell, 1991).

Much previous research has suggested that person-culture fit increases commitment, satisfaction and performance but very little empirical research on these relationships has been done. The general research question was: *To what extent is person-culture fit associated with individual commitment, satisfaction and longevity with an organization we expect to find that high levels of person-culture fit would be positively associated with those outcomes?*

Needed Analysis:

1. demonstrate that the preferences individuals have for organizational cultures are comparable to cultures that exist

2. the relationship between individual preferences and organizational culture needed to be assessed across a broad range of values.

For investigating person-culture fit, an instrument called the Organizational Culture Profile was developed by O'Reilly, Chatman and Cadwell. Person-culture fit can be calculated by correlating the profile of organizational values with the profile of individuals preferences.

The OCP contains 54 value statements that can generally capture individual and organizational values. A more complete description of development and general use of the OCP is as follows:

Step 1- Describing Organizational Values: The set of value statements was developed on the basis of an extensive review of the academic and practitioner oriented writings on organizational culture and values (Kilmann, 1984: Ouchi, 1981: Peters and Waterman, 1982: Schein, 1985). An attempt was made to identify the items that

1. could be used to describe any person or organization

2. would not be equally characteristic of all people or organizations

3. would be easy to understand

Since there were over 110 items in the pool, the final set was established by applying the following criteria:

- generality- an items should be relevant to any type of organization, regardless of industry, size and composition

- discriminability- no item should reside in the same category for all organizations

- readability- the items should be easily understandable to facilitate their having commonly shared meanings

- non-redundancy- the items should have distinct enough meaning that they could not substitute for another consistently

Step 2- Assessing Characteristics of the Firm: To obtain profiles of the cultures of firms, sets of key informants with broad experience were selected and asked to sort the 54 items in terms of how characteristic each was of their organization's culture. To study eight accounting firms an average of 16 accountant were used. The similarity of the cultures of the eight firms was assessed by correlating overall firm profiles with one another.

Step 3- Assessing Individual Preferences: To assess individual preferences for organizational cultures, respondents were asked to sort the 54- item deck into nine categories by responding to the question, "How important is it for this characteristic to be a part of the organization that you work for?". The answers ranged from the "most desirable" to the "most undesirable".

Step 4- Calculating the Person Organization Fit Score: This score is calculated for each individual by correlating the individual preference profile of the firm for which the person worked(O'Reilly, Chatman, Caldwell, 1991).

In this chapter, some examples of how to diagnose culture in the literature were explained. The common thread among these studies is that they more or less try to measure the same dimensions of culture. One concept utilized under one heading in a study takes place under another heading in another study, the concepts stays the same, only the names differ. The next chapter explains the study of Harrison and Strokes 4 dimensional culture model which will be used as the sample questionnaire in this thesis.

CHAPTER 3

DIAGNOSING ORGANIZATIONAL CULTURE

3.0 <u>Overview</u>:

In the previous chapters the main emphasis has been on the definition of culture and some previous examples of diagnosing culture in order to provide a brief understanding of what has been done in this field until now. In this chapter another system for diagnosing culture designed by Roger HARRISON and Herb STROKES is introduced and explained.

As stated by Harrison "this questionnaire comes out from my attempts to understand my own cross cultural experiences, first with the Peace Corps and later during an eight year sojourn as a freelance organizational development consultant in Europe and UK." (Harrison and Strokes, 1992), Harrison and Strokes developed an instrument to begin diagnosing organizational cultures. Although it seems like water drops in a sea, this tool can give a general understanding of what is going on in the organization, and the way that the organization's members expect it to go on.

First and foremost, the questionnaire is an attempt to help members of an organization to begin to talk about organizational culture. It is actually part of a well developed a workshop which may further lead to a larger training program on organizational culture. The questionnaire is purported to be useful for the following purposes:

1. to provide a non-threatening way to surface and begin a dialogue about participants' experiences with the values and management practices in their organization

2. to provide access to data from other parts of the organization to participants

3. to use as an instrument with a <u>construct validity</u> as well, meaning that groups and organizations that are expected to have different cultures on independent groups, have predictably different patterns of questionnaire scores as well

4. to use as an instrument with a <u>predictive validity</u> as well, meaning that the members of more successful project teams rated their term culture higher on Achievement and Support and lower on Power or Role

3.1. <u>Reliability and Validity of the Instrument</u>

Reliability: The current version of this instrument, which presents the items as forced choices (Actual Ratings only), was given to 231 employees of a Fortune 500 company. The level of the respondents ranged from Technician to the President of the subsidiary. The same sample of 231 employees was given a form of questionnaire that asked for a Likert-type five-point scale rating on each of the items of the amount of change that had occurred in the company during the past two and a half years.

Scale	Reliability: actual scores	Reliability: change scores
Power	.90	.87
Role	.64	.77
Achievement	.86	.80
Support	.87	.86
Culture Index	**.85**	**.88**

Table 2: Reliability Scores

Since Hofstede and Sanders applied the questionnaire on a large sample of people they had a chance to test the reliability of the questionnaire. The reliability scores of the culture questionnaire is calculated by the Spearman-Brown formula for the split halves of a test. The reliability of the questionnaire is calculated by this tool, because the questionnaire looks at the two different states of an organization as existing and preferred cultures. The reliability of the questionnaire is quite high as can be seen from Table 2.

Scale	Power Actual	Power Change	Role Actual	Role Change	Achievement Actual	Achievement Change
Power	1.00	1.00				
Role	.34	.54	1.00	1.00		
Achievement	-.72	-.38	-.25	.09	1.00	1.00
Support	-.51	-.46	-.50	.01	.40	.77

Table 3: Intercorrelations of the Scales for both the Actual and Change Ratings

As can be seen from Table 3, culture is not something to make predictions about. Power is positively correlated with role and negatively correlated with achievement and support. Existing role is found to be negatively correlated with achievement and support, while preferred role is

found to be positively correlated with achievement and support. On the other hand, achievement is stated to be positively correlated with support on both existing and preferred scales.

Validity: There is evidence of construct validity (ability of the questionnaire to vary concomitantly with other measures, which, on theoretical grounds, should reflect the same underlying values and attitudes). The questionnaire was used to assess changes in organizational culture occurring as a result of an intensive "culture change" effort in the Fortune 500 in which it was applied. The changes in the results after the culture change process is as follows:

- Significant shifts in Actual scores took place from before to after the study for a sample of middle managers

- The questionnaire has also been used to assess the differences in culture perceived by project members in very successful and less successful research and development projects

Additional indirect evidence of validity of the questionnaire comes from the work of Tom Janz at the University of Calgary. Janz's questionnaire was carefully constructed by use of repeated factor analyses. The scales that emerged from this work were labeled Values, Power and Rules.

Harrison/Strokes Questionnaire	Janz Questionnaire			
	Values	**Power**	**Rules**	**Index**
Power	-.70	.79	.01	-.80
Role	.19	-.47	.40	.29
Achievement	.69	-.69	-.38	.83
Support	.41	-.68	-.46	.69

Table 4: Validity of the Instrument Comparison with Janz Questionnaire
p .05 if r .3, and p .01 if r .41

Table 4 indicates that the two questionnaires appear to tap into the same cognitive space (Harrison, Strokes, 1992)

3.2. **What Does the Instrument Measure?**

There are many aspects of organizational culture which can be investigated. The Harrison/Strokes instrument looks at:

- how people treat one another

- what values they live by

- how people are motivated to produce

- how people use power in the organization

Appendix A presents the actual questionnaire.

In the questionnaire each alternative stands for a different type of culture as stated below:

(a) alternatives refer to an organizational culture called *power* oriented

(b) alternatives asses the *role* culture

(c) alternatives describe a culture based on *achievement*

(d) alternatives describe a *support* orientation

Among the studies that are described in this thesis, the most valid and well known one is Hofstede, Ohavy and Sanders'- Measuring Organizational Cultures.   The questionnaire used in this study

refs to the dimensions that are used in that study. The two studies are linked in the following ways:

1. *power orientation* in Harrison/Strokes study refers to the *power distance* in the Hofstede study

2. *role orientation* in Harrison/Strokes study refers to the dimensions of *uncertainty-avoidance* and *masculinity-feminity* in the Hofstede study

3. *achievement orientation* in Harrison/Strokes study refers to the *individualism* in the Hofstede study

4. *support orientation* in Harrison/Strokes study refers to the *collectivism* in the Hofstede study

Harrison/Strokes four dimensional culture model is identified with another model that was previously applied in this field utilizing the same dimensions. Depending on the literature survey that was done for this study, one can conclude that studies that are done in this field measure more or less the same dimensions, like Cooke and Laferty's 12 subscales, below provides some insight into the complexity of each major dimension:

Power	Role	Achievement	Support
Opposition	Approval	Achievement	Humanistic
Power	Conventionality	Self-Actualization	Helpful
Perfectionism	Avoidance	Competitive	Dependence

The details of what is meant by these dimensions will be explained in the following sections.

3.3. The Power Orientation:

The power-oriented organization is based on the inequality of access to resources. A resource can be anything that one person controls that another person wants. The people in power use resources to satisfy or frustrate the needs of others and thus control the others' and thus to control others' behaviour. Leadership resides in the person of the leaders and rests on the leaders ability and willingness to administer rewards and punishments. People in power oriented organizations are motivated by rewards and punishments and by the wish to be associated to be a strong leader.

It rests on the acceptance of hierarchy and inequality as legitimate by all members of the organization. In more industrialized democracies such as the United States, there is much less acceptance of hierarchy as being legitimate than there is more traditional societies and there is not a strong cultural value to reinforce benevolent, power-oriented leadership.

As the size and complexity of the business increases, the demands on the leadership of a power oriented organization multiply exponentially. Large Power oriented are inefficient and full of fear and confusion, unless the power orientation is supplemented by good structures and systems for getting the work done. As the distance between leaders and followers increases, effective control becomes more difficult. When Power-oriented organizations expand, they often run short of a leadership talent, because followers have been conditioned to be dependent.

Power Oriented organizations are places where:

1. the leader is strong and charismatic, bringing courage to the fainthearted and clarity to the confused

2. the leaders take care of their own, they reward and protect loyal followers

3. the leaders is wise and benevolent, he or she acts unilaterally but in the best interests of the organizations and its members

4. the leader is demanding but fair; clear about what is required and rewarding of compliance

5. people who get ahead are loyal and put the leader's wishes before their own needs

3.3.1. Strengths of Power-oriented Organizations:

- unifies individual effort behind the vision of the leader

- can move quickly in the market and make rapid internal changes

- leverages the knowledge, wisdom, and talent of the leader

- can provide direction and certainty and reduce conflict and confusion in times of danger and emergency

3.3.2. Limitations of Power-oriented Organizations:

- constructive change is limited by the vision and the flexibility of the leaders

- hands-on management of large organizations produces confusion and inefficiency

42

- energy is diverted from work into politics and gaining favour with the leaders

- leaders' impulsive seizing of opportunities may disrupt systems , schedules and plans

- leaders easily become isolated and insulated from bad news

- leaders are overloaded; subordinates' work stalls, waiting for approvals

- short range thinking is typical of power oriented organizations

(Harrison, Strokes, 1992)

3.4. The Role Orientation:

The Role culture substitutes a system of structures and procedures for the naked power of leaders. Structures and systems give protection to subordinates and stability to the organization. The struggle for power is moderated by the rule of law. The duties and the rewards of members' roles are carefully defined, usually in writing, and are subject of an explicit or implicit contract between the organization and the individual. People perform specific functions in order to receive defined rewards. Both the individual and the organization are expected to adhere to their parts of the bargain.

The values of the Role orientation are order, dependability, rationality and consistency. A well-designed system of rules (a bureaucracy) in which performance is organized by structures and procedures -rather than personally controlled leader- permits work to be reliably directed at a distance, so that large, complex organizations can be created and managed. Authority and

responsibility are delegated downward. Each level in the organization has a defined area of authority and work can continue to be done without supervision from the top.

At its best, the Role-oriented organizations provides stability, justice and efficient performance. People are able to spend less time working out for themselves and can devote more energy to their work.

In rapidly changing situations, they have difficulty keeping up with the circumstances. Nevertheless, most large organizations today have strong elements of the role culture.

The weakness of Role organizations is in the very impersonality that is their strength. They operate on the assumption that people are not to be trusted, so that they do not give individual autonomy or discretion to members at lower levels. The system is designed to control people and to prevent them from committing selfish or stupid acts.

New approaches to management such as *employee involvement* and *total quality management* attempt to blend the Role orientation's emphasis on well designed and closely managed systems with the empowerment of employees that is typical of the achievement orientation.

Role-oriented organizations are places where:

1. individual performance is judged against written descriptions; as long as employees meet requirement they feel safe

2. people are rewarded for playing by the rules and reliable, dependable service to the firm

3. inefficiency, uncertainty and confusion are reduced by clear objectives, systems and procedures

4. personal abuse of power is reduced by the rules and limiting arbitrary use of authority

5. authority and responsibility of jobs are clearly defined, minimizing power struggles and turf issues

6. work methods minimize the variability of performance and reduce the need for individual decision making

3.4.1. Strengths of Role-oriented Organizations:

- well-designed structures and systems make for efficient operations and reduce time for learning jobs

- clear lines of authority and responsibility reduce conflict, turf battles, confusion and indecision

- clear, fair rules and guidelines protect individuals from exploitation and abusive of power

- having good systems, procedures and organization memory prevents to "reinvent the wheel"

- structure, routine and predictability provide security and reduce stress

3.4.2. Limitations of Role-oriented Organizations:

- change is difficult and too slow in turbulent environments

- checking and reporting requirements due to low thrust take time away from productive work

- boundaries of the organization easily harden into non-cooperating fiefdoms

- suboptimization: everyone takes care of own business, and no one tales care of the whole

- people do what the rules say rather than what is needed narrow jobs under use the talents and creativity of the lower level subordinates

(Harrison, Strokes, 1992)

3.5. The Achievement Orientation:

Both the Power-oriented and the Role-oriented organizational cultures depend on the use of external rewards and punishments to motivate people. Organization members are expected to contribute their personal energy in return for rewards. However, many people like their work, want to make a worthwhile contribution to society and enjoy interacting with colleagues or customers. These intrinsic rewards are qualitative rather than quantitative and arise from the nature of work and/or the context in which it takes place. Traditional Power and Role oriented organizations are not designed to provide such intrinsic satisfactions, and their presence is either result of chance or through the occupational choices people make their own.

In some work situations, these intrinsic satisfactions arise naturally like:

- the work situation engages the total person

- people supervise themselves, seeking out what needs to be done without direction from above

- there is clearly understood mission that is articulated at the highest level of the organization

- communication channels are open both laterally and vertically. It is easy to be heard if you have an idea or suggestion

The achievement oriented organization has been called the *aligned* organization because "it lines people up" behind common vision or purpose. It uses the mission to attract and release the personal energy of its members in the pursuit of common goals.

Achievement organizations may rely on the common vision to organize the work, rather than subject themselves to the discipline of systems and procedures. When the task is complex and the vision takes on different forms for different parts of the organization, the organization may lose focus and unity of effort.

The achievement oriented organization is frequently underorganized; it relies on high motivation to overcome its deficiencies in structures, systems and planning. Although it evokes enthusiasm and commitment, it may not have a heart. People's needs are subordinate to the organization's missions and needs.

Achievement-oriented organizations are places where:

1. people share a sense of urgency in attaining worth-while goals and values; they feel they are working for something bigger than themselves

2. people feel stronger and better for being a member of the group; it raises their self esteem

3. people manage themselves, doing voluntarily what they see needs doing

4. the rules and regulations are not allowed to get in the way of doing work

5. people work long hours without complaint

6. there is high morale, sense of "one for all"

7. there is a sense of being unique and different- there is a sense of being unique and different-an "elite" with special myths and jargon

3.5.1. Strengths of Achievement-oriented Organizations:

- unity of effort toward mutually valued goals

- reduced need for controls on individuals

- high internal motivation

- maximum utilization of members' talents

- high self-esteem for organization members

- rapid learning and problem solving

- rapid adaptation to change

3.5.2. Limitations of Achievement-oriented Organizations:

- tendency to use up, burn out members

- tendency to waste resources; inefficient

- inward-focused; may have narrow, parochial view

- members may be arrogant and competitive toward other groups

- may be ruthless; the noble end justifies ignoble means

- norm of individuality makes coordination and control difficult

(Harrison, Strokes, 1992)

3.6. The Support Orientation:

The Support culture may be defined as an organizational climate that is based on mutual trust between the individual and the organization. In such an organization people believe that they are valued as human beings, not just as cogs in machine and contributors to as task. A support culture fosters warmth and even love not just driving enthusiasm. People like to come to work in the morning, not because they like work, but also they care for people with whom they work. Because they feel cared for, they are more human in their interactions with others: customers, suppliers, the public and their fellow workers.

The support oriented organizations may be characterized in the following ways:

- People like spending time together, they often see each other off the job, as well as on.

- People are viewed basically good, when things go wrong , they get a second chance.

- People value harmony and avoid confrontation, sometimes to the point of leaving important issues unresolved.

In Western societies, the Support culture is the least typical of the four assessed by this instrument. It is not valued by the Power or Role oriented organizations, so it goes underground. It tends to develop organizations in which people work together for long periods of time to build personal relationships, work out the differences and arrive at a degree of trust.

Two current issues in the business show the benefits of a warm and caring organizational climate: quality and service. It is no accident that successful approaches to quality improvement are based on small work teams. There is a close connection between loving one's work and wanting to do it well and having a sense of caring and trust with the people with whom one works.

Like Achievement organizations, Support-oriented organizations assume that people want to contribute. Rather than evoking their contribution through a common purpose or ideal (a *doing* culture), the Support-oriented organization offers its members satisfactions that come from relationships: mutuality, belonging and connection (a *being* culture). The assumption is that people will contribute out a sense of commitment to a group or organization for which they feel a real sense of belonging and in which they believe they have a personal stake.

Support-oriented Organizations are places where:

1. people support one another in the work; they go out their way to cooperate

2. people value harmony; they make sure conflicts are resolved and that everyone is on board

3. people give their time and energy to others; they are available; they care; they listen

4. people thrust that they are viewed as individual human beings by the organization

5. people appreciate one another; they acknowledge one another's contributions

6. people have a sense of belonging; they feel accepted by those they work with; they like spending time together

3.6.1. Strengths of Support-oriented Organizations:

- good internal communication and integration

- high levels of commitment to decisions

- sophisticated process skills; manage people and issues well

- high levels of cooperation; effective group work

- good at sensing environment

- provide caring, responsive service

- high thrust between individuals and organization

- nurturing to members; good for health

- good balance for achievement culture

3.6.2. Limitations of Support-oriented Organizations:

- not strongly task oriented

- may not deal well with conflict

- slow to decide

- efforts may be diffused and unfocused

- does not motivate individual achievement

- tendency to put needs of people over the needs of the organization

(Harrison, Strokes, 1992)

3.7. Application of the Questionnaire and Methodology:

Three companies which operate in three different sectors were selected for the application of this questionnaire. In the first stage a meeting with the manager/owner of the company was held. The main objective of this meeting was to give a general explanation about the study. The questionnaire, why and how it is used, what it measures and how it can help a company to improve in some dimensions of its culture which might then result in some organizational change or development projects for the improvement organization effectiveness.

After obtaining approval to use the questionnaire from the organization managers an appropriate date for the application of the questionnaire was arranged. In the application of the questionnaire members of the organization were divided into groups and the questionnaire was introduced and

explained.   Then each group answered the questionnaire.   The questionnaires were collected for the analysis.

In the analysis stage a simple application of the statistical methods were used.   The results of the statistical analysis is presented in the appendices.   The analysis of the cultures of the sample organizations is presented in the following chapters.

CHAPTER 4

GES COMPANY

4.0 <u>Overview:</u>

Beginning with this chapter the analysis and results of the questionnaires from three different companies are presented.

GES company is operating in the field of electronics. The main function of the company is to import electronic systems that can identify the machine breakdowns and to provide service in this area. The GES company has been in operation for seven years. Between the years of 1989-1992 the company was operating with only 3 people. Between the years of 1992-1996 the company experienced a development stage and now operates with 60 people.

GES can be characterized simply as being young and dynamic. That is not simply to say that the company was newly established but also employs young and dynamic people.

GES is managed by a board of directors and a general manager from that board of directors. The four main departments and the İstanbul and Denizli Branches are directly tied to the general manager. The four departments are the:

- Technical Group

- Sales Group

- Accounting & Administration Group

- Import and Product Management Group

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                        ┌─────────────────┐
                        │    BOARD OF      │
                        │   DIRECTORS      │
                        └─────────────────┘
                                 │
                        ┌─────────────────┐ ............. ┌──────────────────┐
                        │ GENERAL MANAGER  │ ............. │    FINANCIAL     │
                        └─────────────────┘               │   CONSULTANT     │
```

	TECHNICAL GROUP	SALES GROUP	FINANCE & ADMINISTRATION GROUP	IMPORT & PRODUCT MANAGEMENT GROUP

TECHNICAL GROUP
- TECHNICAL SERVICE
- MARKETING
  - MARKETING MANAGEMENT
  - MARKETING GROUP

SALES GROUP
- GENERAL SALES
- AGREEMENT MANAGEMENT
- TECHNICAL SALES
- PRODUCT SALES

FINANCE & ADMINISTRATION GROUP
- ACCOUNTING
- ADMINISTRATIVE

IMPORT & PRODUCT MANAGEMENT GROUP
- STOCK
- IMPORT
- PUBLIC RELATIONS

- ISTANBUL GROUP
- DENİZLİ GROUP

GES COMPANY ORGANIZATIONAL STRUCTURE

ORGANIZATIONAL CHART 1

4.1. General Evaluation of GES Company Questionnaire Results :

The tables 4.1.a-4.1.h present the general statistical information collected from GES. The means, standard deviations, minimum and maximum scores for each group of cultural orientation (power, role, achievement, support) can be seen from the them.

Existing POWER in GES		Preferred POWER in GES	
Mean	38.571	Mean	23.381
Standard Deviation	11.699	Standard Deviation	5.617
Minimum	18.000	Minimum	17.000
Maximum	56.000	Maximum	40.000

Table 4.1.a: Summaries of Power Orientation

A comparison of the mean scores concerning the existing and preferred power indicates that the participants have a strong desire for having less power in the organization. The maximum score possible for power is 60, a score of 56 is very high on this scale. While the maximum score for existing power is 56.00 the maximum score on preferred power is only 40.00 so also indicating that employees in the organization strongly prefer less power. The standard deviation of 5.617 shows that they quite agree on what they are expecting as power.

Existing ROLE in GES		Preferred ROLE in GES	
Mean	39.571	Mean	41.667
Standard Deviation	4.966	Standard Deviation	6.183
Minimum	30.000	Minimum	29.000
Maximum	47.000	Maximum	52.000

Table 4.1.b: Summaries of Role Orientation

The role orientation of the employees in GES company are similar for the existing and the preferred scores. This strongly suggests that the employees in GES company are satisfied with the level of their role orientation and want it to stay the same. However there is a striking difference between the maximum scores. While the maximum score on existing power is 47.00 the preferred one is 52.00. The standard deviation of the scores are also different, this point gives a chance to say people would prefer to be more role oriented.

Existing ACHIEVEMENT in GES		Preferred ACHIEVEMENT in GES	
Mean	38.571	Mean	46.095
Standard Deviation	7.897	Standard Deviation	4.482
Minimum	22.000	Minimum	35.000
Maximum	51.000	Maximum	53.000

Table 4.1.c: Summaries of Achievement Orientation

The *existing achievement* scores presented in Table 4.1.c are much lower than the *preferred achievement* scores. The standard deviation calculated for the existing achievement scores shows a high standard deviation stating that the perception of the current situation differs highly among the individuals. On the other hand, the members of GES are more consistent in the preferred achievement level with a standard deviation of 4.482. The minimum scores deviate indicating that the employees would appreciate more achievement in GES company.

Existing SUPPORT in GES		Preferred SUPPORT in GES	
Mean	33.190	Mean	38.857
Standard Deviation	8.256	Standard Deviation	6.069
Minimum	19.000	Minimum	29.000
Maximum	51.000	Maximum	51.000

Table 4.1.d: Summaries of Role Orientation

Table 4.1.d indicates that the existing support in the company is quite high with a high standard deviation. There is an agreement on how much support to the maximum should take place in the company. The preferred support in the company is higher and more consistent than the existing one indicating that employees generally agree on what they expect to see on the support orientation of the company.

Age		
Mean	1.429	between 20-25 years old
Standard Deviation	.746	
Minimum	1.000	between 20-25 years old
Maximum	4.000	between 36-40 years old

Table 4.1.e: Summaries of Age

Table 4.1.e presents that, on the average, the company generally employs people aged between 20-25, the range differs among people aged between 20-25 years old and people aged between 26-30 years old.

Sex	
Female	10
Male	11

Table 4.1.f: Summaries of Sex

Table 4.1.f shows that among 21 answering the questionnaire 10 of them were female and 11 of them are male.

Education		
Mean	3.857	High School Graduates
Standard Deviation	.573	
Minimum	3.000	High School Graduates
Maximum	5.000	Master's Degree

Table 4.1.g: Summaries of Education

The mean of 3.857 indicates that average education in GES company lies between high school and university. GES compared to the majority of Turkey, employs educated people. This need of employing educated people mainly comes from the specific needs of the electronics sector.

Seniority		
Mean	1.643	about 1,5 years
Standard Deviation	1.590	
Minimum	.500	less than 1 year
Maximum	6.000	founders

Table 4.1.h: Summaries of Seniority

People answering the questionnaire have been working in the company for about 1,5 years. This generally comes from the company's growth policy for the last two years.

⇨ data is selected from all groups and levels in the organization

4.2. Pairwise t-test Comparison for Existing and Preferred Culture Orientations:

The critical analysis for this study was to examine the significant differences between the existing and preferred culture orientations of the members. A pairwise T-test comparison was applied for this purpose:

4.2.1. Pairwise t-test Comparison for Existing Power Orientation & Preferred Power Orientation

$$Ho : X_1 - X_2 = Do$$

$$Ha : X_1 - X_2 \neq Do$$

95% Confidence Interval (8.968, 21.413)

t-value = 5.09

Fail to accept the Hypothesis that the difference between the existing and preferred power is statistically significant. The t-value is outside the acceptance region on the left hand side indicating that there is a significant difference between the existing and the preferred scores. There is high tendency towards a decrease in the power orientation.

4.2.2. Pairwise t-test Comparison for Existing Role Orientation & Preferred Role Orientation

$$Ho : X_1 - X_2 = Do$$

$$Ha : X_1 - X_2 \neq Do$$

95% Confidence Interval (-5.169, .979)

t-value = - 1.42

Fail to reject the Hypothesis that the difference between the existing and preferred role is statistically significant. The t-value is inside the acceptance region indicating that the existing and the preferred scores are close to each other. There is no tendency to make a significant change in the role orientation.

4.2.3. Pairwise t-test Comparison for Existing Achievement Orientation & Preferred Achievement Orientation

$Ho : X_1 - X_2 = Do$

$Ha : X_1 - X_2 \neq Do$

95% Confidence Interval (-11.977, -3.071)

t-value = -3.53

Fail to reject the Hypothesis that the difference between the existing and preferred achievement is statistically significant. The t-value is inside the acceptance region but very close to the rejection region indicating that the existing and preferred scores are not very close to each other. There is tendency towards an increase in the achievement orientation.

4.2.4. Pairwise t-test Comparison for Existing Support Orientation & Preferred Support Orientation

$Ho : X_1 - X_2 = Do$

$Ha : X_1 - X_2 \neq Do$

95% Confidence Interval (-8.746, -2.588)

t-value = -3.84

Fail to reject the Hypothesis that the difference between the existing and preferred support is statistically significant. The t-value is inside the acceptance region indicating that the existing and preferred scores are very close to each other. There is tendency towards a slight increase in the support orientation.

4.3. Cultural Differences of GES Company Arising From Position:

To analyze the cultural differences between the managers and other employees of GES, the members were divided into two groups that can be seen from Chart 1 on the following page. The first group is the Sales and Technical Group and second group is the Managers group.

The sales and technical group agree on the orientation level for the existing and preferred scores on power. The standard deviation for the power preferred is very low compared to the existing power. So the sales and technical group has a general tendency of demanding less power on themselves. Against this demand there is attempt of the managers to exert more power on these people arising from the difference between the preferred means. The mean of the managers is 45 for the preferred power while the same thing for the employees is 39.3.

The means of the scores on role differ between the groups. While the employees expect a level of role orientation with a mean of 33.55 the managers preferred level of role is 26.00. That simply states that managers do not want the roles change.

The achievement scores show a consensus among all employees in the organization. Everyone believes that they can do better than what they are doing currently. So this survey is a good start to begin to talk about how that level of achievement can be reached.

GES COMPANY DIFFERENCES IN POSITION

GROUP I				GROUP II			
Sales & Technical Group				Managers			
Power Existing		*Power Preferred*		*Power Existing*		*Power Preferred*	
Mean	38,65	Mean	39,30	Mean	37,00	Mean	45,00
Std. Dev.	12,00	Std. Dev.	4,93	Std. Dev.		Std. Dev.	
Min	18,00	Min	30,00	Min	37,00	Min	45,00
Max	56,00	Max	47,00	Max	37,00	Max	45,00
Role Existing		*Role Preferred*		*Role Existing*		*Role Preferred*	
Mean	38,4	Mean	33,55	Mean	42,00	Mean	26,00
Std. Dev.	8,062	Std. Dev.	8,30	Std. Dev.		Std. Dev.	
Min	22	Min	19,00	Min	42,00	Min	26,00
Max	51	Max	51,00	Max	42,00	Max	26.00
Achiev. Existing		*Achiev. Preferred*		*Achiev. Existing*		*Achiev. Preferred*	
Mean	23,20	Mean	41,35	Mean	27,00	Mean	48,00
Std. Dev.	5,70	Std. Dev.	6,17	Std. Dev.		Std. Dev.	
Min	17,00	Min	29,00	Min	27,00	Min	48,00
Max	40,00	Max	52,00	Max	27,00	Max	48,00
Supp. Existing		*Supp. Preferred*		*Supp. Existing*		*Supp. Preferred*	
Mean	46,15	Mean	39,25	Mean	45,00	Mean	31,00
Std. Dev.	4,59	Std. Dev.	5,95	Std. Dev.		Std. Dev.	
Min	35,00	Min	29,00	Min	45,00	Min	31,00
Max	53,00	Max	51,00	Max	45,00	Max	31,00

CHART 1: GES COMPANY - COMPARISON POSITION

Comparison of support orientation scores ends in a result of a demand for less support. Employees average preferred level of support is higher than the managers. The two groups agree on the average level of the existing support level in the organization.

4.4. Cultural Differences of GES Company Arising From Education:

Another important dimension in the perception of the cultural issues is that they differ depending on the education level of people. For the analysis of cultural differences in GES company arising from education another grouping is made. The first group consists of employees graduated from high school and the second group consists of employees with university or master's degree that can be seen from the Chart 2 on the following page.

The high school graduates and the university graduates agree on the level of the existing power in the company. Against this fact, high school graduates are looking for more power on themselves- that is they prefer to be dominated more. People with university education in the organization are consistent with their level of preferred power in the organization with low standard deviation. With a standard deviation of 13.12 there is no consensus on the level of power existing among the university graduates.

The means of the role orientation scores are nearly the same between these two groups. It is interesting to note that the high school graduates prefer a lower level of role while the university graduates are looking for a higher level of role than the high school graduates in the organization.

GES COMPANY DIFFERENCES IN EDUCATION

GROUP I				GROUP II			
High Sch. Grads				University or Master's degree			
Power Existing		*Power Preferred*		*Power Existing*		*Power Preferred*	
Mean	38,60	Mean	42,80	Mean	38,56	Mean	38,56
Std. Dev.	6,23	Std. Dev.	3,63	Std. Dev.	13,12	Std. Dev.	4,98
Min	30,00	Min	37,00	Min	18,00	Min	30,00
Max	44,00	Max	47,00	Max	56,00	Max	45,00
Role Existing		*Role Preferred*		*Role Existing*		*Role Preferred*	
Mean	38,80	Mean	29,20	Mean	38,50	Mean	34,44
Std. Dev.	4,09	Std. Dev.	6,06	Std. Dev.	8,87	Std. Dev.	8,61
Min	32,00	Min	23,00	Min	22,00	Min	19,00
Max	42,00	Max	36,00	Max	51,00	Max	51,00
Achiev. Existing		*Achiev. Preferred*		*Achiev. Existing*		*Achiev. Preferred*	
Mean	27,60	Mean	40,80	Mean	22,06	Mean	41,94
Std. Dev.	7,02	Std. Dev.	5,76	Std. Dev.	4,60	Std. Dev.	6,47
Min	23,00	Min	35,00	Min	17,00	Min	29,00
Max	40,00	Max	47,00	Max	32,00	Max	52,00
Supp. Existing		*Supp. Preferred*		*Supp. Existing*		*Supp. Preferred*	
Mean	43,80	Mean	37,60	Mean	46,81	Mean	39,25
Std. Dev.	3,49	Std. Dev.	5,46	Std. Dev.	4,61	Std. Dev.	6,36
Min	38,00	Min	31,00	Min	35,00	Min	29,00
Max	46,00	Max	45,00	Max	53,00	Max	51,00

CHART 2: GES COMPANY - COMPARISON EDUCATION

For the existing level of achievement the high school graduates are more satisfied with their whereas the university graduates show a lower level of achievement on the average. There is agreement among these two groups on the level of preferred achievement.

The average of the existing support scores are similar to each other, but the university graduates experience a higher level of support in the organization. Again, in the average level of the preferred support scores although the general tendency is for a lower level of support in the organization again the university graduates desire a higher level of support than the high school graduates.

4.5. Cultural Differences of GES Company Arising From Age:

Differences in cultural perceptions may also arise from differences in age. Two groups are discernible from the available data. In group 1 the employees aged between 20-25 and in group 2 employees who are 26 years and older takes place, the chart with the statistical results of age differentiation takes place on Chart 3 in the following page.

The group aged between 20-25 years old has equivalent means for the existing and preferred power level. The group that is aged higher than 26 feel lower power on themselves. Their preferred level is higher than the existing power mean reaching to the same mean of 20-25 years age group. The standard deviations of the preferred power means are similar to each other. So both of the groups are consistent in their preferred level of power.

GES COMPANY DIFFERENCES IN AGES							
GROUP I				**GROUP II**			
20-25 years old				>25- years old			
Power Existing		*Power Preferred*		*Power Existing*		*Power Preferred*	
Mean	39,86	Mean	39,86	Mean	36,00	Mean	39,00
Std. Dev.	11,92	Std. Dev.	4,96	Std. Dev.	11,69	Std. Dev.	5,32
Min	18,00	Min	31,00	Min	19,00	Min	30,00
Max	56,00	Max	47,00	Max	55,00	Max	45,00
Role Existing		*Role Preferred*		*Role Existing*		*Role Preferred*	
Mean	37,50	Mean	32,71	Mean	40,71	Mean	34,14
Std. Dev.	8,61	Std. Dev.	9,08	Std. Dev.	6,26	Std. Dev.	6,87
Min	22,00	Min	19,00	Min	32,00	Min	26,00
Max	51,00	Max	51,00	Max	49,00	Max	46,00
Achiev. Existing		*Achiev. Preferred*		*Achiev. Existing*		*Achiev. Preferred*	
Mean	23,71	Mean	41,14	Mean	22,71	Mean	42,71
Std. Dev.	6,18	Std. Dev.	6,64	Std. Dev.	4,65	Std. Dev.	5,47
Min	17,00	Min	29,00	Min	19,00	Min	38,00
Max	40,00	Max	51,00	Max	31,00	Max	52,00
Supp. Existing		*Supp. Preferred*		*Supp. Existing*		*Supp. Preferred*	
Mean	46,71	Mean	38,36	Mean	44,86	Mean	39,86
Std. Dev.	5,11	Std. Dev.	6,50	Std. Dev.	2,80	Std. Dev.	5,43
Min	35,00	Min	29,00	Min	41,00	Min	31,00
Max	53,00	Max	51,00	Max	50,00	Max	47,00

CHART 3: GES COMPANY - COMPARISON AGE

The group between 20-25, feels a lower level of power orientation in the company than the older group. But both of the groups prefer to be less role oriented. Again, the first group prefers a lower level of power orientation in the company.

The average level of achievement existing in the company are similar to each other. Both of the groups would like to work in a much more achievement oriented company. The means for the preferred level of the achievement orientation are nearly the same for both of them.

One can see that just the reverse of the achievement situation takes place for the support part. The mean of the existing support scores are close to each other, it is 46.71 for the first group (aged between 20.25) and 44.86 for the second group (aged 26 and higher). The preferred level of support is quite lower than that, both of the groups are looking for a lower level of support with means of 38.36 and 39.86.

4.6. Cultural Differences of GES Company Arising From Seniority:

The time spent in an organization is an important indication for adapting to the culture of that organization. So three groups of people are made to see the cultural differences arising from seniority. The first group is the employees who are working for less that a year, the second group is the employees working for 1 to 2.5 years and the third group is the employees who are working for more than 2.5 years. The statistical results for these groupings are available on the Chart 4 in the following page.

GES COMPANY DIFFERENCES IN SENIORITY

GROUP I — Work < 1yr		GROUP II — Work 1-2.5 yrs		GROUP III — Work >2.5 yrs	
Power Existing	*Power Preferred*	*Power Existing*	*Power Preferred*	*Power Existing*	*Power Preferred*
Mean 35,30	Mean 39,60	Mean 44,86	Mean 38,86	Mean 35,75	Mean 40,75
Std. Dev. 12,03	Std. Dev. 4,58	Std. Dev. 12,99	Std. Dev. 6,62	Std. Dev. 1,50	Std. Dev. 3,30
Min 18,00	Min 32,00	Min 20,00	Min 30,00	Min 34,00	Min 37,00
Max 55,00	Max 44,00	Max 56,00	Max 47,00	Max 37,00	Max 45,00
Role Existing	*Role Preferred*	*Role Existing*	*Role Preferred*	*Role Existing*	*Role Preferred*
Mean 39,90	Mean 35,40	Mean 34,43	Mean 31,57	Mean 42,50	Mean 30,50
Std. Dev. 8,19	Std. Dev. 9,08	Std. Dev. 8,44	Std. Dev. 8,81	Std. Dev. 2,38	Std. Dev. 4,44
Min 22,00	Min 23,00	Min 25,00	Min 19,00	Min 41,00	Min 26,00
Max 49,00	Max 51,00	Max 51,00	Max 48,00	Max 46,00	Max 36,00
Achiev. Existing	*Achiev. Preferred*	*Achiev. Existing*	*Achiev. Preferred*	*Achiev. Existing*	*Achiev. Preferred*
Mean 23,50	Mean 40,20	Mean 20,86	Mean 43,00	Mean 27,50	Mean 43,00
Std. Dev. 5,19	Std. Dev. 5,63	Std. Dev. 2,41	Std. Dev. 7,48	Std. Dev. 8,96	Std. Dev. 5,83
Min 17,00	Min 32,00	Min 17,00	Min 29,00	Min 19,00	Min 37,00
Max 32,00	Max 51,00	Max 24,00	Max 52,00	Max 40,00	Max 48,00
Supp. Existing	*Supp. Preferred*	*Supp. Existing*	*Supp. Preferred*	*Supp. Existing*	*Supp. Preferred*
Mean 45,00	Mean 41,30	Mean 48,00	Mean 38,00	Mean 45,50	Mean 34,25
Std. Dev. 4,55	Std. Dev. 6,20	Std. Dev. 3,83	Std. Dev. 4,87	Std. Dev. 5,45	Std. Dev. 5,74
Min 35,00	Min 31,00	Min 43,00	Min 34,00	Min 38,00	Min 29,00
Max 52,00	Max 51,00	Max 53,00	Max 48,00	Max 50,00	Max 42,00

CHART 4: GES COMPANY- COMPARISON SENIORITY

People who have been working for GES company for less than a year and people who are working for more than 2.5 year feel almost the same level of power on the average. Both of the groups prefer a higher level of power in the organization and the standard deviations for the preferred power means are low so there is consistency in the preference of power. For people who have been working in GES company between 1 and 2.5 years are experiencing a much higher level of power in the company with high standard deviation. Also, this group of people prefers a lower level of power in the organization. It is important to note that the preferred level of power falls within the same ranges in all three groups.

The average mean of the role existing for people who have been working for less than a year is 39.90, the preferred level of role orientation for the same group is 35.40 with high standard deviations. The same thing occurs for people who have been working at GES for 2 and 2.5 years. The striking difference here is among people who have been working for more than 2.5 years. The average for the role existing is 42.50 while the mean for preferred level of role orientation is quite lower than that, it is 30.50 with a very low standard deviation. As the experience in the company increases the scores for the preferred role orientation decreases.

The preferred level of achievement is nearly the same for all groups. Higher level of achievement is preferred among all three groups of people. The average means for preferred level of achievement are 40.20 ands 43.00. On the existing level of achievement employees working less than a year and working for 2 and 2.5 years state a lower level of achievement orientation than

people that have been working for more than 2.5 years. Experience in the company increases the level of achievement felt by the employees.

Everyone in this group agrees that there is high level of support in the company which should be decreased. But there is a strange correlation between the number of years spent in the company and preferred level of support orientation. As experience increases the preferred level of support decreases. The number of years spent in the company is negatively correlated with the level of support.

CHAPTER 5

SDK COMPANY

5.0 <u>Overview:</u>

The company produces Acrylic Bathtubs in Samsun. It is a small firm compared to the giants operating in this field but the company is quite competitive because of its quality. The company began to operate three years ago with 10 people. Currently the firm employs 35 people and makes exports to Holland, Israel and Russia.

The company characterizes this market as being a rapid growth market with a limited number of competitors. This does not limit the company in its vision and the next step for the company is to get an ISO 9000 license so they began to work on quality issues. Another aim is to expand the domestic sales which simply means competing with the giants in the market. Establishing a stable marketing strategy and setting up a powerful organizational structure accordingly carries vital importance for the company.

The company is characterized as:

- being a family
- employees having the initiative
- being democratic
- having job definitions and task assignments
- setting the aims and making the necessary plans for reaching those aims

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                        └─────────────────────┘
                                  │
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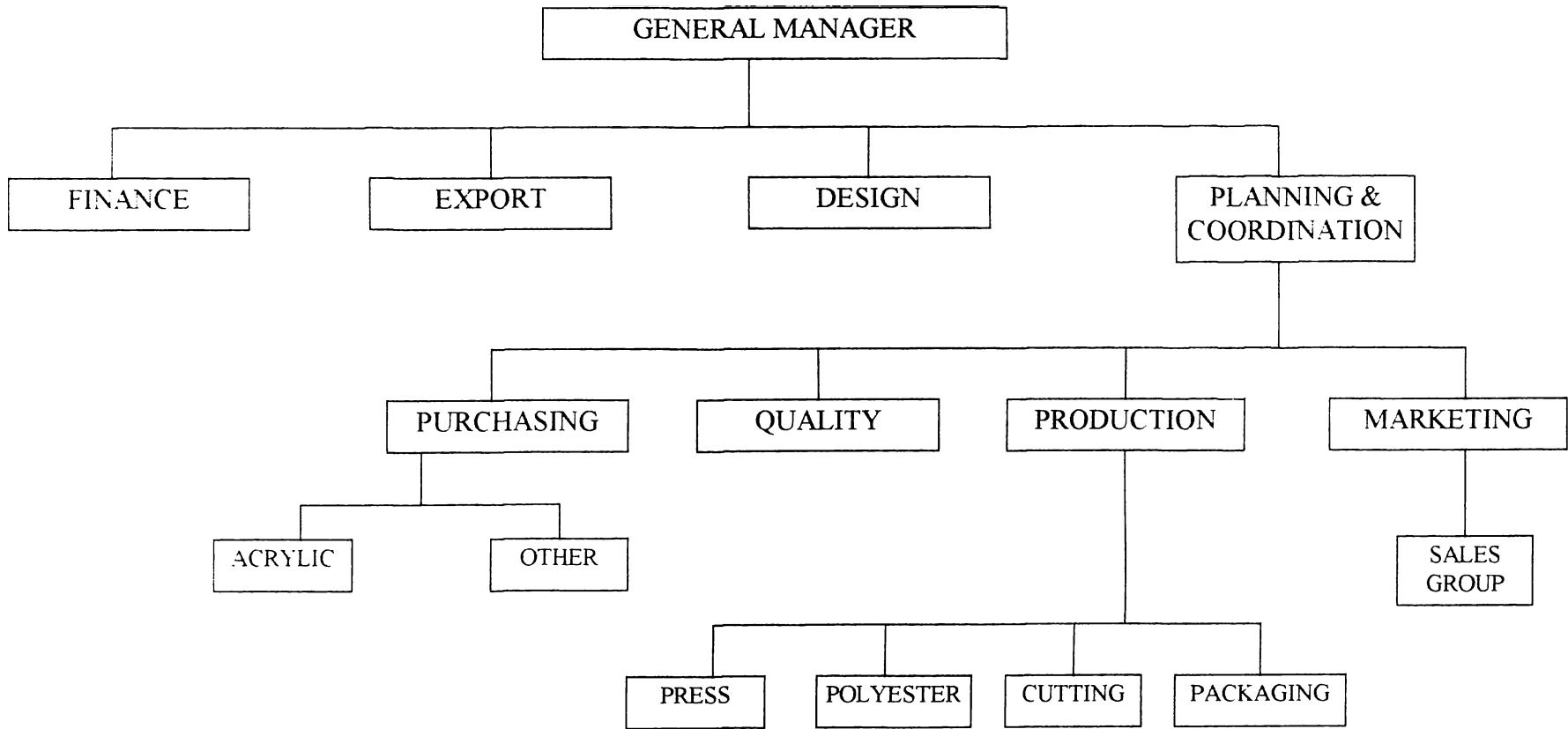
SDK COMPANY ORGANIZATIONAL STRUCTURE

ORGANIZATIONAL CHART 2

The Organization Chart 2 on the following page, shows clearly that the person responsible for Planning and Coordination issues is overloaded. There should be a rearrangement of job definitions so that this overload is shared among other people.

5.1. General Evaluation of SDK Company Questionnaire Results:

The tables 5.1.a-5.1.h below present the general evaluation of the questionnaires in SDK company. The statistical results presented below provide a general understanding of the cultural perceptions in the company.

Existing POWER in SDK		*Preferred POWER in SDK*	
Mean	37.964	Mean	29.607
Standard Deviation	7.974	Standard Deviation	8.638
Minimum	20.000	Minimum	15.000
Maximum	55.000	Maximum	49.000

Table 5.1.a: Summaries of Power Orientation

The average of the scores for existing power is 37.964, but the preferred power for the company is quite lower than that. This can also be seen from the minimum and maximum scores for the preferred power. Since the standard deviation of the preferred power is higher than the existing power, the expectations of employees lies in a greater range.

Existing ROLE in SDK		*Preferred ROLE in SDK*	
Mean	39.429	Mean	40.107
Standard Deviation	4.741	Standard Deviation	4.732
Minimum	32.000	Minimum	30.000
Maximum	51.000	Maximum	51.000

Table 5.1.b: Summaries of Role Orientation

There is consistency between the existing role orientation and the preferred role orientation. This mainly arises from the efforts of the company to get a ISO 9000 license, so that everyone in the company is trying to their best -what is expected from them-. This can also be seen from the scores of minimum and maximum and the consistent standard deviations.

Existing ACHIEVEMENT in SDK		Preferred ACHIEVEMENT in SDK	
Mean	38.929	Mean	42.464
Standard Deviation	7.170	Standard Deviation	7.265
Minimum	26.000	Minimum	29.000
Maximum	54.000	Maximum	57.000

Table 5.1.c: Summaries of Achievement Orientation

The differences in the minimum and maximum scores is also reflected in the difference of the means. Employees in SDK company are looking for more achievement. That is to say that they are looking for more personal achievement in their jobs.

Existing SUPPORT in SDK		Preferred SUPPORT in SDK	
Mean	33.679	Mean	37.786
Standard Deviation	7.134	Standard Deviation	6.106
Minimum	17.000	Minimum	21.000
Maximum	44.000	Maximum	46.000

Table 5.1.d: Summaries of Support Orientation

In SDK company the preferred support is quite higher than the existing support. Employees are looking for more support within the company. Also the minimum and maximum scores for the support are higher than the existing ones. The standard deviations do not differ that much. The

ranges that are specified for the preferred support are quite higher than the ones for the existing

support.

Age		
Mean	1.429	between ages 20-25 and 26-30
Standard Deviation	.997	
Minimum	1.000	between ages 20-25
Maximum	6.000	between ages 46-50

Table 5.1.e: Summaries of Age

The company employs young and dynamic people, especially presented in the achievement scores.

The average age for the members is between the ages of 20-25 and 26-30. The mean for the age

indicates that the majority of the people employed are young and the mode for ages is around 25

and 26.

Sex	
Female	3
Male	25

Table 5.1.f: Summaries of Sex

In SDK company 28 people answered the questionnaire which 3 of them were female and 25 of

them are male. There are 2 basic underlying reasons for that. The first is the company is small,

the second is that, the majority of the employees work in production process and women cannot

be employed for such jobs.

Education		
Mean	2.393	Secondary School Graduates
Standard Deviation	1.100	
Minimum	1.000	Primary School Graduates
Maximum	4.000	University Graduates

Table 5.1.g: Summaries of Education

The average education level is completion of secondary school. This again arises from the nature of the company. The majority of employees work in the production process in which there is no minimum education requirement.

Seniority		
Mean	2.107	working for about 2 years
Standard Deviation	2.675	
Minimum	.500	
Maximum	15.000	outlier

Table 5.1.h: Summaries of Seniority

On the average people in the SDK company have been working there for about 2 years with high standard deviation. So there are many people who have been with the company since it was established.

⇨ data is selected from all groups and levels in the organization

5.2. Pairwise t-test Comparison for Existing & Preferred Culture Orientations:

5.2.1 Pairwise t-test Comparison for Existing Power Orientation & Preferred Power Orientation:

$$Ho : X_1 - X_2 = Do$$

$$Ha : X_1 - X_2 \neq Do$$

95% Confidence Interval (4.132, 12.582)

t-value = 4.06

Reject the Hypothesis that the difference between the existing and preferred power is statistically significant. The t-value is outside the acceptance region on the left hand side indicating that there is a significant difference between the existing and the preferred scores. There is high tendency towards a decrease in the power orientation.

5.2.2. Pairwise t-test Comparison for Existing Role Orientation & Preferred Role Orientation

$$Ho : X_1 - X_2 = Do$$

$$Ha : X_1 - X_2 \neq Do$$

95% Confidence Interval (-3.174, 1.817)

t-value = - 0.56

Fail to reject the Hypothesis that the difference between the existing and preferred role is statistically significant. The t-value is inside the acceptance region indicating that the existing and the preferred scores are close to each other. There is no tendency to make a significant change in the role orientation.

5.2.3. Pairwise t-test Comparison for Existing Achievement Orientation & Preferred Achievement Orientation

$$Ho : X_1 - X_2 = Do$$

$$Ha : X_1 - X_2 \neq Do$$

95% Confidence Interval (-6.723, -0.349)

t-value = -2.28

Fail to reject the Hypothesis that the difference between the existing and preferred achievement is statistically significant. The t-value is inside the acceptance region indicating that the existing and preferred scores are close to each other. There is tendency towards a slight increase in the achievement orientation.

5.2.4. Pairwise t-test Comparison for Existing Support Orientation & Preferred Support Orientation

$$Ho : X_1 - X_2 = Do$$

$$Ha : X_1 - X_2 \neq Do$$

95% Confidence Interval (-7.424, -.790)

t-value = -2.54

Fail to reject the Hypothesis that the difference between the existing and preferred support is statistically significant. The t-value is inside the acceptance region indicating that the existing and the preferred scores are close to each other. There is tendency towards a slight increase in the support orientation.

5.3. Cultural Differences of SDK Company Arising From Position:

There are two different levels of positions in SDK company. The first group of employees are the blue collar employees working in the factory-the production process. The second group of people consist of the white collar employees; administrative employees working in the factory and employees in the sales and marketing group.

The existing level of power orientation among the blue collar employees has an average of 39.20, there is not a big difference in the level of their preferred power orientation. Among the white collar employees the existing level of power orientation is lower than the blue collar employees. The striking point here is that the preferred level of power orientation is higher for the white collar employees. The mean for existing power is 34.88 and the mean for the preferred power is 41.38.

For the role orientation of the blue collar employees, the existing mean is 36.70, the preferred role orientation mean is near to the existing role mean 35.45. white collar employees feel a higher level of role orientation with a mean of 44.50. There is a striking difference on the level of the preferred role orientation, the mean for the preferred role orientation is 29.25.

The data indicate that blue collar employees are more satisfied with their work. The mean for the existing achievement orientation is 32.25. The blue collar employees preferred level of achievement is higher than that, the mean is 39.90 with a low standard deviation. White collar employees' mean for the existing achievement orientation is 23.00, that shows white collar

SDK COMPANY DIFFERENCES IN POSITION							
GROUP I				**GROUP II**			
Blue Collar				White Collar			
Power Existing		*Power Preferred*		*Power Existing*		*Power Preferred*	
Mean	39,20	Mean	38,65	Mean	34,88	Mean	41,38
Std. Dev.	6,87	Std. Dev.	3,83	Std. Dev.	10,09	Std. Dev.	6,39
Min	26,00	Min	32,00	Min	20,00	Min	32,00
Max	55,00	Max	46,00	Max	52,00	Max	51,00
Role Existing		*Role Preferred*		*Role Existing*		*Role Preferred*	
Mean	36,70	Mean	35,45	Mean	44,50	Mean	29,25
Std. Dev.	5,68	Std. Dev.	6,62	Std. Dev.	7,82	Std. Dev.	7,85
Min	26,00	Min	19,00	Min	30,00	Min	17,00
Max	47,00	Max	44,00	Max	54,00	Max	41,00
Achiev. Existing		*Achiev. Preferred*		*Achiev. Existing*		*Achiev. Preferred*	
Mean	32,25	Mean	39,90	Mean	23,00	Mean	40,63
Std. Dev.	7,63	Std. Dev.	4,49	Std. Dev.	7,75	Std. Dev.	5,58
Min	17,00	Min	30,00	Min	15,00	Min	35,00
Max	49,00	Max	50,00	Max	38,00	Max	51,00
Supp. Existing		*Supp. Preferred*		*Supp. Existing*		*Supp. Preferred*	
Mean	39,95	Mean	38,00	Mean	48,75	Mean	37,25
Std. Dev.	6,37	Std. Dev.	5,61	Std. Dev.	5,50	Std. Dev.	7,61
Min	29,00	Min	29,00	Min	40,00	Min	21,00
Max	54,00	Max	46,00	Max	57,00	Max	45,00

CHART 5: SDK COMPANY - COMPARISON POSITION

employees are less satisfied with their work. The preferred achievement orientation for white collar employees has a mean of 40.63. so white collar employees prefer to work in a more achievement oriented company.

Blue collar employees show no differentiation among the existing support orientation and preferred support orientation. Although the means are nearly the same the maximum score for the preferred level of support orientation is quite lower than the maximum score for existing support orientation. White collar employees score higher on support than the blue collar employees. The mean for the existing support is 48.75 and for the preferred level of support it is 37.25. That is to say that the white collar workers are looking for less support orientation in the organization.

5.4. Cultural Differences of SDK Company Arising From Education:

The average education is lower compared to other companies included in this thesis. In order to see the differences arising from education the employees were divided into three groups. The first group consisted of primary and secondary school graduates, the second group consisted of high school graduates and the third group the university graduates presented on Chart 6.

The primary and secondary school graduates scored the same means for the existing and preferred levels of power in the company. People in this group are more consistent in the preferred power level with low standard deviation. High school graduates indicate a lower mean on existing power but the same mean on the preferred level of power with the primary and secondary school

SDK COMPANY DIFFERENCES IN EDUCATION

	GROUP I — Pri.+Secd. Sch. Grad.		GROUP II — High Sch. Grad.		GROUP III — Univ. Grad.	
	Power Existing	*Power Preferred*	*Power Existing*	*Power Preferred*	*Power Existing*	*Power Preferred*
Mean	39,07	39,14	36,89	39,00	36,80	41,00
Std. Dev.	6,63	3,35	8,40	6,63	11,69	4,85
Min	26,00	33,00	25,00	32,00	20,00	34,00
Max	55,00	46,00	52,00	51,00	52,00	47,00
	Role Existing	*Role Preferred*	*Role Existing*	*Role Preferred*	*Role Existing*	*Role Preferred*
Mean	36,85	34,93	39,89	34,22	43,00	29,20
Std. Dev.	5,47	6,35	6,74	8,61	11,00	5,72
Min	30,00	19,00	30,00	17,00	26,00	22,00
Max	47,00	43,00	52,00	44,00	54,00	37,00
	Achiev. Existing	*Achiev. Preferred*	*Achiev. Existing*	*Achiev. Preferred*	*Achiev. Existing*	*Achiev. Preferred*
Mean	33,92	38,64	26,78	42,00	22,60	40,60
Std. Dev.	7,35	4,11	8,15	5,71	7,09	3,78
Min	23,00	30,00	17,00	35,00	15,00	37,00
Max	49,00	48,00	38,00	51,00	31,00	46,00
	Supp. Existing	*Supp. Preferred*	*Supp. Existing*	*Supp. Preferred*	*Supp. Existing*	*Supp. Preferred*
Mean	39,36	38,21	43,33	37,56	49,60	37,00
Std. Dev.	6,96	5,65	6,61	7,94	3,51	4,53
Min	29,00	29,00	37,00	21,00	45,00	32,00
Max	54,00	46,00	57,00	45,00	54,00	43,00

CHART 6: SDK COMPANY - COMPARISON EDUCATION

graduates. The university graduates indicate a mean similar to that of the high school graduates 36.80. Surprisingly, the preferred level of power orientation of the university graduates is higher with a mean of 41.00.

The primary, secondary and high school graduates have similar means for existing role orientation scores. The preferred role orientation scores are lower than the existing role orientation scores. The university graduates have scored the highest mean on existing role orientation with a mean of 43.00. The preferred role orientation mean is 29.20, the university graduates are looking for less role orientation in SDK company.

The existing achievement mean is highest on primary and secondary school graduates while the preferred level of achievement is lowest among others. The existing achievement level of high school graduates are lower than that of primary and secondary school graduates, the same thing is valid for the university school graduates group. The university graduates and high school graduates prefer higher levels of achievement in the organization. The preferred achievement scores lie nearly within the same ranges.

Primary and secondary school graduates are satisfied with the level of support in the organization. The mean for the existing support orientation in this group is 39.36 while the preferred support orientation mean is 38.21. The high school graduates has a mean of 43.33 on existing support, while the university graduates has a higher mean 49.60 on existing support. The preferred level of support for the high school and the university graduates are the same with a mean of 37.00.

5.5. Cultural Differences of SDK Company Arising From Seniority:

The perception of the cultural issues changes as experience in the company increases. For analyzing these differences the employees of SDK company divided into three groups. The first group consists of employees with less than 1 year experience, the second group 1 to 2 years experience and the third group employees more than 2.5 years experience. The statistical summaries of the results can be seen in Chart 7 on the following page.

For employees that have been working in SDK company for less than one year the existing and preferred power orientation means are nearly the same. The only difference between these two is the difference in standard deviations, the preferred power level is more consistent with a lower standard deviation. Among all the groups in seniority people who have been working less than one year feel the most power in the organization. For the employees who have been working in the company for between 1 and 2 years the existing power orientation mean is 37.21 and the preferred power mean is 37.50. The preferred orientations standard deviations differ significantly from the existing power standard deviations. For people who have been working in the company for more than 2.5 years the mean of the existing power orientation is 37.14 while the mean for the preferred power orientation is 42.00. This indicates that employees who have been working in the company for more than 2.5 years prefer higher levels of power in the organization.

For the existing level of role orientation in SDK company the ranges fall in the same region. The means for the preferred role orientation are nearly the same for the employees working less than a

SDK COMPANY DIFFERENCES IN SENIORITY

	GROUP I — Work < 1yr		GROUP II — Work 1-2 yrs		GROUP III — Work >2.5 yrs	
	Power Existing	**Power Preferred**	**Power Existing**	**Power Preferred**	**Power Existing**	**Power Preferred**
Mean	40,29	40,71	37,21	37,50	37,14	42,00
Std. Dev.	7,70	4,96	9,29	3,94	5,61	4,97
Min	33,00	34,00	20,00	32,00	30,00	37,00
Max	55,00	47,00	52,00	43,00	45,00	51,00
	Role Existing	**Role Preferred**	**Role Existing**	**Role Preferred**	**Role Existing**	**Role Preferred**
Mean	37,29	31,71	39,71	35,57	39,00	31,86
Std. Dev.	6,97	8,98	8,36	5,00	5,16	8,80
Min	30,00	19,00	26,00	27,00	31,00	17,00
Max	51,00	42,00	54,00	44,00	44,00	43,00
	Achiev. Existing	**Achiev. Preferred**	**Achiev. Existing**	**Achiev. Preferred**	**Achiev. Existing**	**Achiev. Preferred**
Mean	28,29	40,29	27,79	40,86	34,57	38,43
Std. Dev.	5,53	3,25	8,49	4,54	10,52	6,40
Min	23,00	37,00	15,00	35,00	16,00	30,00
Max	37,00	46,00	41,00	50,00	49,00	51,00
	Supp. Existing	**Supp. Preferred**	**Supp. Existing**	**Supp. Preferred**	**Supp. Existing**	**Supp. Preferred**
Mean	43,43	38,00	42,43	38,86	41,57	35,43
Std. Dev.	5,80	5,75	8,04	4,96	7,87	8,50
Min	32,00	29,00	32,00	30,00	29,00	21,00
Max	49,00	44,00	57,00	45,00	54,00	46,00

CHART 7: SDK COMPANY - COMPARISON SENIORITY

year and people who have been working more than 2.5 years is 31.71. The preferred role orientation is 35.57 for people who have been working for 1 to 2 years. There is a general tendency toward a lower level role orientation.

The existing and preferred achievement orientation levels are the same for people who have been working less than a year and who have been working for about 2 years. People who have been working since the company was established (more than 2.5 years) have a mean of 34.57 on existing achievement orientation and the mean of preferred power orientation is lower than the other two means.

For the existing support orientation in the company each group ended up with similar means. The perceived level of support ranged within the same limits. The preferred level of support orientation is the same for employees who have been working less than a year and working for 1 and 2 years. The preferred support orientation is lower for employees who have been working for more than 2.5 years with a mean of 35.43. That is an implication of the fact that as experience in the company increases the preferred level of support decreases.

CHAPTER 6

ARM COMPANY

6.0 Overview:

The company is established as a production facility of a big corporation in Ankara. The company employs about 300 people, about 70 of them are white collar and the remainder are blue collar workers.

Assembly lines are the basis of the production systems. The production infrastructure allows for;

- Lean and flexible manufacturing

- Future based automation

- Computer integrated manufacturing

Organizational structure of the company is based on work groups. There are no functional departments. The groups are formed on a process flow basis. There are group leaders and department managers. People are working in open offices to increase coordination and cooperation. Mainly, it is very easy to reach higher level people.

6.1 General Evaluation of ARM Company Questionnaire Results:

The questionnaire results concerning the general cultural perceptions of the ARM company are presented in the following Tables 6.1.a-6.1.h, as are the data concerning how employees see the four dimensions of culture.

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                          ┌─────────────┐
                          │    PLANT    │
                          │   MANAGER   │
                          └─────────────┘
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| QUALITY ASSURANCE MANAGER | ASSEMBLY AREA MANAGER | INNER PRODUCTION AREA MANAGER | PRODUCT DEVELOPMENT AREA MANAGER |

| | MAIN ASS'Y TEAM LEADER | SUB ASS'Y TEAM LEADER | MECHANICAL PROD. TEAM LEADER | INNER LINER PROD. TEAM LEADER | PAINT SHOP TEAM LEADER |

HUMAN RESOURCES MANAGER

ACCOUNTING MANAGER

INFORMATION SYSTEMS CHIEF

TEAM ENG.

TEAM ENG.

TEAM ENG.

TEAM ENG.

TEAM ENG.

CELL SPEAKER
WORKER-1
WORKER-2
WORKER-3

ARM COMPANY ORGANIZATIONAL STRUCTURE

ORGANIZATIONAL CHART 3

Existing POWER in ARM		Preferred POWER in ARM	
Mean	40.510	Mean	26.255
Standard Deviation	10.011	Standard Deviation	10.133
Minimum	15.000	Minimum	15.000
Maximum	60.000	Maximum	58.000

Table 6.1.a: Summaries of Power Orientation

The existing power in ARM company 40.15 which is quite high with a high standard deviation. It is interesting ARM company is the only company that scored the maximum on power orientation. The average of the power preferred is significantly lower than the existing power in the company. The means of the two situations are so different from each other that they do not even fall in the same range. Surprisingly, the minimum and maximum scores on power orientation are quite similar to each other.

Existing ROLE in ARM		Preferred ROLE in ARM	
Mean	40.941	Mean	37.333
Standard Deviation	5.609	Standard Deviation	4.934
Minimum	32.000	Minimum	28.000
Maximum	55.000	Maximum	52.000

Table 6.1.b: Summaries of Role Orientation

In terms of the role orientation ARM nearly stays almost within the same range. Although the company scored lower in preferred role orientation the means are near to each other so there is not a big expectation of change in this situation.

Existing ACHIEVEMENT in ARM		Preferred ACHIEVEMENT in ARM	
Mean	36.020	Mean	44.804
Standard Deviation	5.461	Standard Deviation	7.197
Minimum	21.000	Minimum	26.000
Maximum	48.000	Maximum	58.000

Table 6.1.c: Summaries of Achievement Orientation

Existing achievement in ARM company is much lower than the preferred achievement in ARM company. So the employees of ARM company are looking for more personal achievement in their operations. The maximum score on preferred achievement is higher than the score on achievement. The standard deviation of the preferred achievement scores is higher than the scores on existing achievement. There is more consensus on existing achievement than on preferred achievement.

Existing SUPPORT in ARM		Preferred SUPPORT in ARM	
Mean	32.529	Mean	41.588
Standard Deviation	8.659	Standard Deviation	8.913
Minimum	15.000	Minimum	15.000
Maximum	55.000	Maximum	59.000

Table 6.1.d: Summaries of Support Orientation

The preferred support score is higher than the existing support score. Although the standard deviations are quite similar to each other, because of the differences in means the ranges differ. So the expectation of support is very high. The differences in preferred support differs strikingly against the similarities in minimum and maximum scores.

81

Age		
Mean	1.647	between 20-25 and 26-30
Standard Deviation	.744	
Minimum	1.000	between 20-25
Maximum	4.000	between 36-40

Table 6.1.e: Summaries of Age

The average age is between 20-25 and 26-30 which indicates that the company employs young and dynamic people. Since the mean is 1.647 the mode is either 26 or 27 indicating that the majority of the people employed aged 26 or 27.

Sex	
Female	18
Male	33

Table 6.1.f: Summaries of Sex

Among 51 people answering the questionnaire 18 of them were female and 33 of them were male.

Education		
Mean	3.549	High School Graduates
Standard Deviation	.642	
Minimum	3.000	High School Graduates
Maximum	5.000	Master's Degree

Table 6.1.g: Summaries of Education

The average education level of people employed in ARM company is high school. Since the majority of the sample consisted of blue collar workers, it is an expected result for the average education rate falls in somewhere between the high school and university graduates.

82

Seniority		
Mean	2.618	working for about 2,5 years
Standard Deviation	1.423	
Minimum	.500	working for less than a year
Maximum	9.000	outlier

Table 6.1.h: Summaries of Seniority

On the average people have been working until the establishment of the company.

⇨ data is selected from all groups and levels in the organization

6.2. Pairwise t-test Comparison for Existing and Preferred Culture Orientation

6.2.1. Pairwise t-test Comparison for Existing Power Orientation & Preferred Power Orientation

$Ho : X_1 - X_2 = Do$

$Ha : X_1 - X_2 \neq Do$

95% Confidence Interval (10.105, 18.405)

t-value = 6.90

Reject the Hypothesis that the difference between the existing and preferred power is statistically significant. The t-value is outside the acceptance region on the left hand indicating that there is significant difference between the existing and the preferred scores. There is high tendency towards a decrease in the power orientation.

6.2.2. Pairwise t-test Comparison for Existing Role Orientation & Preferred Role Orientation

$$Ho : X_1 - X_2 = Do$$

$$Ha : X_1 - X_2 \neq Do$$

95% Confidence Interval (1.581, 5.635)

t-value = 3.58

Fail to reject the Hypothesis that the difference between the existing and preferred role is statistically significant. The t-value is inside the acceptance region indicating that the existing and preferred scores are very close to each other. There is no tendency to make a significant change in the role orientation.

6.2.3. Pairwise t-test Comparison for Existing Achievement Orientation & Preferred Achievement Orientation

$$Ho : X_1 - X_2 = Do$$

$$Ha : X_1 - X_2 \neq Do$$

95% Confidence Interval (-11.814, -5.755)

t-value = -5.83

Fail to reject the Hypothesis that the difference between the existing and preferred achievement is statistically significant. The t-value is inside the acceptance region but very close to the rejection region indicating that the existing and the preferred scores are not very close to each other. There is tendency towards an increase in the achievement orientation.

6.2.4 Pairwise t-test Comparison for Existing Support Orientation & Preferred Support Orientation

$$Ho : X_1 - X_2 = Do$$

$$Ha : X_1 - X_2 \neq Do$$

95% Confidence Interval (-12.214, -5.903)

t-value = -5.77

Reject the Hypothesis that the difference between the existing and preferred support is statistically significant. The t-value is outside the acceptance region on the right hand side indicating that there is a significant difference between the existing and the preferred scores. There is high tendency towards an increase in the support orientation.

6.3 Cultural Differences of ARM Company Arising from Position:

Employees in the organization are grouped as blue collar and white collar. Their cultural perception differences arising from position can be analyzed from Chart 8 in the following page. The evaluation of the statistical results are as follows:

The blue collar employees feel less power on themselves than the white collar employees. The expectations of power do not deviate much from the existing power mean, but the standard deviations are lower. The white collar employees feel higher power orientation and strangely their expectation of power is similar to that with smaller standard deviation.

ARM COMPANY DIFFERENCES IN POSITION							
GROUP I				**GROUP II**			
Blue Collar				White Collar			
Power Existing		*Power Preferred*		*Power Existing*		*Power Preferred*	
Mean	38,00	Mean	39,75	Mean	43,57	Mean	42,39
Std. Dev.	9,05	Std. Dev.	4,34	Std. Dev.	10,47	Std. Dev.	6,66
Min	15,00	Min	33,00	Min	22,00	Min	32,00
Max	52,00	Max	53,00	Max	60,00	Max	55,00
Role Existing		*Role Preferred*		*Role Existing*		*Role Preferred*	
Mean	37,04	Mean	35,21	Mean	34,78	Mean	29,26
Std. Dev.	5,15	Std. Dev.	7,88	Std. Dev.	5,69	Std. Dev.	8,60
Min	21,00	Min	22,00	Min	24,00	Min	15,00
Max	48,00	Max	55,00	Max	47,00	Max	48,00
Achiev. Existing		*Achiev. Preferred*		*Achiev. Existing*		*Achiev. Preferred*	
Mean	30,39	Mean	37,75	Mean	21,22	Mean	36,83
Std. Dev.	9,36	Std. Dev.	4,86	Std. Dev.	8,81	Std. Dev.	5,09
Min	15,00	Min	28,00	Min	15,00	Min	31,00
Max	50,00	Max	52,00	Max	58,00	Max	48,00
Supp. Existing		*Supp. Preferred*		*Supp. Existing*		*Supp. Preferred*	
Mean	41,29	Mean	40,64	Mean	49,09	Mean	42,74
Std. Dev.	5,22	Std. Dev.	9,12	Std. Dev.	7,03	Std. Dev.	8,71
Min	30,00	Min	15,00	Min	26,00	Min	28,00
Max	49,00	Max	57,00	Max	58,00	Max	59,00

CHART 8: ARM COMPANY - COMPARISON POSITION

For the blue collar employees' existing role orientation and preferred role orientation scores falls exactly in the same ranges. White collar employees have a mean of role orientation lower than blue collar employees. The preference of the role orientation is much lower among the white collar employees.

Blue collar employees existing achievement mean is quite higher than the white collar employees. But in the preferred achievement mean blue collar employees state that they would like to take place in a more achievement oriented organization. White collar employees preference of achievement has a mean which is quite higher than the existing one. So the white collar employees also prefer to work in a more achievement oriented work place.

Blue collar workers are satisfied with the support orientation taking place in the organization. There is no big differences between the means of existing support orientation and preferred support orientation. The mean of the white collar employees is higher than blue collar employees on existing support orientation. The preferred level of support orientation is lower than the existing support orientation for the white collar employees.

6.4 Cultural Differences of ARM Company Arising from Education:

The significant differences and interesting results of cultural differences arising from education is presented on Chart 9 in the following page. The employees of ARM company are divided into

ARM COMPANY DIFFERENCES IN EDUCATION

GROUP I — High Sch. Grad.
GROUP II — University Grad.
GROUP III — Masters Degree

	Group I *Power Existing*	Group I *Power Preferred*	Group II *Power Existing*	Group II *Power Preferred*	Group III *Power Existing*	Group III *Power Preferred*
Mean	38,22	39,48	44,65	43,00	35,25	40,50
Std. Dev.	9,13	4,20	9,74	5,90	12,18	10,15
Min	15,00	33,00	30,00	32,00	22,00	33,00
Max	52,00	53,00	60,00	52,00	51,00	55,00

	Group I *Role Existing*	Group I *Role Preferred*	Group II *Role Existing*	Group II *Role Preferred*	Group III *Role Existing*	Group III *Role Preferred*
Mean	36,74	35,56	34,70	27,65	37,75	36,50
Std. Dev.	4,86	7,72	5,81	7,82	7,63	9,15
Min	21,00	22,00	24,00	15,00	31,00	26,00
Max	43,00	55,00	48,00	45,00	47,00	48,00

	Group I *Achiev. Existing*	Group I *Achiev. Preferred*	Group II *Achiev. Existing*	Group II *Achiev. Preferred*	Group III *Achiev. Existing*	Group III *Achiev. Preferred*
Mean	29,85	37,74	22,85	37,55	19,00	33,50
Std. Dev.	9,62	4,46	9,99	5,69	3,56	2,65
Min	15,00	29,00	15,00	28,00	16,00	31,00
Max	50,00	52,00	58,00	48,00	24,00	37,00

	Group I *Supp. Existing*	Group I *Supp. Preferred*	Group II *Supp. Existing*	Group II *Supp. Preferred*	Group III *Supp. Existing*	Group III *Supp. Preferred*
Mean	41,96	40,52	47,75	41,70	49,25	48,25
Std. Dev.	5,22	8,86	8,30	8,76	5,85	9,39
Min	30,00	15,00	26,00	28,00	43,00	37,00
Max	51,00	57,00	58,00	59,00	56,00	56,00

CHART 9: ARM COMPANY - COMPARISON EDUCATION

three groups. The first group consists of the high school graduates, the second group consists of the university graduates and the third group consisted of the employees with master's degree.

The existing power orientation mean is 38.22 for the high school graduates while the preferred power orientation is 39.48, so there is not a big difference between them. The university graduates indicate that they are facing a high level of power orientation with a mean of 44.65 but their preference of power is not far away from that with a mean of 43.00. Employees with masters degree feel a lower level of power existing in the organization. Their preferred power level is higher than that reaching the mean of the preferred power level of the university graduates.

High school graduates and employees having masters degree on the average has similar existing and preferred role orientations. The existing role orientation mean of the university graduates is lower than that of the others. Still, university graduates preferred role orientation mean state that they are looking for less role orientation.

High school graduates are the ones that are most satisfied with their achievement level. University graduates are indicating a lower level of achievement in the organization. Both the university graduates and high school graduates show similar preferred achievement orientation. Strikingly, employees with masters degree are the ones that are less satisfied with their work. Although the level of preferred achievement is lower than the others it shows striking difference.

High school graduates and people with masters degree are satisfied with the level of support orientation in the company. Employees with masters degree existing and preferred means are the highest among others. University graduates have a mean similar to that of master's degree employees on existing support orientation. The preferred level of support orientation is lower than the existing support orientation.

6.5 Cultural Differences of ARM Company Arising from Seniority:

For the analysis of the differences arising from seniority ARM employees are divided into two groups. The first group consisted of employees that have been working up to 2.5 years. The second group consisted of employees who have been working in the company for more than 2.5 years. The summary of the statistical results can be seen in the following page.

Employees who have been working since the establishment of the company feel a higher level of power than employees who have been working up to 2.5 years. The general perception of power is consistent because employees are preferring the same level of power orientation in the company.

Employees who have been employed for less than 2.5 years have a mean of 36.65 for the existing role orientation, and the preferred role orientation for the same group is 34.35. Employees who have been working for more than 2.5 years have a mean of 35.61 for existing role orientation, but they seem as is they would like to work in a less role oriented environment with a preferred role orientation mean of 31.36.

ARM COMPANY DIFFERENCES IN SENIORITY							
GROUP I				**GROUP II**			
btw 0-2.5 yrs				more than 2.5 yrs			
Power Existing		*Power Preferred*		*Power Existing*		*Power Preferred*	
Mean	39,45	Mean	39,55	Mean	41,19	Mean	41,84
Std. Dev.	10,34	Std. Dev.	5,40	Std. Dev.	9,90	Std. Dev.	5,65
Min	22,00	Min	32,00	Min	15,00	Min	33,00
Max	60,00	Max	49,00	Max	56,00	Max	55,00
Role Existing		*Role Preferred*		*Role Existing*		*Role Preferred*	
Mean	36,65	Mean	34,35	Mean	35,61	Mean	31,36
Std. Dev.	5,32	Std. Dev.	7,45	Std. Dev.	5,60	Std. Dev.	9,28
Min	24,00	Min	22,00	Min	21,00	Min	15,00
Max	47,00	Max	48,00	Max	48,00	Max	55,00
Achiev. Existing		*Achiev. Preferred*		*Achiev. Existing*		*Achiev. Preferred*	
Mean	25,70	Mean	37,55	Mean	26,61	Mean	37,19
Std. Dev.	10,82	Std. Dev.	4,80	Std. Dev.	9,83	Std. Dev.	5,10
Min	16,00	Min	31,00	Min	15,00	Min	28,00
Max	58,00	Max	48,00	Max	50,00	Max	52,00
Supp. Existing		*Supp. Preferred*		*Supp. Existing*		*Supp. Preferred*	
Mean	46,05	Mean	40,70	Mean	44,00	Mean	42,16
Std. Dev.	7,55	Std. Dev.	8,05	Std. Dev.	6,97	Std. Dev.	9,51
Min	26,00	Min	28,00	Min	30,00	Min	15,00
Max	57,00	Max	56,00	Max	58,00	Max	59,00

CHART 10: ARM COMPANY - COMPARISON SENIORITY

For both of the groups the existing achievement orientation is low with means of ⁻ 70 and 26.61. The preferred achievement level is higher than that with means of 37.55 and 37.1   o regardless of the work experience in the company employees would like to work in a mo   achievement oriented company.

Employees who have been working less than 2.5 years has a mean of 46.05 on existing support orientation. The preferred level of support is much lower than that with a mean of 40.70. For employees who have been working more than 2.5 years the mean on existing support is 44.00 and the preferred level of support for that group is lower than that with a mean of 42.16. Since there are not huge differences employees are satisfied with the level support existing in the company.

CHAPTER 7

CONCLUSION AND RECOMMENDATIONS

7.0 Overview:

"Talking about organizational culture seems to mean talking about the importance for the people of symbolism - of rituals, myths, stories, legends - and about the interpretation of events ideas and explanations that are influenced and shaped by the groups within which they live." [3]

The statement above explains all the research, efforts, questionnaires and results that were presented in the previous chapters. The research made and the results reached during this thesis was another addition to the studies in field of diagnosing organizational culture. The concept of organizational culture is something very difficult to explain but more difficult to measure.

The conclusions drawn concerning this study are presented below:

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[3] Frost Peter J., and Larry F. Moore, Meryl R. Louis, Craig C. Lundberg, Joanne Martin, (1985) 'An Allegorical View of Organizational Culture' in Frost et al. (Eds); Organizational Culture, page 17.

7.1 GES Company:

The members of GES company indicate a significant preference for less power to be applied on themselves. The main underlying reason for the feeling of high existing power is the strong founder figure in the organization.

In relation to power orientation, the data indicate that the members of GES company prefer to be more role and achievement oriented. This is proven by their attempts to obtain more responsibility. The scope of the responsibility that would be transferred to the members of the organization can best be found in the recommendations coming from the employees. The simplest way of reaching the desired level of role orientation would be to implement job descriptions. Personal and organizational goal settings combined with strong communication among the members can form the basis for higher achievement orientation.

The company members state that they are looking for more support in the company. Competition among the members of an organization is always a problem, especially in such a young group of people. The company needs to find ways of providing more support without diminishing the competition.

The power and role orientations in GES company are interrelated, so the desire for decreasing power orientation can basically be resolved by increasing role orientation.

Hence, identification of clear job descriptions and delegation of authority and responsibilities, regarding these descriptions is the minimum requirement for decreasing the power orientation and increasing the role orientation within the company. Besides, developing a recruitment policy in line with the defined roles would certainly serve the same aim.

To increase support orientation team work should be encouraged both among and within departments. A performance appraisal system should be developed to increase both achievement and support orientation. With this performance appraisal system, goals and achievements should be defined and the importance of social relations within the company should clearly be identified. Members of the organization should be evaluated according to their personal accomplishments accompanied with the company goals and also the level of success in their social relations. All the members of the organization should be reinforced with the defined incentives and rewards depending on the results of the performance appraisal system.

7.2 SDK Company:

SDK Company's policy of setting the aims and reaching them is indicated in the scores for role orientation. In role orientation this company is somewhere around the desired level. On the other hand, members of SDK company expressed their preference for less power in the organization. This preference is more or less the same for most Turkish

organizations. Founders of the organization try to keep as much power as they can, in that way they shift other members of the organization into either power dominated or power oriented organizational figures.

There are no major differences between the existing and preferred Achievement and Support scores. This is probably the result of successful role definitions. The critical point here is that any shift in the role orientations-definitions would result in significant changes in the behaviours of the members of the organization.

The organization is small scaled compared to other organizations in the study and most of the employees are blue collar. Blue collar workers have strict job descriptions that is the main underlying reason of consistent role orientation scores.

For the success of the organization in the long term, restructuring is a necessity in which the responsibilities of the departments of finance, marketing, export and quality should be enhanced. Job descriptions for these departments should be redefined for an appropriate application of the increased responsibilities. A linear organizational structure would help to create a more decentralized organization. In this way, the domination of the strong founder would be limited and delegation of authority and responsibilities could be exercised within the company.

7.3 ARM Company:

Having a lateral organizational structure, including teams and team leaders, ARM company would be expected to score low on power. However, the reality is just the opposite, ARM scored the highest on power. The preferred level of power is much lower than that, so this indicates that it is time for the organizations members to begin to talk about "power".

The data indicate that the company is highly role oriented, decreasing the achievement orientation of employees. So, less role orientation and higher achievement is preferred. High role orientation also resulted in low support, making the employees prefer a higher level of support.

Being a member of one of the most powerful groups in Turkey, ARM company originates its culture from that group. Belonging to such a group has some effects on the organization's culture. White collar employees scored high both on existing and preferred power indicating that they are power oriented and power dominated.

Arising from the nature of work, the organization has a mechanistic style; jobs are strictly defined. The production is based on assembly lines leading to decreased support and achievement among organization members. Although there a is tendency for higher achievement and support, it is not a simple issue to reach that level.

The following can be suggested for improvement in support and achievement:

- identifying and giving small incentives to team members working in the same assembly line,

- selecting the team of the month and announcing in the organization.

7.4 Researcher's Perceptions:

Beginning from the very first chapter unfortunately, there has been no consensus among major researches concerning some cultural issues, but different views of the same situation making the subject richer and more interesting.

The term culture has a range beginning from **organizational structure** and ending with the **leadership style**. This wide range of explanations might contradict one another both on theoretical grounds and in behavioral terms, but the fact that a certain type of behaviour is accepted and rewarded is the same for every organization. This is a valid explanation for the differences between the existing and preferred culture orientation scores.

When employees are first involved in groups, their first concern is for their own feelings and perceptions rather than the group's problems. In this case they simply follow the

leaders; resulting in the **power orientation** which is a rather strong feeling within an organization.

The **role orientation** is the division of labour among the group members. Including the leader this issue is also a division of authority among the members of the organization. If the group can be successful with the authority issue it is more likely to make assumptions about what a good group is and how well members get along with each other.

Following this, people set the standards for themselves on where to reach and how to support one another in the organization. This is the general perception of the group members regarding both the personal achievement and the group support.

During this thesis, the researcher has been able to form a general insight on how organizational culture depends strongly on the style of management. The unique function of *"leadership"* is contrasted with *"management"* or *"administration"* in the creation of the management culture. Any attempt to reach the preferred situation should be strongly supported by the leaders so that a change in the situation can take place.

The existing culture orientations and preferred culture orientations resemble a structured form of the "theories-in-use" and "espoused-theories". When interviews are held in an organization to conduct research on organizational culture, there always exist differences

between what the managers or leaders indicate that they are applying in the organization and the perception of other employees about the same situation. The questionnaire utilized in this study could also be used as a tool to examine the differences between the *espoused theories* and the *theories in use* in an organization. This can be made through a close investigation of each question in the questionnaire supported by personal interviews with organizational members.

Many books written on organizational behaviour, culture, change and development talk about the *devotion of managers or leaders* in some concepts. For example, if a manager does not believe in change or restructuring it would not be possible to make any significant changes in the organization. One striking point in the research was that managers talk about how to improve the activities in the organizations and how they would like their employees to fill in the questionnaire. However, the hardest part of the research was obtaining the results from the managers. Some managers did not even fill out the questionnaires stating that they did not have time to do it. As one of the managers explained during the research; *they are the ones that set the rules and also break them.*

Culture may serve as a force to provide stability in an organization, but for providing meaning and identity the current culture might not be sufficient. The groups must be more responsive to external changes in today' s currently changing environment. Within these changing conditions, the rebellious counterculture is mostly formed by the younger

more externally oriented elements in the group, leading the whole group to suffer from a loss of integrity. In time more extreme conditions may occur like revolution, restructuring and massive replacement of people. Since organizations go through different stages with different orientations, the change and development mechanisms that might be used should be different according to the stage.

The questionnaire utilized in this study is a tool to guide the organizations which do not know where to start their activities for making some changes. With the help of such a diagnosis organizations would be able to see their strong and weak points. Moreover, the preferred culture orientation would act as a major goal toward which the members of the organization would like to strive. With the help of this diagnosis a path between the existing and the preferred culture orientations could be drawn.

Appendix A

THE QUESTIONNAIRE

ORGANİZASYON KÜLTÜRÜNÜN TANIMLANMASI

Lütfen cevaplarınızda "olan" ve "olması istenen" durum kolonlarına her şık için sadece bir 4,3,2,1 değeri verdiğinizden emin olunuz.

Sıralama Anahtarı:

4 : En yaygın görüş, en tercih edilen alternatif

3 : Bir sonraki yaygın görüş, bir sonraki tercih edilen alternatif

2 : Bir sonraki yaygın görüş, bir sonraki tercih edilen alternatif

1 : En az yaygın olan görüş, en az tercih edilen alternatif

olan durum   **olması gereken durum**

1. Şirket çalışanlarının aşağıdaki durumlarda ilk önceliği şuna vermesi beklenir

_____   _____   **a.** kendi yöneticilerinin veya şirketteki diğer üst düzey yöneticilerin istek ve ihtiyaçlarını karşılamak

_____   _____   **b.** kendi işlerini tanımlanmış politikalar ve prosedürler dahilinde yürütmek

_____   _____   **c.** iş ile ilgili güçlükleri işlerin yapılması için daha kolay yollar bularak çözmek

_____   _____   **d.** iş arkadaşları ile hem işle ilgili hem kişisel problemleri çözerken işbirliği yapmak

2. İş yerinde başarılı olan kişiler genellikle

_____   _____   **a.** kendi yöneticilerini nasıl memnun edebileceğini bilen ve öne geçmek için güç ve politikaları kullanmayı bilen ve isteyenlerdir

b. kuralları ile oynayan, sistem dahilinde çalışan ve işleri doğru yapmak için çaba gösterenlerdir

_____   _____   **c.** teknik bilgi açısından yeterli ve etkin olup bir işi yapmak için bağlılık gösterenlerdir

d. diğerleri ile ortak çalışan ve diğer çalışanlarla ilişkilerine özen göstererek yakın iş ilişkileri kuranlardır

olan **olması**
durum **gereken**
        durum

3. Şirket çalışanlarına şöyle davranır

a. yüksek kademedeki kişiler tarafından zamanları ve enerjileri tüketilebilecek "eller" gibi

b. hem şirket hem de çalışanlar için iki tarafın da haklarını ve sorumluluklarını tanımlayan bir sözleşme ile zamanları ve enerjileri satın alınmış "çalışanlar" gibi

c. herkes tarafından paylaşılan bir hedefe ulaşmak için beraber, bağlılıkla hareket eden "ortaklar" gibi

d. birlikte olmayı seven ve birbirlerini destekleyip düşünen bir "aile" veya "arkadaşlar" gibi

4. Kişiler genellikle şu şekilde idare edilir, yönlendirilir veya etkilenir

a. yetki sahibi kişilerin güçlerini ödül veya ceza uygulayarak göstermeleri ile

b. kişilerin neyi nasıl yapacağını açıklayan sistem, kural ve prosedürler ile

c. şirketin hedeflerine ulaşabilmek için kendi gösterdikleri bağlılık ile

d. diğerleri tarafından kabul edilmek ve çalışma gruplarının iyi bir üyesi olmak için gösterdikleri çaba ile

5. Karar verme işlemleri genellikle şu özelliklerle belirlenir

a. daha yüksek seviyelerdeki yöneticilerden gelen direktifler, emirler ve talimatlar

b. karar verirken resmi kanalların takip edilmesi, politikalara ve talimatlara bağlı kalınması

c. harekete geçmeye en yakın pozisyondaki kişilerin karar vermesi ile

d. kabul ve destek görmek için ortak karar verme metotlarının kullanılması ile

olan   olması
durum gereken
       durum

6. Kimlere hangi işlerin verileceği genellikle şu şekilde belirlenir

a. güç sahibi pozisyonlardaki kişilerin, kişisel değerlendirmeleri, görüşleri ve isteklerine dayanarak

b. şirketin ihtiyaçları ve planları doğrultusunda, sistemin kurallarına uyarak (kıdem, kişisel özellikler v.b.)

c. kişilerin ilgi ve becerileri ile işin gerektirdiklerinin ne kadar uyduğunu değerlendirerek

d. çalışanların kişisel tercihlerine ve kendilerini geliştirmek için duyduğu ihtiyaca bakarak

7. Çalışanların şöyle olması beklenir

a. çalışkan, uysal, itaat eden ve rapor verdikleri kişilerin isteklerine bağlı

b. sorumluluk sahibi ve güvenilir, işlerin gerektirdiği görevleri yerine getirebilir ve kendi yöneticilerini şaşırtacak veya utandıracak hareketlerden kaçınan

c. kendi motivasyonunu sağlayabilen ve yeterli, işlerin yolunda gidebilmesi için inisiyatif alabilen , iyi sonuçlar elde edebilmek için gerekirse rapor ettikleri kişileri zorlayabilen

d. iyi ekip üyeleri olabilen, işbirliği yapabilen destekleyici ve diğerleri ile iyi anlaşabilen

8. Yöneticilerin şöyle olması beklenir

a. güçlü ve kararlı, katı fakat adil

b. kişisel olmayan ve uygun şekilde davranan, yetkilerini kendi avantajları için kullanmaktan kaçınan

c. demokratik ve çalışanlarının işle ilgili fikirlerini kabul etmeye istekli

d. çalışanlarının ihtiyaçları ve kişisel istekleri konusunda duyarlı, onlara destek olan ve onları düşünen

olan durum	olması gereken durum

9. Birinin başka birine ne yapacağını söylemesi şu durumlarda uygun kabul edilir

a. o kişinin daha fazla yetkisi veya gücü varsa ya da şirkette etkin biri olarak kabul ediliyorsa

b. o kişinin iş tanımlarında bu iş sorumluluğu olarak belirtilmişse

c. o kişinin daha fazla bilgisi ve tecrübesi varsa ve bunu kişilere rehberlik etmek veya onlara işlerini nasıl yapmaları gerektiğini öğretmek için kullanıyorsa

d. diğer kişiler ondan yardım ya da tavsiye isterlerse

10. İş motivasyonu genellikle şunun sonucudur

a. ödüller için umut, cezalar için korku ve yöneticiye kişisel bağlılık duymak

b. " bir günlük adil iş için, bir günlük adil para" felsefesi ile yapılan iş karşılığında hâk ettiğini kazanacağını bilerek çalışmak

c. şirketin başarılı olmasına katkıda bulunmak için başarmak, yaratmak ve bunları sağlayabilmek için kendini zorlamak

d. çalışanların birbirine yardım etmesi ve diğerleri ile yakın ilişkilerini korumayı ve geliştirmeyi istemesi

11. Çalışma grupları ve departmanlar arasındaki ilişkiler genellikle şöyledir

a. rekabete dayalı, iki tarafın da kendi çıkarlarını gözettiği ve eğer kendileri için bir fayda sağlamayacaksa birbirlerine yardım etmeyen

b. birbirlerine karşı kayıtsız olmaları, ancak uygun olduğunda veya üst düzeydeki yöneticilerden bir direktif gelmesi halinde birbirlerine yardım eden

c. ortak bir amaca ulaşmak için işbirliği yapan. İnsanlar genellikle işin yapılabilmesi için bürokratik ve organizasyondan kaynaklanan engelleri aşmak için istekli olan

d. arkadaşça, diğer gruplardan gelen yardım taleplerine cevap veren

olan durum	olması gereken durum

12. Kişiler ve gruplar arasındaki karışıklıklar genellikle,

    a. daha yüksek pozisyondaki insanların kişisel müdahaleleri ile ilgilidir

    b. konulmuş kurallar, prosedürler, yetki ve sorumlulukların resmi tanımların sınırları ile engellenmiştir

    c. iş ile ilgili en iyi sonucun alınmasını amaçlayan tartışmalarla çözümlenir

    d. iyi iş ilişkilerinin korunması ve kişilerin zarar görme ihtimalini azaltmakla ilgilidir

13. Şirketin içinde bulunduğu ortam (şirket çevresi) genelde şöyle görülür

    a. tam bir karmaşa, ayakta kalmak için diğer şirketler ile rekabet içinde olan

    b. planlar ve prosedürler ile belirlenmiş ilişkiler, herkesin kurallar çerçevesinde davranmasının beklendiği düzenli bir sistem

    c. üretkenlik, kalite ve başarıya dayanan yaratıcılık üzerine kurulmuş bir mükemmellik yarışı

    d. en önemli noktanın ortak çıkarlar olduğu birbirine bağımlı gruplar

14. Eğer kurallar, sistemler veya prosedürler kişilerin karşısına engel olarak çıkarsa genellikle çalışanlar

    a. yeterli güçleri varsa veya yakalanmadan bu işten kurtulacaklarını düşünüyorlarsa bu kuralları yıkarlar

    b. genelde uyarlar, ancak uygun yollardan izin alarak bu kuralları değiştirmeye veya ortadan kaldırmaya çalışırlar

    c. işlerini tamamlamak ya da daha iyi yapmak için önemsemiyormuş gibi yaparlar

    d. eğer kendilerini diğerlerine karşı haksızlık yapılmış veya onlara rahatsızlık verilmiş hissediyorlarsa,kurallara karşı çıkarken birbirlerini desteklerler

Appendix B

General Statistical Results
of GES Company

POWERGE

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	18.00	1	4.8	4.8	4.8
	19.00	1	4.8	4.8	9.5
	20.00	1	4.8	4.8	14.3
	26.00	1	4.8	4.8	19.0
	30.00	1	4.8	4.8	23.8
	34.00	2	9.5	9.5	33.3
	35.00	1	4.8	4.8	38.1
	37.00	2	9.5	9.5	47.6
	38.00	1	4.8	4.8	52.4
	40.00	1	4.8	4.8	57.1
	42.00	1	4.8	4.8	61.9
	43.00	1	4.8	4.8	66.7
	44.00	2	9.5	9.5	76.2
	48.00	1	4.8	4.8	81.0
	55.00	3	14.3	14.3	95.2
	56.00	1	4.8	4.8	100.0
	Total	21	100.0	100.0	

Mean	38.571	Median	38.000	Mode	55.000
Std dev	11.699	Variance	136.857	Range	38.000
Minimum	18.000	Maximum	56.000	Sum	810.000
Valid cases	21	Missing cases	0		

POWERGP

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	17.00	2	9.5	9.5	9.5
	18.00	1	4.8	4.8	14.3
	19.00	3	14.3	14.3	28.6
	20.00	2	9.5	9.5	38.1
	21.00	1	4.8	4.8	42.9
	22.00	1	4.8	4.8	47.6
	23.00	2	9.5	9.5	57.1
	24.00	3	14.3	14.3	71.4
	25.00	1	4.8	4.8	76.2
	26.00	1	4.8	4.8	81.0
	27.00	1	4.8	4.8	85.7
	31.00	1	4.8	4.8	90.5
	32.00	1	4.8	4.8	95.2
	40.00	1	4.8	4.8	100.0
		-------	-------	-------	
	Total	21	100.0	100.0	

Mean	23.381	Median	23.000	Mode	19.000
Std dev	5.617	Variance	31.548	Range	23.000
Minimum	17.000	Maximum	40.000	Sum	491.000

* Multiple modes exist. The smallest value is shown.

Valid cases   21   Missing cases   0

ROLEGE

		Value	Frequency	Percent	Valid Percent	Cum Percent
Value Label						
		30.00	1	4.8	4.8	4.8
		31.00	1	4.8	4.8	9.5
		32.00	1	4.8	4.8	14.3
		34.00	1	4.8	4.8	19.0
		36.00	2	9.5	9.5	28.6
		37.00	1	4.8	4.8	33.3
		38.00	2	9.5	9.5	42.9
		40.00	1	4.8	4.8	47.6
		41.00	1	4.8	4.8	52.4
		42.00	2	9.5	9.5	61.9
		43.00	3	14.3	14.3	76.2
		44.00	2	9.5	9.5	85.7
		45.00	2	9.5	9.5	95.2
		47.00	1	4.8	4.8	100.0
			-------	-------	-------	
		Total	21	100.0	100.0	

Mean	39.571	Median	41.000	Mode	43.000
Std dev	4.966	Variance	24.657	Range	17.000
Minimum	30.000	Maximum	47.000	Sum	831.000

Valid cases   21   Missing cases   0

ROLEGP

				Valid	Cum
Value Label	Value	Frequency	Percent	Percent	Percent
	29.00	1	4.8	4.8	4.8
	32.00	1	4.8	4.8	9.5
	35.00	1	4.8	4.8	14.3
	37.00	1	4.8	4.8	19.0
	38.00	2	9.5	9.5	28.6
	39.00	5	23.8	23.8	52.4
	42.00	1	4.8	4.8	57.1
	44.00	2	9.5	9.5	66.7
	47.00	2	9.5	9.5	76.2
	48.00	3	14.3	14.3	90.5
	51.00	1	4.8	4.8	95.2
	52.00	1	4.8	4.8	100.0
		-------	-------	-------	
	Total	21	100.0	100.0	

Mean	41.667	Median	39.000	Mode	39.000
Std dev	6.183	Variance	38.233	Range	23.000
Minimum	29.000	Maximum	52.000	Sum	875.000

Valid cases   21   Missing cases   0

ACHIEVGE

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	22.00	1	4.8	4.8	4.8
	25.00	1	4.8	4.8	9.5
	29.00	1	4.8	4.8	14.3
	32.00	3	14.3	14.3	28.6
	33.00	1	4.8	4.8	33.3
	38.00	2	9.5	9.5	42.9
	39.00	1	4.8	4.8	47.6
	41.00	3	14.3	14.3	61.9
	42.00	3	14.3	14.3	76.2
	46.00	2	9.5	9.5	85.7
	49.00	2	9.5	9.5	95.2
	51.00	1	4.8	4.8	100.0
		-------	-------	-------	
	Total	21	100.0	100.0	

Mean	38.571	Median	41.000	Mode	32.000
Std dev	7.897	Variance	62.357	Range	29.000
Minimum	22.000	Maximum	51.000	Sum	810.000

* Multiple modes exist. The smallest value is shown.

Valid cases   21   Missing cases   0

ACHIEVGP

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	35.00	1	4.8	4.8	4.8
	38.00	1	4.8	4.8	9.5
	41.00	1	4.8	4.8	14.3
	43.00	2	9.5	9.5	23.8
	44.00	1	4.8	4.8	28.6
	45.00	2	9.5	9.5	38.1
	46.00	4	19.0	19.0	57.1
	48.00	2	9.5	9.5	66.7
	49.00	2	9.5	9.5	76.2
	50.00	2	9.5	9.5	85.7
	51.00	1	4.8	4.8	90.5
	52.00	1	4.8	4.8	95.2
	53.00	1	4.8	4.8	100.0
		-------	-------	-------	
	Total	21	100.0	100.0	

Mean	46.095	Median	46.000	Mode	46.000
Std dev	4.482	Variance	20.090	Range	18.000
Minimum	35.000	Maximum	53.000	Sum	968.000

Valid cases   21   Missing cases   0

SUPPGE

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	19.00	1	4.8	4.8	4.8
	23.00	1	4.8	4.8	9.5
	24.00	1	4.8	4.8	14.3
	26.00	1	4.8	4.8	19.0
	28.00	3	14.3	14.3	33.3
	31.00	3	14.3	14.3	47.6
	32.00	3	14.3	14.3	61.9
	35.00	2	9.5	9.5	71.4
	36.00	1	4.8	4.8	76.2
	40.00	1	4.8	4.8	81.0
	41.00	1	4.8	4.8	85.7
	46.00	1	4.8	4.8	90.5
	48.00	1	4.8	4.8	95.2
	51.00	1	4.8	4.8	100.0
		-------	-------	-------	
	Total	21	100.0	100.0	

Mean	33.190	Median	32.000	Mode	28.000
Std dev	8.256	Variance	68.162	Range	32.000
Minimum	19.000	Maximum	51.000	Sum	697.000

* Multiple modes exist. The smallest value is shown.

Valid cases   21   Missing cases   0

SUPPGP

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	29.00	1	4.8	4.8	4.8
	31.00	2	9.5	9.5	14.3
	32.00	1	4.8	4.8	19.0
	34.00	1	4.8	4.8	23.8
	35.00	3	14.3	14.3	38.1
	36.00	1	4.8	4.8	42.9
	38.00	1	4.8	4.8	47.6
	39.00	1	4.8	4.8	52.4
	40.00	1	4.8	4.8	57.1
	41.00	2	9.5	9.5	66.7
	42.00	2	9.5	9.5	76.2
	44.00	1	4.8	4.8	81.0
	45.00	1	4.8	4.8	85.7
	47.00	1	4.8	4.8	90.5
	48.00	1	4.8	4.8	95.2
	51.00	1	4.8	4.8	100.0
		-------	-------	-------	
	Total	21	100.0	100.0	

Mean	38.857	Median	39.000	Mode	35.000
Std dev	6.069	Variance	36.829	Range	22.000
Minimum	29.000	Maximum	51.000	Sum	816.000
Valid cases	21	Missing cases	0		

AGEG

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1.00	14	66.7	66.7	66.7
	2.00	6	28.6	28.6	95.2
	4.00	1	4.8	4.8	100.0
		-------	-------	-------	
	Total	21	100.0	100.0	

Mean	1.429	Median	1.000	Mode	1.000
Std dev	.746	Variance	.557	Range	3.000
Minimum	1.000	Maximum	4.000	Sum	30.000
Valid cases	21	Missing cases	0		

SEXG

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1.00	10	47.6	47.6	47.6
	2.00	11	52.4	52.4	100.0
		-------	-------	-------	
	Total	21	100.0	100.0	

Mean	1.524	Median	2.000	Mode	2.000
Std dev	.512	Variance	.262	Range	1.000
Minimum	1.000	Maximum	2.000	Sum	32.000
Valid cases	21	Missing cases	0		

EDUCATEG

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	3.00	5	23.8	23.8	23.8
	4.00	14	66.7	66.7	90.5
	5.00	2	9.5	9.5	100.0
		-------	-------	-------	
	Total	21	100.0	100.0	

Mean	3.857	Median	4.000	Mode	4.000
Std dev	.573	Variance	.329	Range	2.000
Minimum	3.000	Maximum	5.000	Sum	81.000

Valid cases   21   Missing cases   0

SENIORG

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	.50	10	47.6	47.6	47.6
	1.00	3	14.3	14.3	61.9
	2.00	2	9.5	9.5	71.4
	2.50	2	9.5	9.5	81.0
	3.00	1	4.8	4.8	85.7
	4.00	1	4.8	4.8	90.5
	4.50	1	4.8	4.8	95.2
	6.00	1	4.8	4.8	100.0
		-------	-------	-------	
	Total	21	100.0	100.0	

Mean	1.643	Median	1.000	Mode	.500
Std dev	1.590	Variance	2.529	Range	5.500
Minimum	.500	Maximum	6.000	Sum	34.500

Valid cases   21   Missing cases   0

POSITIOG

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1.00	5	23.8	23.8	23.8
	2.00	3	14.3	14.3	38.1
	3.00	2	9.5	9.5	47.6
	4.00	1	4.8	4.8	52.4
	5.00	6	28.6	28.6	81.0
	6.00	3	14.3	14.3	95.2
	7.00	1	4.8	4.8	100.0
		-------	-------	-------	
	Total	21	100.0	100.0	

Mean	3.619	Median	4.000	Mode	5.000
Std dev	2.037	Variance	4.148	Range	6.000
Minimum	1.000	Maximum	7.000	Sum	76.000

Valid cases   21   Missing cases   0

- - - t-tests for paired samples - - -

Variable	Number of pairs	Corr	2-tail Sig	Mean	SD	SE of Mean
POWERGE				38.5714	11.699	2.553
	21	-.140	.546			
POWERGP				23.3810	5.617	1.226

Paired Differences			"			
Mean	SD	SE of Mean	"	t-value	df	2-tail Sig
15.1905	13.666	2.982	"	5.09	20	.000
95% CI (8.968, 21.413)			"			

Variable	Number of pairs	Corr	2-tail Sig	Mean	SD	SE of Mean
ROLEGE				39.5714	4.966	1.084
	21	.282	.216			
ROLEGP				41.6667	6.183	1.349

```
        Paired Differences         "

Mean        SD        SE of Mean  "     t-value    df  2-tail Sig

"""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""

-2.0952      6.752      1.473     "      -1.42     20      .170

95% CI (-5.169, .979)             "
```

```
              Number of        2-tail

Variable        pairs   Corr   Sig      Mean        SD      SE of Mean

""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""

ACHIEVGE                                38.5714      7.897     1.723

                21     -.187   .418

ACHIEVGP                                46.0952      4.482      .978

""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""
```

```
        Paired Differences         "

Mean        SD        SE of Mean  "     t-value    df  2-tail Sig

"""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""

-7.5238      9.781      2.134     "      -3.53     20      .002

95% CI (-11.977, -3.071)          "
```

```
              Number of        2-tail

Variable        pairs   Corr   Sig      Mean        SD      SE of Mean

""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""

SUPPGE                                  33.1905      8.256     1.802

                21     .591    .005

SUPPGP                                  38.8571      6.069     1.324

""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""
```

```
          Paired Differences         "

Mean         SD        SE of Mean  "     t-value      df  2-tail Sig

""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""

-5.6667       6.763      1.476     "       -3.84      20      .001

95% CI (-8.746, -2.588)            "
```

Appendix C

General Statistical Results
of SDK Company

POWERSE

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	20.00	1	3.6	3.6	3.6
	25.00	1	3.6	3.6	7.1
	26.00	1	3.6	3.6	10.7
	30.00	2	7.1	7.1	17.9
	33.00	3	10.7	10.7	28.6
	35.00	1	3.6	3.6	32.1
	36.00	2	7.1	7.1	39.3
	37.00	2	7.1	7.1	46.4
	38.00	2	7.1	7.1	53.6
	40.00	4	14.3	14.3	67.9
	41.00	3	10.7	10.7	78.6
	44.00	1	3.6	3.6	82.1
	45.00	2	7.1	7.1	89.3
	52.00	2	7.1	7.1	96.4
	55.00	1	3.6	3.6	100.0
	Total	28	100.0	100.0	

Mean	37.964	Median	38.000	Mode	40.000
Std dev	7.974	Variance	63.591	Kurtosis	.425
S E Kurt	.858	Skewness	.031	S E Skew	.441
Range	35.000	Minimum	20.000	Maximum	55.000

Valid cases   28   Missing cases   0

POWERSP

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	15.00	1	3.6	3.6	3.6
	16.00	1	3.6	3.6	7.1
	17.00	1	3.6	3.6	10.7
	18.00	1	3.6	3.6	14.3
	19.00	1	3.6	3.6	17.9
	23.00	3	10.7	10.7	28.6
	24.00	1	3.6	3.6	32.1
	27.00	3	10.7	10.7	42.9
	28.00	1	3.6	3.6	46.4
	29.00	2	7.1	7.1	53.6
	31.00	1	3.6	3.6	57.1
	32.00	1	3.6	3.6	60.7
	34.00	3	10.7	10.7	71.4
	36.00	1	3.6	3.6	75.0
	37.00	1	3.6	3.6	78.6
	38.00	2	7.1	7.1	85.7
	40.00	2	7.1	7.1	92.9
	41.00	1	3.6	3.6	96.4
	49.00	1	3.6	3.6	100.0
	Total	28	100.0	100.0	

Mean	29.607	Median	29.000	Mode	23.000
Std dev	8.638	Variance	74.618	Kurtosis	-.539
S E Kurt	.858	Skewness	.101	S E Skew	.441
Range	34.000	Minimum	15.000	Maximum	49.000

* Multiple modes exist. The smallest value is shown.

Valid cases   28   Missing cases   0

ROLESE

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	32.00	3	10.7	10.7	10.7
	33.00	1	3.6	3.6	14.3
	34.00	1	3.6	3.6	17.9
	36.00	1	3.6	3.6	21.4
	37.00	3	10.7	10.7	32.1
	38.00	5	17.9	17.9	50.0
	39.00	2	7.1	7.1	57.1
	41.00	3	10.7	10.7	67.9
	42.00	1	3.6	3.6	71.4
	43.00	4	14.3	14.3	85.7
	45.00	1	3.6	3.6	89.3
	46.00	1	3.6	3.6	92.9
	47.00	1	3.6	3.6	96.4
	51.00	1	3.6	3.6	100.0
		-------	-------	-------	
	Total	28	100.0	100.0	

Mean	39.429	Median	38.500	Mode	38.000
Std dev	4.741	Variance	22.476	Kurtosis	.000
S E Kurt	.858	Skewness	.336	S E Skew	.441
Range	19.000	Minimum	32.000	Maximum	51.000

Valid cases   28   Missing cases   0

ROLESP

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	30.00	1	3.6	3.6	3.6
	35.00	1	3.6	3.6	7.1
	36.00	3	10.7	10.7	17.9
	37.00	3	10.7	10.7	28.6
	38.00	6	21.4	21.4	50.0
	39.00	2	7.1	7.1	57.1
	40.00	1	3.6	3.6	60.7
	41.00	2	7.1	7.1	67.9
	42.00	1	3.6	3.6	71.4
	43.00	3	10.7	10.7	82.1
	45.00	1	3.6	3.6	85.7
	46.00	1	3.6	3.6	89.3
	48.00	1	3.6	3.6	92.9
	50.00	1	3.6	3.6	96.4
	51.00	1	3.6	3.6	100.0
	Total	28	100.0	100.0	

Mean	40.107	Median	38.500	Mode	38.000
Std dev	4.732	Variance	22.396	Kurtosis	.502
S E Kurt	.858	Skewness	.614	S E Skew	.441
Range	21.000	Minimum	30.000	Maximum	51.000

Valid cases   28   Missing cases   0

ACH1EVSE

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	26.00	1	3.6	3.6	3.6
	30.00	3	10.7	10.7	14.3
	31.00	2	7.1	7.1	21.4
	33.00	2	7.1	7.1	28.6
	34.00	2	7.1	7.1	35.7
	37.00	1	3.6	3.6	39.3
	38.00	1	3.6	3.6	42.9
	39.00	2	7.1	7.1	50.0
	40.00	2	7.1	7.1	57.1
	41.00	2	7.1	7.1	64.3
	42.00	2	7.1	7.1	71.4
	43.00	1	3.6	3.6	75.0
	44.00	3	10.7	10.7	85.7
	47.00	1	3.6	3.6	89.3
	51.00	1	3.6	3.6	92.9
	52.00	1	3.6	3.6	96.4
	54.00	1	3.6	3.6	100.0
		-------	-------	-------	
	Total	28	100.0	100.0	

Mean	38.929	Median	39.500	Mode	30.000
Std dev	7.170	Variance	51.402	Kurtosis	-.435
S E Kurt	.858	Skewness	.273	S E Skew	.441
Range	28.000	Minimum	26.000	Maximum	54.000

* Multiple modes exist. The smallest value is shown.

Valid cases   28   Missing cases   0

ACHIEVSP

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	29.00	1	3.6	3.6	3.6
	32.00	2	7.1	7.1	10.7
	34.00	1	3.6	3.6	14.3
	36.00	2	7.1	7.1	21.4
	37.00	2	7.1	7.1	28.6
	38.00	2	7.1	7.1	35.7
	40.00	2	7.1	7.1	42.9
	41.00	1	3.6	3.6	46.4
	42.00	3	10.7	10.7	57.1
	45.00	3	10.7	10.7	67.9
	47.00	1	3.6	3.6	71.4
	48.00	2	7.1	7.1	78.6
	49.00	·2	7.1	7.1	85.7
	52.00	1	3.6	3.6	89.3
	54.00	2	7.1	7.1	96.4
	57.00	1	3.6	3.6	100.0
	Total	28	100.0	100.0	

Mean	42.464	Median	42.000	Mode	42.000
Std dev	7.265	Variance	52.776	Kurtosis	-.665
S E Kurt	.858	Skewness	.170	S E Skew	.441
Range	28.000	Minimum	29.000	Maximum	57.000

* Multiple modes exist. The smallest value is shown.

Valid cases   28   Missing cases   0

SUPPSE

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	17.00	1	3.6	3.6	3.6
	19.00	1	3.6	3.6	7.1
	22.00	1	3.6	3.6	10.7
	26.00	1	3.6	3.6	14.3
	27.00	1	3.6	3.6	17.9
	29.00	2	7.1	7.1	25.0
	31.00	1	3.6	3.6	28.6
	32.00	3	10.7	10.7	39.3
	33.00	4	14.3	14.3	53.6
	34.00	1	3.6	3.6	57.1
	36.00	2	7.1	7.1	64.3
	37.00	2	7.1	7.1	71.4
	41.00	4	14.3	14.3	85.7
	42.00	2	7.1	7.1	92.9
	43.00	1	3.6	3.6	96.4
	44.00	1	3.6	3.6	100.0
		-------	-------	-------	
	Total	28	100.0	100.0	

Mean	33.679	Median	33.000	Mode	33.000
Std dev	7.134	Variance	50.893	Kurtosis	.015
S E Kurt	.858	Skewness	-.621	S E Skew	.441
Range	27.000	Minimum	17.000	Maximum	44.000

* Multiple modes exist. The smallest value is shown.

Valid cases   28   Missing cases   0

SUPPSP

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	21.00	1	3.6	3.6	3.6
	29.00	2	7.1	7.1	10.7
	30.00	1	3.6	3.6	14.3
	32.00	1	3.6	3.6	17.9
	33.00	2	7.1	7.1	25.0
	34.00	2	7.1	7.1	32.1
	36.00	1	3.6	3.6	35.7
	37.00	2	7.1	7.1	42.9
	38.00	2	7.1	7.1	50.0
	39.00	2	7.1	7.1	57.1
	40.00	1	3.6	3.6	60.7
	41.00	2	7.1	7.1	67.9
	43.00	3	10.7	10.7	78.6
	44.00	3	10.7	10.7	89.3
	45.00	2	7.1	7.1	96.4
	46.00	1	3.6	3.6	100.0
	Total	28	100.0	100.0	

Mean	37.786	Median	38.500	Mode	43.000
Std dev	6.106	Variance	37.286	Kurtosis	.445
S E Kurt	.858	Skewness	-.798	S E Skew	.441
Range	25.000	Minimum	21.000	Maximum	46.000

* Multiple modes exist. The smallest value is shown.

Valid cases   28   Missing cases   0

AGES

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1.00	20	71.4	71.4	71.4
	2.00	7	25.0	25.0	96.4
	6.00	1	3.6	3.6	100.0
		-------	-------	-------	
	Total	28	100.0	100.0	

Mean	1.429	Median	1.000	Mode	1.000
Std dev	.997	Variance	.995	Kurtosis	17.124
S E Kurt	.858	Skewness	3.830	S E Skew	.441
Range	5.000	Minimum	1.000	Maximum	6.000
Valid cases	28	Missing cases	0		

SEXS

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1.00	3	10.7	10.7	10.7
	2.00	25	89.3	89.3	100.0
		-------	-------	-------	
	Total	28	100.0	100.0	

Mean	1.893	Median	2.000	Mode	2.000
Std dev	.315	Variance	.099	Kurtosis	5.614
S E Kurt	.858	Skewness	-2.686	S E Skew	.441
Range	1.000	Minimum	1.000	Maximum	2.000

Valid cases	28	Missing cases	0		

EDUCATES

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1.00	8	28.6	28.6	28.6
	2.00	6	21.4	21.4	50.0
	3.00	9	32.1	32.1	82.1
	4.00	5	17.9	17.9	100.0
	Total	28	100.0	100.0	

Mean	2.393	Median	2.500	Mode	3.000
Std dev	1.100	Variance	1.210	Kurtosis	-1.317
S E Kurt	.858	Skewness	.024	S E Skew	.441
Range	3.000	Minimum	1.000	Maximum	4.000
Valid cases	28	Missing cases	0		

SENIORS

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	.50	7	25.0	25.0	25.0
	1.00	4	14.3	14.3	39.3
	1.50	1	3.6	3.6	42.9
	2.00	9	32.1	32.1	75.0
	2.50	2	7.1	7.1	82.1
	3.00	4	14.3	14.3	96.4
	15.00	1	3.6	3.6	100.0
	Total	28	100.0	100.0	

Mean	2.107	Median	2.000	Mode	2.000
Std dev	2.675	Variance	7.155	Kurtosis	21.659
S E Kurt	.858	Skewness	4.400	S E Skew	.441
Range	14.500	Minimum	.500	Maximum	15.000
Valid cases	28	Missing cases	0		

POSITIOS

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1.00	4	14.3	14.3	14.3
	2.00	20	71.4	71.4	85.7
	3.00	3	10.7	10.7	96.4
	4.00	1	3.6	3.6	100.0
		-------	-------	-------	
	Total	28	100.0	100.0	

Mean	2.036	Median	2.000	Mode	2.000
Std dev	.637	Variance	.406	Kurtosis	2.832
S E Kurt	.858	Skewness	.898	S E Skew	.441
Range	3.000	Minimum	1.000	Maximum	4.000

Valid cases   28   Missing cases   0

```
                       - - - t-tests for paired samples - - -


                  Number of        2-tail
Variable            pairs  Corr   Sig       Mean       SD     SE of Mean
................................................................

POWERSE                                    37.9643    7.974     1.507

                     28     .142   .472

POWERSP                                    29.6071    8.638     1.632
................................................................



        Paired Differences         "
Mean       SD       SE of Mean  "     t-value    df  2-tail Sig
................................................................

8.3571    10.894     2.059     "        4.06    27      .000
95% CI (4.132, 12.582)         "



                  Number of        2-tail
Variable            pairs  Corr   Sig       Mean       SD     SE of Mean
................................................................

ROLESE                                     39.4286    4.741      .896

                     28     .077   .697

ROLESP                                     40.1071    4.732      .894
................................................................



        Paired Differences         "
Mean       SD       SE of Mean  "     t-value    df  2-tail Sig
................................................................

 -.6786    6.435     1.216     "       -.56     27      .581
95% CI (-3.174, 1.817)         "
```

Variable	Number of pairs	Corr	2-tail Sig	Mean	SD	SE of Mean
ACHIEVSE				38.9286	7.170	1.355
	28	.352	.066			
ACHIEVSP				42.4643	7.265	1.373

Paired Differences Mean	SD	SE of Mean	"	t-value	df	2-tail Sig
-3.5357	8.217	1.553	"	-2.28	27	.031
95% CI (-6.723, -.349)			"			

- - - t-tests for paired samples - - -

Variable	Number of pairs	Corr	2-tail Sig	Mean	SD	SE of Mean
SUPPSE				33.6786	7.134	1.348
	28	.173	.380			
SUPPSP				37.7857	6.106	1.154

Paired Differences Mean	SD	SE of Mean	"	t-value	df	2-tail Sig
-4.1071	8.552	1.616	"	-2.54	27	.017
95% CI (-7.424, -.790)			"			

Appendix D

General Statistical Results
of ARM Company

POWERAE

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	15.00	1	2.0	2.0	2.0
	21.00	1	2.0	2.0	3.9
	22.00	1	2.0	2.0	5.9
	27.00	1	2.0	2.0	7.8
	28.00	2	3.9	3.9	11.8
	30.00	2	3.9	3.9	15.7
	31.00	2	3.9	3.9	19.6
	32.00	1	2.0	2.0	21.6
	33.00	3	5.9	5.9	27.5
	34.00	1	2.0	2.0	29.4
	36.00	1	2.0	2.0	31.4
	37.00	4	7.8	7.8	39.2
	39.00	3	5.9	5.9	45.1
	40.00	2	3.9	3.9	49.0
	41.00	3	5.9	5.9	54.9
	42.00	2	3.9	3.9	58.8
	43.00	1	2.0	2.0	60.8
	44.00	3	5.9	5.9	66.7
	45.00	2	3.9	3.9	70.6
	46.00	1	2.0	2.0	72.5
	48.00	1	2.0	2.0	74.5
	49.00	1	2.0	2.0	76.5
	50.00	2	3.9	3.9	80.4
	51.00	3	5.9	5.9	86.3
	52.00	1	2.0	2.0	88.2
	55.00	3	5.9	5.9	94.1
	56.00	2	3.9	3.9	98.0
	60.00	1	2.0	2.0	100.0
	Total	51	100.0	100.0	

Mean	40.510	Median	41.000	Mode	37.000
Std dev	10.011	Variance	100.215	Range	45.000
Minimum	15.000	Maximum	60.000	Sum	2066.000
Valid cases	51	Missing cases	0		

POWERAP

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	15.00	2	3.9	3.9	3.9
	16.00	5	9.8	9.8	13.7
	17.00	5	9.8	9.8	23.5
	19.00	4	7.8	7.8	31.4
	20.00	4	7.8	7.8	39.2
	21.00	2	3.9	3.9	43.1
	22.00	1	2.0	2.0	45.1
	23.00	3	5.9	5.9	51.0
	24.00	1	2.0	2.0	52.9
	26.00	3	5.9	5.9	58.8
	27.00	3	5.9	5.9	64.7
	28.00	2	3.9	3.9	68.6
	29.00	1	2.0	2.0	70.6
	30.00	1	2.0	2.0	72.5
	31.00	3	5.9	5.9	78.4
	33.00	1	2.0	2.0	80.4
	35.00	1	2.0	2.0	82.4
	36.00	1	2.0	2.0	84.3
	38.00	1	2.0	2.0	86.3
	39.00	2	3.9	3.9	90.2
	43.00	1	2.0	2.0	92.2
	46.00	1	2.0	2.0	94.1
	47.00	1	2.0	2.0	96.1
	50.00	1	2.0	2.0	98.0
	58.00	1	2.0	2.0	100.0
		-------	-------	-------	
	Total	51	100.0	100.0	

Mean	26.255	Median	23.000	Mode	16.000
Std dev	10.133	Variance	102.674	Range	43.000
Minimum	15.000	Maximum	58.000	Sum	1339.000

* Multiple modes exist. The smallest value is shown.

Valid cases   51   Missing cases   0

ROLEAE

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	32.00	1	2.0	2.0	2.0
	33.00	2	3.9	3.9	5.9
	34.00	4	7.8	7.8	13.7
	35.00	2	3.9	3.9	17.6
	36.00	5	9.8	9.8	27.5
	37.00	2	3.9	3.9	31.4
	38.00	3	5.9	5.9	37.3
	39.00	4	7.8	7.8	45.1
	40.00	3	5.9	5.9	51.0
	41.00	4	7.8	7.8	58.8
	42.00	3	5.9	5.9	64.7
	43.00	2	3.9	3.9	68.6
	44.00	2	3.9	3.9	72.5
	45.00	1	2.0	2.0	74.5
	46.00	5	9.8	9.8	84.3
	47.00	1	2.0	2.0	86.3
	48.00	2	3.9	3.9	90.2
	49.00	2	3.9	3.9	94.1
	52.00	1	2.0	2.0	96.1
	53.00	1	2.0	2.0	98.0
	55.00	1	2.0	2.0	100.0
	Total	51	100.0	100.0	

Mean	40.941	Median	40.000	Mode	36.000
Std dev	5.609	Variance	31.456	Range	23.000
Minimum	32.000	Maximum	55.000	Sum	2088.000

* Multiple modes exist. The smallest value is shown.

Valid cases   51   Missing cases   0

ROLEAP

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	28.00	1	2.0	2.0	2.0
	29.00	1	2.0	2.0	3.9
	31.00	3	5.9	5.9	9.8
	32.00	5	9.8	9.8	19.6
	33.00	2	3.9	3.9	23.5
	34.00	4	7.8	7.8	31.4
	35.00	3	5.9	5.9	37.3
	36.00	2	3.9	3.9	41.2
	37.00	4	7.8	7.8	49.0
	38.00	8	15.7	15.7	64.7
	39.00	6	11.8	11.8	76.5
	40.00	1	2.0	2.0	78.4
	41.00	1	2.0	2.0	80.4
	42.00	3	5.9	5.9	86.3
	43.00	2	3.9	3.9	90.2
	44.00	1	2.0	2.0	92.2
	45.00	1	2.0	2.0	94.1
	47.00	1	2.0	2.0	96.1
	48.00	1	2.0	2.0	98.0
	52.00	1	2.0	2.0	100.0
		-------	-------	-------	
	Total	51	100.0	100.0	

Mean	37.333	Median	38.000	Mode	38.000
Std dev	4.934	Variance	24.347	Range	24.000
Minimum	28.000	Maximum	52.000	Sum	1904.000
Valid cases	51	Missing cases	0		

ACHIEVAE

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	21.00	1	2.0	2.0	2.0
	24.00	1	2.0	2.0	3.9
	26.00	1	2.0	2.0	5.9
	27.00	1	2.0	2.0	7.8
	30.00	2	3.9	3.9	11.8
	31.00	2	3.9	3.9	15.7
	32.00	8	15.7	15.7	31.4
	33.00	1	2.0	2.0	33.3
	34.00	2	3.9	3.9	37.3
	35.00	2	3.9	3.9	41.2
	36.00	3	5.9	5.9	47.1
	37.00	7	13.7	13.7	60.8
	38.00	2	3.9	3.9	64.7
	39.00	4	7.8	7.8	72.5
	40.00	4	7.8	7.8	80.4
	41.00	2	3.9	3.9	84.3
	42.00	4	7.8	7.8	92.2
	43.00	2	3.9	3.9	96.1
	47.00	1	2.0	2.0	98.0
	48.00	1	2.0	2.0	100.0
	Total	51	100.0	100.0	

Mean	36.020	Median	37.000	Mode	32.000
Std dev	5.461	Variance	29.820	Range	27.000
Minimum	21.000	Maximum	48.000	Sum	1837.000
Valid cases	51	Missing cases	0		

ACHIEVAP

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	26.00	1	2.0	2.0	2.0
	30.00	1	2.0	2.0	3.9
	31.00	1	2.0	2.0	5.9
	34.00	1	2.0	2.0	7.8
	35.00	1	2.0	2.0	9.8
	36.00	1	2.0	2.0	11.8
	37.00	2	3.9	3.9	15.7
	38.00	1	2.0	2.0	17.6
	39.00	2	3.9	3.9	21.6
	40.00	2	3.9	3.9	25.5
	41.00	3	5.9	5.9	31.4
	42.00	3	5.9	5.9	37.3
	43.00	2	3.9	3.9	41.2
	45.00	5	9.8	9.8	51.0
	46.00	5	9.8	9.8	60.8
	47.00	1	2.0	2.0	62.7
	48.00	4	7.8	7.8	70.6
	49.00	2	3.9	3.9	74.5
	50.00	3	5.9	5.9	80.4
	51.00	1	2.0	2.0	82.4
	52.00	2	3.9	3.9	86.3
	54.00	2	3.9	3.9	90.2
	55.00	1	2.0	2.0	92.2
	56.00	1	2.0	2.0	94.1
	57.00	2	3.9	3.9	98.0
	58.00	1	2.0	2.0	100.0
		-------	-------	-------	
	Total	51	100.0	100.0	

Mean	44.804	Median	45.000	Mode	45.000
Std dev	7.197	Variance	51.801	Range	32.000
Minimum	26.000	Maximum	58.000	Sum	2285.000

* Multiple modes exist. The smallest value is shown.

Valid cases 51   Missing cases   0

SUPPAE

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	15.00	1	2.0	2.0	2.0
	16.00	1	2.0	2.0	3.9
	20.00	1	2.0	2.0	5.9
	21.00	1	2.0	2.0	7.8
	22.00	2	3.9	3.9	11.8
	23.00	1	2.0	2.0	13.7
	24.00	2	3.9	3.9	17.6
	25.00	1	2.0	2.0	19.6
	26.00	4	7.8	7.8	27.5
	28.00	4	7.8	7.8	35.3
	29.00	2	3.9	3.9	39.2
	30.00	3	5.9	5.9	45.1
	31.00	1	2.0	2.0	47.1
	32.00	1	2.0	2.0	49.0
	33.00	4	7.8	7.8	56.9
	34.00	3	5.9	5.9	62.7
	35.00	2	3.9	3.9	66.7
	36.00	2	3.9	3.9	70.6
	38.00	5	9.8	9.8	80.4
	40.00	1	2.0	2.0	82.4
	41.00	1	2.0	2.0	84.3
	42.00	1	2.0	2.0	86.3
	43.00	2	3.9	3.9	90.2
	45.00	2	3.9	3.9	94.1
	48.00	1	2.0	2.0	96.1
	52.00	1	2.0	2.0	98.0
	55.00	1	2.0	2.0	100.0
	Total	51	100.0	100.0	

Mean	32.529	Median	33.000	Mode	38.000
Std dev	8.659	Variance	74.974	Range	40.000
Minimum	15.000	Maximum	55.000	Sum	1659.000
Valid cases	51	Missing cases	0		

SUPPAP

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	15.00	1	2.0	2.0	2.0
	26.00	1	2.0	2.0	3.9
	28.00	1	2.0	2.0	5.9
	29.00	2	3.9	3.9	9.8
	31.00	1	2.0	2.0	11.8
	33.00	1	2.0	2.0	13.7
	34.00	1	2.0	2.0	15.7
	35.00	2	3.9	3.9	19.6
	36.00	3	5.9	5.9	25.5
	37.00	3	5.9	5.9	31.4
	38.00	4	7.8	7.8	39.2
	39.00	2	3.9	3.9	43.1
	40.00	2	3.9	3.9	47.1
	42.00	4	7.8	7.8	54.9
	43.00	3	5.9	5.9	60.8
	44.00	4	7.8	7.8	68.6
	45.00	2	3.9	3.9	72.5
	46.00	1	2.0	2.0	74.5
	47.00	1	2.0	2.0	76.5
	48.00	2	3.9	3.9	80.4
	49.00	2	3.9	3.9	84.3
	51.00	1	2.0	2.0	86.3
	55.00	1	2.0	2.0	88.2
	56.00	3	5.9	5.9	94.1
	57.00	2	3.9	3.9	98.0
	59.00	1	2.0	2.0	100.0
		-------	-------	-------	
	Total	51	100.0	100.0	

Mean	41.588	Median	42.000	Mode	38.000
Std dev	8.913	Variance	79.447	Range	44.000
Minimum	15.000	Maximum	59.000	Sum	2121.000

* Multiple modes exist. The smallest value is shown.

Valid cases   51   Missing cases   0

AGEA

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1.00	25	49.0	49.0	49.0
	2.00	20	39.2	39.2	88.2
	3.00	5	9.8	9.8	98.0
	4.00	1	2.0	2.0	100.0
		-------	-------	-------	
	Total	51	100.0	100.0	

Mean	1.647	Median	2.000	Mode	1.000
Std dev	.744	Variance	.553	Range	3.000
Minimum	1.000	Maximum	4.000	Sum	84.000
Valid cases	51	Missing cases	0		

SEXA

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1.00	18	35.3	35.3	35.3
	2.00	33	64.7	64.7	100.0
		-------	-------	-------	
	Total	51	100.0	100.0	

Mean	1.647	Median	2.000	Mode	2.000
Std dev	.483	Variance	.233	Range	1.000
Minimum	1.000	Maximum	2.000	Sum	84.000
Valid cases	51	Missing cases	0		

EDUCATEA

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	3.00	27	52.9	52.9	52.9
	4.00	20	39.2	39.2	92.2
	5.00	4	7.8	7.8	100.0
		-------	-------	-------	
	Total	51	100.0	100.0	

Mean	3.549	Median	3.000	Mode	3.000
Std dev	.642	Variance	.413	Range	2.000
Minimum	3.000	Maximum	5.000	Sum	181.000
Valid cases	51	Missing cases	0		

SENIORA

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	.50	5	9.8	9.8	9.8
	1.00	3	5.9	5.9	15.7
	1.50	6	11.8	11.8	27.5
	2.00	5	9.8	9.8	37.3
	2.50	1	2.0	2.0	39.2
	3.00	23	45.1	45.1	84.3
	3.50	3	5.9	5.9	90.2
	4.00	2	3.9	3.9	94.1
	5.00	2	3.9	3.9	98.0
	9.00	1	2.0	2.0	100.0
		-------	-------	-------	
	Total	51	100.0	100.0	

Mean	2.618	Median	3.000	Mode	3.000
Std dev	1.423	Variance	2.026	Range	8.500
Minimum	.500	Maximum	9.000	Sum	133.500
Valid cases	51	Missing cases	0		

POSITIOA

		Value	Frequency	Percent	Valid Percent	Cum Percent
Value Label						
		1.00	5	9.8	9.8	9.8
		2.00	10	19.6	19.6	29.4
		3.00	1	2.0	2.0	31.4
		4.00	6	11.8	11.8	43.1
		5.00	1	2.0	2.0	45.1
		6.00	28	54.9	54.9	100.0
			-------	-------	-------	
		Total	51	100.0	100.0	

Mean	4.412	Median	6.000	Mode		6.000
Std dev	1.951	Variance	3.807	Range		5.000
Minimum	1.000	Maximum	6.000	Sum		225.000

Valid cases   51   Missing cases   0

- - - t-tests for paired samples - - -

Variable	Number of pairs	Corr	2-tail Sig	Mean	SD	SE of Mean
POWERAE				40.5098	10.011	1.402
	51	-.072	.613			
POWERAP				26.2549	10.133	1.419

Paired Differences "						
Mean	SD	SE of Mean	"	t-value	df	2-tail Sig
14.2549	14.751	2.066	"	6.90	50	.000
95% CI (10.105, 18.405)			"			

Variable	Number of pairs	Corr	2-tail Sig	Mean	SD	SE of Mean
ROLEAE				40.9412	5.609	.785
	51	.070	.625			
ROLEAP				37.3333	4.934	.691

Paired Differences "						
Mean	SD	SE of Mean	"	t-value	df	2-tail Sig
3.6078	7.206	1.009	"	3.58	50	.001
95% CI (1.581, 5.635)			"			

| | Number of | | 2-tail | | | |
Variable	pairs	Corr	Sig	Mean	SD	SE of Mean
ACHIEVAE				36.0196	5.461	.765
	51	-.437	.001			
ACHIEVAP				44.8039	7.197	1.008

| Paired Differences | | | " | | | |
Mean	SD	SE of Mean	"	t-value	df	2-tail Sig
-8.7843	10.769	1.508	"	-5.83	50	.000

95% CI (-11.814, -5.755)   "

| | Number of | | 2-tail | | | |
Variable	pairs	Corr	Sig	Mean	SD	SE of Mean
SUPPAE				32.5294	8.659	1.212
	51	.185	.193			
SUPPAP				41.5882	8.913	1.248

| Paired Differences | | | " | | | |
Mean	SD	SE of Mean	"	t-value	df	2-tail Sig
-9.0588	11.217	1.571	"	-5.77	50	.000

95% CI (-12.214, -5.903)

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