EXAMINING RELATIONSHIPS BETWEEN INDIVIDUAL, ORGANIZATIONAL FACTOR AND KNOWLEDGE SHARING BEHAVIOR

BY

AIN ZURAINI BINTI ZIN ARIS

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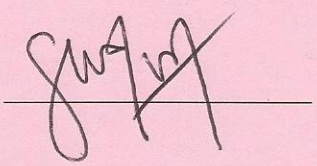

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Abstract

This study examines the direct relationship between sense of self-worth, attitudes, perceived organizational incentives and management support and knowledge sharing behavior. It also examines the moderating effect of interpersoanl trust on the relationship between sense of self worth, attitudes, perceived organizational incentives and management support and knowledge sharing behavior. A total of 148 questionnaires were distributed on site to participants who had agreed to participate in this study. Hypotheses for direct effect were tested using multiple regression analyses and hypotheses for interacting effect were tested using hierarchical multiple regression. Results showed that only sense of self-worth and attitudes were significantly positively associated with knowledge sharing behavior. Furthermore, results from hierarchical multiple regressions showed that interpersonal trust did not moderate the relationship between sense of self-worth and knowledge sharing behavior, between attitude and knowledge sharing behavior, between perceived organizational incentives and knowledge sharing behavior and between management support and knowledge sharing behavior. Implications of the findings, potential limitations and directions for future research are discussed.

Keywords: Knowledge Sharing Behavior, Sense of Self-worth, Attitude, Organizational Incentives, Management Support.

Abstrak

Kajian ini mengkaji hubungan langsung antara rasa nilai kendiri, sikap, persepsi terhadap insentif organisasi dan sokongan pengurusan terhadap gelagat perkongsian pengetahuan. Ia juga mengkaji kesan kepercayaan antara perorangan sebagai penyederhana dalam hubungan antara rasa nilai kendiri, sikap, persepsi terhadap insentif perorangan dan sokongan pengurusan dan gelagat perkongsian pengetahuan. Sebanyak 148 soal selidik telah diedarkan secara sendiri kepada peserta kajian yang telah bersetuju untuk terlibat dalam kajian ini. Hipotesis ke atas kesan langsung dan kesan perantara diuji menggunakan analisis regresi berganda manakala hipotesis bagi kesan interaksi diuji menggunakan analisis regresi berganda bertingkat. Dapatan kajian menunjukkan bahawa hanya rasa nilai kendiri dan sikap sahaja yang mempunyai hubungan yang positif dan signifikan dengan gelagat perkongsian pengetahuan. Seterusnya, keputusan daripada analisis regresi bertingkat tidak menunjukkan bahawa kepercayaan antara perorangan berperanan sebagai penyederhana dalam hubungan antara rasa nilai kendiri dan gelagat perkongsian pengetahuan, dalam hubungan antara sikap dan gelagat perkongsian pengetahuan, antara persepsi terhadap insentif organisasi dan gelagat perkongsian pengetahuan, dan antara sokongan pengurusan dan gelagat perkongsian pengetahuan. Implikasi dapatan kajian, limitasi, dan cadangan kajian pada masa hadapan turut dibincangkan.

Kata Kunci: Gelagat Perkongsian Pengetahuan, Rasa Nilai Kendiri, Sikap, Insentif Organisasi, Sokongan Pengurusan.

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List of Abbreviations

SME	Small Medium Enterprise
ACCIM	Associated Chinese Chambers of iif Commerce and Industry of Malaysia
KM	Knowledge Management
TPB	Theory of Planned-Behavior
SPSS	Statistical Package for the Social Science
KSB	Knowledge Sharing Behavior
IF	Individual Factors
OF	Organizational Factor
IT	Interpersonal Trust
VIF	Variance Inflation Factor
KMO	Keiser-Meyer-Oklin
ANOVA	Analysis of Variance
HRM	Human Resource Management

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CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Knowledge if managed effectively and applied accordingly would be a useful tool in transforming the business and sustain the competitive advantage. As argued by several authors, organizations that applied knowledge management as tools could gain competitive advantage through the generation and the use of new knowledge at the workplace (Alvesson, 2004; Harrison & Kessels, 2004).

However, knowledge primarily derived from people, and thus, managing knowledge among workforce would be critical to the organizations. The efforts in improving the use of knowledge does not only concern in better exploration of existing sources of knowledge management at workplace but also providing the work environment that can encourage the workers to distribute their knowledge to others. This kind of knowledge can be describes as tacit or explicit type of knowledge.

Knowledge sharing behavior can be considered as the foundation and most important part of knowledge management (Bock & Kim, 2002; Ahmad, Sharom & Abdullah, 2006). The possessed of knowledge among the individuals and the contribution of person's knowledge into organizational knowledge is depends on the worker's knowledge sharing behavior (Nonaka & Konno, 1998). Inherently, the knowledge exchange from a person or one unit of the organization to another are

importantly promotes to the organizational performances and productivity (Argote, Ingram, Levine & Moreland, 2000).

Indeed, knowledge is the significant assets of the workers to serve the organizations in meeting its mission and vision. The right use of worker's knowledge through knowledge sharing behavior could benefit the organizations to strengthen its stand within the industry. The success of knowledge-work-environment is possible upon beliefs on knowledge workers offering something specific (Alvesson, 2001). After all, the organizations should better manage the knowledge at workplace so that it will generate the positive output not only to the workers but also to the organization as a whole.

1.2 Problem Statement

For Malaysian SMEs, managing knowledge has becoming more critical. Apart from confronting with tight competition with large companies, many SMEs are facing with high turnover issues. Based on a survey conducted by The Associated Chinese Chambers of Commerce and Industry of Malaysia (ACCIM) (2012) where 62% of the respondents agreed that shortage and difficulty in hiring employees are the main problems faced by many SMEs. In addition, many SMEs are facing with challenges to attract, retain and motivate the best and high qualified employees (Beaver & Hutchings, 2005).

Issues of turnover have made many organizations including SMEs to realize that having knowledge workers per say would not be enough unless their knowledge

is shared with the rest of the employees in the organization. Though SMEs acknowledge that knowledge sharing might be the best option in sustaining the business and to overcome the issue of high turnover rate, many are still struggling to encourage their employees to share knowledge. Besides, it is not realistic to expect all employees to willingly share their knowledge without considering the results of their action. In the literature, reasons for why employees are reluctant to share their knowledge with others have been put forward and among them include lacking of motivation, assuming it as a threat to their status, feeling uneasy of losing the knowledge that distinguishes them with others, scared of losing some power and decrease the chances of personal success such as compensation and promotion and have to take on additional workload (Husted, Michailova, & Minbaeva, 2005; Lin, 2007; Samieh & Wahba, 2007; So & Bollojju, 2005)

Reviewing the literature has shown how individuals will be more willing to contribute in knowledge sharing activity if they are guaranteed that their action is worthy, if they could get the recognition from sharing the knowledge with others, if they can gain economic benefits like pay increase, job security, bonuses or career development, and if the knowledge that been shared will be used (Al-Alawi, Ismail, Al-Marzoki, Yousif, Mohammed & Fraidoon, 2007; Bart & Ridder, 2004).

In a study conducted by Lin (2007b) on 172 employees from 50 large organizations in Taiwan, they found that feeling of enjoyment in helping other workers and sense of self-worth were strongly related with worker willingness in sharing the knowledge. This result indicates that employees who have better sense of

self-worth and enjoy helping others tend to have strong motivation in sharing knowledge with others.

Apart from individual factors, organizational factors such as management support and incentives provided by the organization were also found to be related with the willingness of employees to share their knowledge. For example, several studies have shown how management support increased the level and quality of workers' knowledge exchange (Lee, Kim & Kim, 2006; Kulkarni, Ravindran & Freeze, 2006). Similar finding was also found in a study conducted by Liebowitz (2003) and Nelson, Sabatier and Nelson (2006) where acknowledgement and rewards have been found to encourage knowledge sharing behavior and indirectly assist in building supportive work culture. In other study, Yao, Kam and Chan (2007) found that lack of organizational incentives have been found to be the main barrier for knowledge sharing activity within the organization.

Interpersonal trust is another factor that has been found to contribute to knowledge sharing activity among employees. In past studies, interpersonal trust was found to be positively related to knowledge sharing (Bakker, Leenders, Gabbay, Kratzer & Van, 2006; Chowdury, 2005; Mooradian, Renzl & Matzler, 2006). The findings indicate that employees will share more knowledge with their colleague if they believed that their colleague is honest and can be trusted.

Though several factors have been put forward in the literature that were related to knowledge sharing behavior in the organization, it is still not known what factors might influence Malaysian Bumiputra SMEs' employees to share knowledge

with others as there are limited empirical studies investigating on knowledge sharing behavior in this context. Therefore, this study is conducted with the intention to explore whether individual factors such as sense of self-worth and attitude, and organizational factors like perceived organizational incentives and management support would contribute to knowledge sharing behavior as suggested by the literature. Apart from that, the study also investigates the role of interpersonal trust as a moderator.

1.3 Research Questions

Based on the above discussion, the central research question is "what factors might influence knowledge sharing behavior among SME's employees." Specifically, the research is interested to address the following questions:

1. Does the sense of self-worth related to knowledge sharing behavior among SME's employees?
2. Does attitude related to knowledge sharing behavior among workers at SME?
3. Does perceived organizational incentives related to knowledge sharing behavior among workers at SME?
4. Does management support related to knowledge sharing behavior among workers at SME?
5. Does interpersonal trust moderate the relationship between sense of self-worth and knowledge sharing behavior?
6. Does interpersonal trust moderate the relationship between individual attitude and knowledge sharing behavior?

7. Does interpersonal trust moderate the relationship between perceived organizational incentives and knowledge sharing behavior?
8. Does interpersonal trust moderate the relationship between management support and knowledge sharing behavior?

1.4 Research Objectives

The study attempts to address the following objectives:

1. to investigate the relationships between sense of self-worth and knowledge sharing behavior;
2. to examine the relationships between attitudes and knowledge sharing behavior;
3. to determine the relationships between perceived organizational incentives and knowledge sharing behavior.
4. to examine the relationships between management support and knowledge sharing behavior; and
5. to investigate whether interpersonal trust moderate the relationship between sense of self-worth, attitudes, perceived organizational incentives, management support and knowledge sharing behavior.

1.5 Significance of the Study

Realizing that there is still limited study on knowledge sharing issues within the SMEs especially in the Malaysian context, it is a hope that the findings from this study will benefits both the scholars and practitioners. The findings will not only enrich the literature on knowledge sharing behavior, it can also make effective

contribution of the best way to plan for encouraging knowledge sharing behavior among the employees within the organizations. Though the study was conducted at Malaysian Bumiputra SMEs, the broader contribution extends beyond the Malaysian SMEs context.

1.6 Scope and Aim of Study

The main focus of this study is to investigate which of the factors tested in this study that might influence knowledge sharing behaviors. Two independent variables were tested in this study namely, individual and organizational factors. Individual factors were measured by two dimensions which are sense of self-worth and attitudes, while organizational factors were measured by perceived organizational incentives and management support. The study also tested interpersonal trust as a moderator. The study, which was a cross-sectional study, involved a survey of 148 employees from 39 Bumiputra SMEs located in the state of Kedah.

1.7 Organization of Chapters

This chapter is the first of five chapters in this thesis. Chapter 2 gives general review of the literature on knowledge sharing behavior. The concept of knowledge, knowledge management and knowledge sharing behavior are also presented. Discussion in Chapter 2 continues with past empirical findings on factors that might influence knowledge sharing behavior such as sense of self-worth, attitude, perceived organizational incentives and management support. The chapter concludes with the development of the research hypotheses.

Chapter 3 describes the method for the study, namely the research design and procedure. The chapter reports the selection of participants, sample types and size, and the development of questionnaire for the research. Chapter 3 ends with a brief description of the strategies and procedures that were used to analyze data collected from the survey.

Chapter 4 reports the results and their interpretation for the study. There are reports of the descriptive statistical analysis, factor analysis, bivariate correlation analysis, and regressions analysis. The results are summarized in a number of tables to facilitate interpretation. The findings were compared to those found in the past research reviewed in Chapter 2. New findings were also discussed.

Chapter 5, the final chapter, presents the general discussions and conclusion of the study and their implications for both researchers and practitioners. Chapter 5 concludes with the limitations of the study and some suggestions for future research.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter explores the literature from previous studies on knowledge sharing behavior, sense of self-worth, attitudes towards knowledge sharing behavior, perceived organizational incentives, management support as well as the interpersonal trust. Reviewing the literature is necessary to formulate the research framework and hypotheses. This chapter concentrates on the definitions, conceptual issues and theoretical considerations.

2.2 Knowledge and Knowledge Management

Knowledge is referred to as familiarity towards something or someone that could be included information, descriptions, facts or skills get from the experiences or education. Knowledge can be referred to as the theoretical or practical understanding of a subject. Knowledge are divided into implicit and explicit type of knowledge where implicit knowledge basically related to practical skill or expertise while explicit knowledge is kind of theoretical understanding on the subject which can be less formal and systematic (Stanley, 2002).

Knowledge management can be referred to as the approach of multi-disciplined to achieve the objectives of the organizations through developing the

better use of knowledge (Davenport, 1994). It includes the process of systematic and structured that organizing the corporate information to be retrieved easily, distribution and reuse in the whole organization. Basically, the focus of knowledge management is on the processes that include acquiring, creating and sharing the knowledge and it is supported by the cultural and technical foundations. Knowledge management is also an audit for the intellectual assets which bolds the unique sources and the critical functions that hinder the knowledge to flow in the better point of use. It avoids the intellectual assets from lose; find chances to enhancing decisions, products and services by add up intelligence, improving value and giving flexibility. Knowledge management is becoming demanded especially between business and industries from legal services. There are many organizations that recognize the value of encouraging organizational knowledge since the performance metrics from early adopters are compiling the substantial benefits gain from knowledge management. Thus, knowledge management consulting the services and technologies is in a state of high demand where the software of knowledge management is rapidly enlarged.

Knowledge management is increasingly becomes more important as it could drives the organizational success in facilitating the decision-making capabilities, develop learning workplaces through making learning culture and stimulates the cultural change and innovation. It has three major components which contain people, processes and information. People refer to the individual that keep the knowledge and practice it and processes are where the individuals establish, capture, store, organize and share the knowledge. While information point out as the pieces of data and facts which individuals convert it into the application of as knowledge. Accordingly, it is

crucial that the three components stated previously to be considered before setting up the knowledge management program.

2.3 Knowledge Sharing and Knowledge Sharing Behavior

Knowledge sharing is one of the most significant aspects in the process of making the right knowledge accessible to the right person at the right time as the majority of the knowledge management initiatives depend on it (Frost, 2013). Knowledge sharing can be interpreted as push or pull. The recent is when the knowledge employees are actively explores out the knowledge sources such as through the cooperation with colleagues and library search. It is depends on the habit and readiness of the knowledge employees to find out and be approachable to the sources of knowledge. The right culture or incentives have to be present to support it.

The department of human resources can be seen to expose the knowledge sharing in a various way where in an internalized way is that they can pose as a mediator among staff and their objection to engage in the activity of knowledge sharing at the workplace. Yahya and Goh (2002) mentioned that the direct impact of the human resources objectives with the knowledge management systems in many ways such as by training programs, performance appraisals, decision making, financial rewards or compensation. Human resources departments have the capacity within company to assist frame morale of the staff; motivation and trust which could help impress the worker to adopt the shared working practices. Law and Ngai (2003) took out the thorough empirical research by studied 134 organizations to figure the benefits of knowledge sharing activity beyond the industries which includes

manufacturing, wholesale and retail. The results indicated that knowledge sharing and learning instructions and personnel's behaviors are strongly related in improving the processes of the business and productivity. Knowledge sharing could likely to accomplish healthier competition between the parties and boost the quality and standard of workers. Generally, the application of knowledge sharing approach in Malaysia could inspire the levels of widespread communication by internal or external, support, value, understanding and awareness in a way to improve the clarity of the organization's issues.

On the other hand, knowledge sharing behavior is more about 'share' manner from everybody to share what they know. In the literature, several authors have defined knowledge sharing behavior as the process of involving knowledge exchange or exchanging of information or assistance between individuals and groups of people (Connelly & Kelloway, 2003; Davenport & Prusak, 1998). Members of the organizations that believed that they would gain extrinsic benefits like promotion, monetary rewards or educational chances from their knowledge sharing behavior tend to evolve the more positive attitude on knowledge sharing (Bock & Kim, 2002; Kankanhalli, Tan & Wei, 2005). Further, the workers that believe that they would get intrinsic benefits like social acknowledgement, power or self-satisfaction could also have enjoyment in knowledge sharing (Kankanhalli, Tan & Wei, 2005). Organizational structure also must be taken into considerations in the knowledge sharing context especially when relates on the incentives and rewards system directives to the other (Yang & Chen, 2007).

Interpersonal trust which is an implied set of beliefs has been identified as the significant factor influencing knowledge sharing (Gefen, Karahanna & Straub, 2003). The achievement of knowledge sharing depends on the supply and quality of the interaction among learners and the ability and willingness of practicing the knowledge (Lagerstrom & Anderson, 2003). Knowledge sharing is depends on the interaction and connection among people. Without important interaction, learners would be disturbed easily or feel misunderstanding with other person. The firm can construct new values to enhance its development and hike by knowledge sharing (Bock & Kim, 2002). These values were then proved to have the positive impact on generating new services or products by interactions between departments (Armbrecht, Chapas, Chappelow, Farris, Friga, Hartz, Mcllvaine, Postle & Whitwell, 2001; Tsai, 2000).

Workers are more affected through the work environment when creative ideas are made in the organizational context. The increase of team support within an organization will shape an environment where workers can receive inspiration and compliment from their company or supervisors in order to expand further climate of innovation in the organization in reassuring the innovative behavior and creativity of workers more appropriately (Montes, Moreno & Fernandez, 2004). According to these conditions, organizational and individual factors affected knowledge sharing and innovation (Yu, Yu & Yu, 2013).

The transformation from managing knowledge against managing workers as the right owners of knowledge displays the consequences of human resource practices in the knowledge sharing context (Kelloway, 2000). A work practice that includes work design can affect worker's knowledge sharing behavior (Cabrera & Cabrera,

2005). However, the success of knowledge management initiatives are strongly depends on the person knowledge sharing (Yi, 2009; Wang & Noe, 2010). For example, there will be finite effects of the application on technology infrastructure if no support was given for knowledge sharing practices on organizational and individual levels (De & Fahey, 2000). Hence, it is crucial to further assess the antecedents for knowledge sharing as it turns up at the worker level (Felin & Foss, 2006; & Felin & Hesterly, 2007).

Appealing in the informal knowledge sharing processes from one individual to other person needs a high level of social and personal tenderness. More tacit knowledge could be shared when the personal interactions take place during lunch hours or any times (Yi, 2009; Taminiau, Smit & Lange, 2009). The issues discussed do not need a specific problem explanation or introduction where there might be a type of related chatter. Thus, personal interactions are an imperative part of knowledge sharing behavior between workers especially by their boundlessness.

2.4 Factors Influencing Knowledge Sharing Behavior

2.4.1 Individual Factors

2.4.1.1 Sense of Self-Worth

Sense of self-worth is defined as what people thought about themselves which is the basic of the self-concept that encompasses the positive or negative evaluations of the self like how they feel about it by self (Smith & Mackie, 2007). Sense of self-worth is about the psychology reflecting on the evaluation of person's emotion on his or her own worth. It is the intuition of one person which appears to be an attitude

toward the self. Self-worth describes as an emotional evaluation like pride, triumph, despair and shame (Hewitt, 2009). For example is, “I am competent”. It is normally comes from the person’s inside and become the foundation of people’s ability to belief in their self.

In the context of knowledge sharing behavior, relevant feedback is very demanding in the ongoing interaction setting. Usually, individuals will conclude that their way of thinking and behavior are right when other workers respond in the way that they have anticipated. This process of reflected evaluation that contributes to the development of self-worth is strongly influenced by sense of competence and firmly tied to the effective performance (Bock, Zmud, Kim & Lee, 2005). Thus, Bock, Zmud, Kim and Lee (2005) found that workers that able to get the feedback on knowledge sharing action are more likely to recognize how many actions that have devoted to the other's work and enhancement of organizational performance. Accordingly, it could help in increasing sense of self-worth when they understand it which in turn would deliver these workers that are more likely to flourish the favorable attitudes toward knowledge sharing than workers that are unable to see the linkages of it.

2.4.1.2 Individual Attitude

Aiken (2000) stated that attitude is a learned disposition which determines the positive or negative feedback to the specific situation, person, object or institution. Consequently, attitude demonstrates on what the person is and thus, it is determining the factors of the person’s attitude and affords individuals with the framework within

which to illustrate the world and organize new experiences (Ogunmoye, 2008). The attitude of a person towards a behavior is determined according to their beliefs on the importance of performing it. The definition of attitudes also vary as the predisposition of mental to act which is expose by evaluating certain entity with some degree of favor and disfavor.

2.4.2 Organizational Factors

2.4.2.1 Perceived Organizational Incentives

Meyer and Meyer (2009) viewed organizational incentives as parts of the motivational factors which could be able to improve the performance that is directed in gaining the organizational reward. Organizational incentives also could be defined as the non-financial inducement that intend to influence the future behavior of the workers by rewards or other motivational factors that is obtain from the worker's integration in the framework of the organization with the corresponding impact on employees and their behavior (Milkovich & Newman, 2001). Eventually, the aim of incentives at organizational context is providing value in term of money or any rewards which hopefully it could drive the workers to contribute in organizational success (Armstrong, 2013). Philip and Marshall (2010) defines organizational incentives in a theoretical foundations where they saw that organizational incentives itself motivate the behavior of the person. Thus, they argue that the organization is well served through the socially organizational incentives and individual financial incentives combination in a long term for organizational survival. From the literature, monetary incentives and rewards are the vital factors cited most regularly when it comes to the decision as to whether to share or not (Hahn & Subrami, 2000; Ruppel &

Harrington, 2001; Bartol & Srivastava, 2002, Dignum & Dignum, 2003; Syed-Ikhsan, 2004; Riege, 2005). The typical issue related with knowledge sharing is that the workers are not being rewarded for their involvements, hence discouraging them to participate. It is possible to increase the worker's participation through increasing the incentives linked with sharing the knowledge with others (Cabrera & Cabrera, 2002). Both non-monetary and monetary incentives are pivotal to make the passion with knowledge sharing practices (Cheng, Ho & Lau, 2009).

2.4.2.2 Management Support

In general, management support is referred to active involvement by the management team in supporting lower-level worker's activities (Igbaria, Zinatelli, Cragg & Cavaye, 1997; Ramamurthy & Premkumar, 1995). The management support is the encouragement from the top level management with the allocation of the resources (Guimaraes & Igbaria, 1997). Management support also can be referred to a situation when the high level managers are in a corporation intervention to assist the lower-level workers to develop the required behavior. It is also referring to the perception that the person has the available assistance from the person comes from the management team.

Workers could focus on the organization's commitment to them if managerial teams are concerned with their worker's commitment to the organization. It is likely described as give and take where both parties are in the win-win situation. The organization presents as the significant source of socio emotional resources for workers like caring and respect and tangible benefits like medical benefits and wages

(Rhoades & Eisenberger, 2002). It is actually helps in meeting the worker's needs for approval; esteem and affiliation when there are getting the management support in the organization (Rhoades & Eisenberger, 2002). Workers will indirectly motivated to take an active interest to the intervention held by the organization such as in the context of knowledge sharing activity in the regard where the positive valuation from the organization could provide the indication that increased effort will be rewarded and acknowledged.

2.5.3 Interpersonal Trust

Trust is defined as an expression of faith and confidence that a person or an institution will be fair, honest, trustworthy, decent, experienced and non-threatening (Caldwell & Clapham, 2003; Carnevale, 1995). Accordingly, individual's trust in their co-workers stems from the awareness of their interaction with co-workers such as ethics, morality, integrity, reliability, faith, honesty and competence (Garcı´a-Marza´, 2005; Morgan & Hunt, 1994).

2.6 Research Framework

The research framework shown in Figure 2.1 is developed based on the discussion of literature on knowledge sharing behavior (Bock, Zmud, Kim & Lee, 2005; Chennamaneni, 2006; Tan & Zhao, 2003; Yilmaz & Hunt, 2001).The research framework for this study shows the relationship between sense of self-worth, attitudes, perceived organizational incentives, management support and knowledge sharing behavior. In this study, sense of self-worth, attitudes, perceived organizational

incentives and management support are the independent variables, while knowledge sharing behavior is the dependent variable. This research framework is also testing interpersonal trust as the moderating variable in the relationship between sense of self-worth, attitudes, perceived organizational incentives and management support and knowledge sharing behavior.

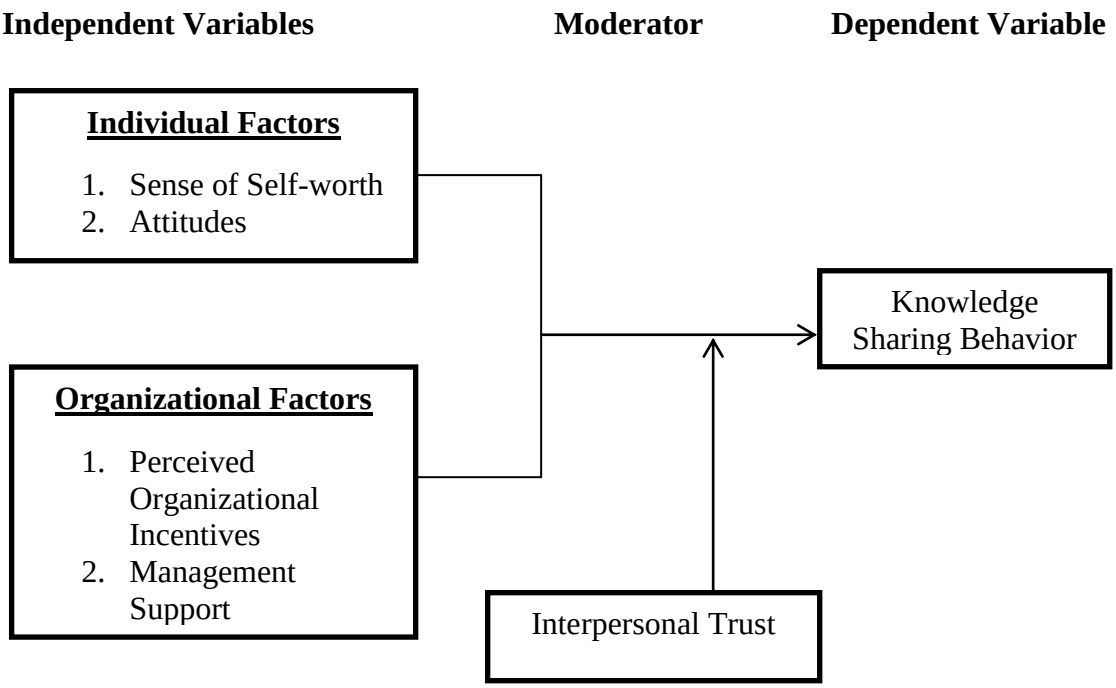

Figure 2.1 Research Framework

2.7 Development of Hypotheses

2.7.1 Relationship between Sense of Self-worth and Knowledge Sharing Behavior

Past studies on sense of self-worth and knowledge sharing behavior have shown mixed results. Joseph and Jacob (2011) found that sense of self-worth did not enhance people's intention in sharing the knowledge when tested on 125 IT knowledge workers in India. The subjective norm did not generate the self-worthiness

of workers to share the knowledge even though it is proved in the study that it could generate the intention to perform a task. In other study, Chow and Chan (2008) also found that sense of self-worth has no direct effect on knowledge sharing behavior when tested on 190 managers from Hong Kong firms. Similar findings were also found in a study conducted by Bock, Zmud, Kim and Lee (2005) where self-worth was not positively influence the knowledge sharing behavior.

In other studies, sense of self-worth was found positively related to knowledge sharing behavior. For example, in a study conducted on 154 managers from 27 Korean organizations, Bock, Zmud, Kim and Lee (2005) found that workers who hold high sense of self-worth towards knowledge sharing incline to share their knowledge with others.

Similar findings were also found in a study conducted by Ramayah, Yeap and Ignatius (2013). In their study on 447 academicians in 10 public universities scattered throughout Malaysia, they found that individual's sense of self-worth is positively related to the subjective norm to share their knowledge with others. Huber (2001) argued that those employees who have high sense of self-worth are more likely to be attentive towards other's expectations in regards to the knowledge sharing behaviors and practice at the workplace.

Based on the above discussion, the following hypothesis is proposed:

H1: Sense of self-worth is positively related to knowledge sharing behavior.

2.7.2 Relationship between Individual Attitudes and Knowledge Sharing Behavior

Past studies have shown how one's attitude related to knowledge sharing behavior. For example, Bock Zmud, Kim and Lee (2005) found that attitude was significantly positively related to the knowledge sharing behavior when tested on 154 managers from 27 Korean organizations. Similar findings were also found in a study conducted by Kolekofski and Heminger (2003) on 34 % response rate of faculty members and supporting staff at the United State Air Force Institute of Technology (AFIT) where attitude was found positively related to knowledge sharing behavior. In other study, attitude was also found to be one of the factors that influence the intention to share knowledge when tested on 286 physicians from 13 hospitals in Korea (Ryu, Ho & Han, 2003).

Based on the above discussion, the following hypothesis is proposed:

H2: Individual attitude is positively related to knowledge sharing behavior.

2.7.3 Relationship between Perceived Organizational Incentives and Knowledge Sharing Behavior

Studies on perceived organizational incentives and knowledge sharing behavior have shown mixed results. In one study conducted by Bock, Zmud, Kim and Lee (2005), extrinsic rewards were found negatively related to knowledge sharing behavior when tested on 154 managers from 27 Korean organizations. In other study, Chennamaneni (2006) also found that perceived organizational incentives does not

support its relationship with knowledge sharing behavior when tested on 180 respondents of full time workers enrolled in MBA and senior level classes in the college of business at University of Texas Arlington. In his study, perceived organizational incentives demonstrated a weak positive relationship on the knowledge sharing behavior among workers when motivators such as perceived benefits, perceived reputation enhancement, perceived loss of knowledge power and perceived enjoyment in helping others were included in the research model.

However, in other study, extrinsic incentives have been found to positively related with knowledge sharing behavior. For example, in a study conducted on 424 former interns of Certified Management Accountants in United State has shown how perceived organizational incentives increased knowledge sharing behavior (Cockrell, Stone & Wier, 2009).

Similar findings were also found in a study conducted by Chay, Menkhoff, Loh and Evers (2004). In their study on 262 academicians, administrators and students from tertiary educational institution in Singapore, they found that organizational incentives were positively related to the knowledge sharing. Quigley, Tesluk, Locke and Bartol (2007) study also found group incentives have a greater positive relationship on knowledge sharing behavior and this effect is stronger when sharing norms are strong when tested on120 undergraduates who enrolled in upper-level management courses at Atlantic university.

Based on the above discussions, the following hypothesis is proposed:

H3: Perceived organizational incentives are positively related to knowledge sharing behavior.

2.7.4 Relationship between Management Support and Knowledge Sharing Behavior

Reviewing the literature on management support and knowledge sharing behavior has shown mixed results. A study conducted by King and Marks (2008) on 169 employees in United State department of defense has shown negative relationship between management support and knowledge sharing behavior.

Though there is negative relationship between management support and knowledge sharing behavior, most of the studies conducted in the past have shown positive relationship. For example, a study by Connelly and Kelloway (2003) on 126 undergraduates in MBA or MPA courses at four Canadian universities in two provinces have shown that management's support is significantly positive associated with knowledge sharing behavior.

Therefore, the following hypothesis is proposed:

H4: Management support is positively related to knowledge sharing behavior.

2.7.5 Interpersonal Trust as Moderator

Studies on interpersonal trust as a moderator in the context of knowledge sharing are limited. Most studies in the past tested interpersonal trust as independent

variables instead of as a moderator with most studies showed positive relationship between interpersonal trust and knowledge sharing behavior. For example, Chang and Chuang (2011) conducted a study on 318 persons through website and found that interpersonal trust had a positive relationship on the quality but not quantity of shared knowledge. The involvement of the participants had the moderating influence of interpersonal trust towards the relationship with the knowledge sharing. In one study conducted on 131 utility workers at Austrian company has found that there are significant effects between interpersonal trust and knowledge sharing behavior among coworkers (Renzl, Matzler & Mader, 2005).

Based on the above discussion, the following hypotheses are proposed:

H5: Interpersonal trust moderates the relationship between sense of self-worth and knowledge sharing behavior.

H6: Interpersonal trust moderates the relationship between attitudes and knowledge sharing behavior.

H7: Interpersonal trust moderates the relationship between management support and knowledge sharing behavior.

H8: Interpersonal trust moderates the relationship between perceived organizational incentives and knowledge sharing behavior.

2.8 Conclusions

The chapter has discussed on the conceptual definitions, variable's dimension and discussion of the previous findings on knowledge sharing behavior. Also, eight hypotheses have been developed to be tested in this study. In the next chapter, Chapter 3, method of the study is discussed.

CHAPTER 3

METHOD

3.1 Introduction

Chapter 3 describes the method for the study. In this chapter, the sample design, survey materials used in this study, procedure for collecting data and the research measures are described. The chapter ends with strategies for analyzing the data.

3.2 Research Design

The study employed quantitative research design. Quantitative design is a systematic empirical approach to investigate social phenomena that used statistical or mathematical based methods that allow to test the relationship between the research variables (Given, 2008; Kreuger & Neuman, 2006). Therefore, quantitative research design is more suitable for this study as it allows the testing of relationship between variables using statistical methods. This corresponds with the primary objective of this study, which is to examine the relationship between sense of self-worth, attitude, perceived organizational incentives, management support and knowledge sharing behavior and the moderating effect of interpersonal trust on the relationship between sense of self-worth, attitude, perceived organizational incentives, management support and knowledge sharing behavior.

In this study, the unit of analysis is at the individual level (SMEs' employees) and the primary data for this study was collected through distribution of questionnaire. Respondents' perceptions about sense of self-worth, attitudes, perceived organizational incentives and management support become the basis for understanding the intention to share knowledge. Therefore, it is suitable to use individual as a unit of analysis to test all the variables shown in the research framework.

The study was cross-sectional, where the data was collected at one point of time. Cross-sectional study is cheaper and save time. Also, it allows examining many factors and outcome in a single study.

3.3 Population and Sampling

3.3.1 Population

Population for this study includes all the employees from all types of sector in Bumiputra SMEs in Kedah. Based on the statistics given by SME Corporation official website (http://www.smecorp.gov.my), there are 324 Bumiputra SMEs located in the state of Kedah. However, the statistics did not specify the total number of employees for each of the SMEs. Table 3.1 presents the total number of Bumiputra SMEs base on the sectors.

Table 3.1
Number of Bumiputra SME by Sectors

Sectors	Total number of SME
Manufacturing (Including Agro-Based)	109
Manufacturing Related Services	17
Services (Including ICT)	109
Construction	44
Primary Agriculture	12
Mining and Quarrying	1
Others	32
Total	**324**

3.3.2 Sample Size

Since the total number of employees was not known, the researcher follow Roscoe's (1975) rule of thumb where a sample that is larger than 30 and less than 500 is appropriate for most research.

3.3.3 Sampling Technique

Out of 324 Bumiputra SMEs, 220 SMEs from various sectors were chosen for this study. A total of 104 SMEs were excluded from the list because of difficulty of access to locations. The location of the companies was important for the purpose of scheduling for appointments and making repeated visits to the companies, as the survey was conducted on site. Another 56 SMEs were deleted from the list as they were no longer in business. Out of 164 remaining SMEs, only 39 of them were willing to participate in the study.

3.4 Operational Definitions and Measurements

3.4.1 Knowledge Sharing Behavior

Knowledge sharing behavior is the dependent variable in this study. Knowledge sharing behavior is operationalized as the process of involving knowledge exchange between individuals and groups of people (Davenport & Prusak, 1998). As shown in Table 3.2, knowledge sharing behavior was measured by 6-items developed by Bock, Zmud, Kim and Lee (2005). This 6-item knowledge sharing behavior scale has been shown to be both reliable and valid for measuring knowledge sharing behavior. Several studies have reported that the scale has adequate internal consistency (the Cronbach alphas ranging from .92 to .93) (Bock, Zmud, Kim & Lee, 2005; Lee, 2001; Wasko & Faraj, 2005). Based on a five-point scale whereby, 1 = strongly disagree, and 5 = strongly agree, participants rated their degree of agreement with the knowledge sharing behavior statements.

Table 3.2
Knowledge Sharing Behavior Items

Variable	Operational definition	Items	Authors
Knowledge Sharing Behavior (Dependent)	The process of involving knowledge exchange between individuals and groups of people.	1. I shared factual knowledge (know-what) from work with my co-workers. 2. I shared business knowledge about the customers, products, suppliers and competitors with my co-workers. 3. I shared internal reports and other official documents with my co-workers.	Bock, Zmud, Kim & Lee (2005)

	4. I shared work experiences with my co-workers.
	5. I shared expertise from education or training with my co-workers.
	6. I shared know-why knowledge from work with my co-workers.

3.4.2 Individual Factors

Individual factors are the independent variables. In this study, individual factors were measured by two dimensions, sense of self-worth and attitudes. Sense of self-worth is operationalized as an emotional evaluation like pride, triumph, despair and shame (Newman & Newman, 1975). Sense of self-worth was measured by 5-items that were adapted from Bock, Zmud, Kim and Lee (2005). Attitude towards knowledge sharing was measured by 8-items developed by Cheng and Chen (2007). Both of the scales have adequate internal consistency (the Cronbach alphas ranging from .93 to .94) (Bock, Zmud, Kim & Lee, 2005; Cheng & Chen, 2007; Fishbein & Ajzen, 1975).

Participants rated their degree of agreement with the sense of self-worth and attitudes toward knowledge sharing statements based on five-point scale whereby, 1 = strongly disagree, and 5 = strongly agree. Table 3.3 shows the sense of self-worth and attitude towards knowledge sharing items used in this study.

Table 3.3
Individual Factor's Items

Variable	Dimensions	Operational definitions	Items	Authors
Individual Factors (Independent).	Sense of self-worth	Emotional evaluation like pride, triumph, despair and shame.	1. Sharing my knowledge would help other members in the organization solve problems. 2. Sharing my knowledge would create new business opportunities for the organization. 3. Sharing my knowledge would improve work processes in the organization. 4. Sharing my knowledge would increase productivity in the organization. 5. Sharing my knowledge would help the organization achieve its performance objectives.	Bock, Zmud, Kim & Lee (2005)
	Attitudes towards knowledge sharing behavior	Predisposition of mental to act which is expose by evaluating certain entity with some degree of favor and disfavor .	6. If I share my knowledge with other members, I feel very beneficial. 7. If I share my knowledge with other members, I feel very pleasant. 8. If I share my knowledge with other members, I feel very expressive. 9. It is a wise move if I share my knowledge with other members. 10. To me, sharing knowledge with my co-workers is harmful.	Cheng & Chen (2007)

	11. To me, sharing knowledge with my co-workers is good.	
	12. To me, sharing knowledge with my co-workers is worthless.	
	13. To me, sharing knowledge with my co-workers is wise.	

3.4.3 Organizational Factors

Organizational factors are the second independent variables. Organizational factors are measured by two dimensions, perceived organizational incentives and management support. Perceived organizational incentives are operationalized as the motivational factors that can trigger performance which is directed at attaining organizational rewards (Meyer & Meyer, 2009). Perceived organizational incentives were measured by 5-item scale developed by Kankanhalli, Tan and Wei (2005).

The second dimension, management support is operationalized as the degree of general support provided by the top management team (Igbaria, Zinatelli, Cragg & Cavage, 1997). Management support was measured by 4-item scale adapted from Tan and Zhao (2003). Based on the previous study, both of the scales have adequate internal consistency (the Cronbach alphas ranging from .52 to .89) (Tan & Zhao, 2003; Lin, 2007a; Rahab, Sulistyandari & Sudjono, 2011).

In this study, participants rated their degree of agreement with perceived organizational incentives and management support statements based on five-point

scale whereby, 1 = strongly disagree, and 5 = strongly agree. Table 3.4 shows the perceived organizational incentives and management support items used in this study.

Table 3.4
Organizational Factor's Items

Variable	Dimensions	Operational definition	Items	Authors
Organizational Factors (Independent)	Perceived organizational incentives	The motivational factors that can trigger performance which is directed at attaining organizational rewards.	1. Sharing knowledge with my co-workers improves the likelihood of getting better work assignment for me. 2. Sharing knowledge with my co-workers improves the likelihood of getting a promotion for me. 3. Sharing knowledge with my co-workers improves the likelihood of getting a higher salary for me. 4. Sharing knowledge with my co-workers improves the likelihood of getting bonus for me. 5. I expect to get more job security when I share knowledge with my co-workers.	Kankanhalli, Tan & Wei (2005)
	Management Support	General support provided by top management.	6. Top managers think that encouraging knowledge sharing with colleagues is beneficial. 7. Top managers always support and encourage employees to share their knowledge with colleagues. 8. Top managers provide most of the necessary help and resources to enable employees to	Tan & Zhao (2003)

		share knowledge. 9. Top managers are keen to see that the employees are happy to share their knowledge with colleagues.	

3.4.4 Interpersonal Trust

In this study, interpersonal trust is the moderator variable. Interpersonal trust is operationalized as the willingness to rely on the word, action and decisions of other party (McAllister, 1995). Interpersonal trust was measured by 5-items scale developed by Yilmaz and Hunt (2001). The scale had adequate internal consistency (the Cronbach alphas ranging from .84 to .95) (Larzelere & Huston, 1980; Morgan & Hunt, 1994; Yilmaz & Hunt, 2001).

Participants rated their degree of agreement with interpersonal trust statements based on five-point scale whereby, 1 = strongly disagree, and 5 = strongly agree. Table 3.5 shows the interpersonal trust items used in this study.

Table 3.5
Interpersonal Trust's Items

Variable	Operational definition	Items	Authors
Interpersonal Trust (Moderator)	The willingness to rely on the word, action, and decisions of other party.	1. I consider my co-workers as people who can be trusted. 2. I consider my co-workers as people who can be counted on to do what is right. 3. I consider my co-workers as people who can be counted on to get the job done right.	Yilmaz & Hunt (2001)

	4. I consider my co-workers as people whom are always faithful.
	5. I consider my co-workers as people whom I have great confidence in.

3.5 Layout of Questionnaire

All questionnaires were prepared in Bahasa Malaysia. Each participant in this survey received eight-page questionnaire (with cover letter attached). The questionnaire used in this study is shown in Appendix A.

The eight-page questionnaire consisted of five sections. Section 1 asked about knowledge sharing behavior and there are 6 items. Section 2 asked about participants' sense of self-worth and attitudes. There are 5 and 8 items respectively. In Section 3, there are 5 items on perceived organizational incentives and 4 items on management support. The final section of the questionnaire, Section 5, is the demographic variables.

3.6 Pilot Test

Pilot test which is also called as a pilot study is a small scale of initial research process study conducted to evaluate the feasibility, cost, time, adverse events and size of the statistical variability so as to predict the suitable sample size and brush up or improve the design of the current study related to full-scale research study performances (Hulley, 2007). The pilot test was conducted to find the validity and reliability of the questionnaire as to ensure the quality of the survey.

In this study, pilot test was conducted in the middle of August 2013. The questionnaire was distributed to 30 SMEs employees. There were no changes required to the questionnaire. The internal consistency reliabilities (Cronbach's Alpha) of the research measures from the pilot study are reported in Table 3.6. As shown in Table 3.6, all variables have satisfactory reliability values ranging from .75 to .86.

Table 3.6
The Cronbach's Alpha from the Pilot Study (n = 30)

Variable	Number of Items	Cronbach Alpha
Knowledge sharing behavior	5	.75
Individual factors	13	.79
Organizational factors	9	.84
Interpersonal Trust	5	.86

3.7 Data Collection Procedures

Potential SMEs listed under the SME Corporation official website were contacted personally by telephone. Through the initial telephone conversation, the researcher introduced herself, explained the purpose of the call and asked for an appointment with SME's representative to conduct the survey. Once the respondent agreed to participate in the study on behalf of the firm, a date was fixed at the respondent's convenience.

During the survey session with the respondents, the researcher personally administered and collected the completed questionnaire. Each respondent was first briefed about the purpose of the survey. They were assured that all the information

given will remain confidential at all times and will be used for the study only. Respondents were then given 30 minutes to complete the survey forms. Each meeting lasted between 30 to 60 minutes.

3.8 Technique of Data Analysis

Data collected through the survey were analyzed using SPSS (version 19) program for Windows. Prior to primary analyses, the data were examined for data entry accuracy, outliers and distributional properties.

3.8.1 Factor Analysis

Factor analysis is conducted to describe the variation between variables in the context of few underlying but unobservable random variables which is namely as factors. The analysis could be viewed as the statistical procedure for grouping the variables into the subsets like the variables of each set that are mutually highly correlated whereas the variables in different subsets are relatively uncorrelated at the same time. Items that show the value of 'a-square' that is below than .5 will be omitted. First, the KMO (Keiser-Meyer-Oklin) of the variable will be determined in the factor analysis. Generally, the higher the cumulative variance is the better the correlation among items of the variables.

The factor analysis of this study contributed all of the items that measure the dependent variable (knowledge sharing behavior), independent variables (individual factors and organizational factors) and a moderator (interpersonal trust). According to

Pallant (2010), sample size is important before the factor analysis can be conducted. For this study, the sample was adequate to conduct factor analysis as the minimum number required is 100 (Barlett, Kotrlik & Higgins 2001; Hair, Anderson, Tatham & Black, 1998; Pallant, 2010).

3.8.2 Correlation Analysis

According to Pallant (2010), correlation analysis is a statistical technique that explained the strength and direction of the linear relationship between two variables. Therefore, in order to determine the strength of the relationship between the variables in this study, the correlation technique will be used to understand the direction of the relationship and amount of correlation between the dimensions of independent variables (sense of self-worth, attitudes, perceived organizational incentives and management support), moderating variable (interpersonal trust) and dependent variable (knowledge sharing behavior). Pearson correlation coefficients (r) can only take on values from -1 to +1. In order to interpret the value between 0 (no relationship) and 1 (perfect relationship), Cohen's (1988) suggestion will be followed. The relationship is said to be small when the value of r is between$\pm$ 0.1 to $\pm$ 0.29. The relationship is considered medium when r value is between$\pm$ 0.30 to $\pm$ 0.49, and the relationship is considered to be large when r value is between$\pm$ 0.50 and above.

3.8.3 Regression Analysis

Multiple regression analysis is a statistical technique that can be used to explore the relationship between a single dependent variable and a number of

independent variables (Pallant, 2010). Multiple regression analysis can be used to address variety of research questions. For example, it can tell the researcher how well a set of variables is able to predict a particular outcome, provide information about the model as a whole and the contribution of each of the variables that make up the model and it can statistically control for an additional variable when exploring predictive ability of the model. As for this study, multiple regressions is conducted to determine the predictive power of the independent variables (sense of self-worth, attitudes, perceived organizational incentives, management support) toward the dependent variable (knowledge sharing behavior).

3.8.4 Test of Moderation

Moderation happens in the regression analysis when the relationship among the two variables is depends on the third variable which is referred to as a moderator (Cohen, Cohen, Leona & West 2003). A moderator is an independent variable that affects the strength and / or direction of association between another independent variable and an outcome variable. To assess the effects of a moderating variable, hierarchical multiple regression is used. In the first step of the regression, the independent variables (including the moderator) are entered into the model as predictors of the outcome variable. The independent variables do not have to be significant predictors of the outcome variable in order to test for an interaction. In a separate step, an interaction term (the product of two independent variables, which represent the moderator effect) is entered. If the interaction term explains a statistically significant amount of variance in the dependent variable, a moderator effect is present.

3.9 Conclusions

This chapter has explained the research method and strategy for the study. It described how the sample of organizations was obtained, the selection of the respondents, development of the questionnaire, the research materials and the survey procedure. This chapter also briefly explains the adoption of several analyses such as correlation and regression analysis to test the research hypotheses. The results of the study are reported in Chapter 4.

CHAPTER 4

RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter reports results of the study. The chapter begins by reporting the demographic characteristics of the respondents. It then presents the factor analysis and the bivariate relationship between the research variables. The chapter concludes with the regression analysis.

4.2 Demographic Characteristics of Participants

Detailed descriptive statistics of the participants' demographic characteristics are presented in Table 4.1. It is noted that 53.4% of the 148 participants in this survey were females. Most of the respondents (48.6%) were aged between 21 and 30 years old. Out of 148 participants, 37.2% had secondary education (11 years of schooling) and 41.9% earned a salary between RM901 and RM 1500. Most of the participants (33.1%) had served their organization between 1 to 3 years. Most of the SMEs (24.3%) participated in this study were other than construction, mining and quarrying, manufacturing (including agro-based), agriculture, manufacturing (related services) and manufacturing (including ICT).

Table 4.1
Demographic Characteristics of Participants

Descriptions	Frequency	Percentage
Gender:		
Male	79	53.4
Female	69	46.6
Age:		
Below 20	8	5.4
21 - 30	72	48.6
31 – 40	42	28.4
41 – 50	20	13.5
51 and above	6	4.1
Marital status:		
Single	56	37.8
Married	87	58.8
Divorce	5	3.4
Academic Qualification:		
PMR	8	5.4
SPM	55	37.2
Certificate	37	25.0
Degree	43	29.1
Others	5	3.4
Salary:		
Below RM 900	32	21.6
RM 901 – RM 1500	62	41.9
RM 1500 and above	54	36.5
No. of years in organization:		

Descriptions	Frequency	Percentage
Less than 1 year	47	31.8
1 – 3 years	49	33.1
4 – 7 years	21	14.2
More than 7 years	31	20.9
Types of SME:		
Construction	12	8.1
Mining and Quarrying	6	4.1
Manufacturing (Including agro-based)	26	17.6
Agriculture	9	6.1
Manufacturing (related services)	35	23.6
Manufacturing (Including ICT)	24	16.2
Others	36	24.3

Note: Total respondents = 148

4.3 Data Screening

Data screening was done to ensure that the data collected is clean and ready for further statistical analysis. This is important so that the data are reliable, useful and valid to test the causal theory.

4.3.1 Missing Data

The analysis of missing data showed that there is .0% of missing values for all items in the questionnaire. Thus, there is no missing value in the data. The full results for missing value analysis were in the Appendix B.

4.3.2 Normality

Normality test was done to examine if the data is well-model with and without a normal distribution to compute the way that underlying random variable is distributing normally. The normality test is considered as prerequisite as sustaining the normal distribution of the data which is underlying the assumption of parametric testing in the statistical test's process. There are two ways to perform it which are graphically or numerically. Two of it has the advantages and disadvantages. However, the main focus is to figure out and presents the data's normality that is being used in this research. Normal Q-Q plot is used to detect the normality of the data. Data that follows a normal distribution will appear a straight line and linear in the normal probability plot (Coakes & Steed, 2003). The normality test was made for each variable and will be discussed accordingly through this section. The normal Q-Q Plot graph for the variables was attached in the Appendix B for review.

Based on the normal Q-Q Plot for every factor, the normality for some of the items in the variable are deviated from the line. However, it is not mean that there are abnormal. The chart might appear so due to the way the respondents chose the answer in the survey. In addition, it might cause the tabulation of the data which is not in stable strata as the same questionnaire may have different interpretation by different

respondent. The table of normality test below could be referred for further understanding on the normality test that been conducted on the variables. The test was prepared to the all items in the variables as shown in the Table 4.2 below so that the comparison can be made in the context of graphical and numerical while the charts shown previously are the normality test based on the factors.

Table 4.2
Normality Test for Knowledge Sharing Behavior, Individual Factors, Organizational Factors and Interpersonal Trust

	Kologorov-Smirnov[a]			**Shapiro-Wilk**		
	Statistic	**df**	**Sig.**	**Statistic**	**df**	**Sig.**
Knowledge sharing behavior (KSB).	.124	148	.000	.972	148	.004
Individual Factor (IF).	.100	148	.001	.976	148	.012
Organizational Factor (OF).	.080	148	.022	.987	148	.187
Interpersonal Trust (IT).	.113	148	.000	.964	148	.001

Note: a. Lilliefor Significance Correction

Table 4.2 showed the strong and acceptable relationship among items in the variables. Therefore, it is valid to be used as a basis to make the conclusions for this research. The table also exhibits the outcome from the two well-known normality tests which are Kolmogorov-Smirnov Test and Shapiro-Wilk Test. The Shapiro-Wilk Test is suits better for small sample size or less than 50 samples. However, it can also be done to the large sample size such as 2000. Due to this reason, Shapiro-Wilk test will be used as the numerical means to assess the normality. The data is considered normal if the sig. value from the Shapiro-Wilk test is more than .05 while the data is significantly deviate from the normal distribution if it is recorded less than .05.

4.3.3 Homoscedasticity

Homoscdedastic is a sequence of random variables that have the similar finite variance in statistics. It is also called as homogeneity of variance. The methods that used in evaluating the homoscedasticity needed the independent variables to be non-metric which are nominal or ordinal while dependent variable to be ordinal or interval. The assumption will evaluated as part of the multiple regression's residual analysis if both variables are metric. It produces a pretty straight line where it represents the constant relationship between dependent and independent variables in the research study. Table 4.3 shows the homogeneity of variances among the variables. The variance in the table is homogenous as the Levene Statistic for all variables are more than .001 (> .001).

Table 4.3
Homogeneity of Variances among the Variables

	Levene Statistics	**df1**	**df2**	**Sig.**
Knowledge sharing behavior and attitudes	1.917	11	136	.042
Knowledge sharing behavior and sense of self-worth	.636	10	137	.781
Knowledge sharing behavior and organizational incentives	2.790	15	131	.001
Knowledge sharing behavior and management support	1.293	10	136	.241

4.3.4 Outliers Detection

Outliers detection are the situation where there will have a typical score for a variable which is univariate outliers or a combination of variables which called as multivariate outliers. Generally, the concern for outliers detection is to find out whether

the analysis is more valid with the outlier case or more valid when the outlier case is excluded.

Table 4.4
Percentiles for Knowledge Sharing Behavior

		Percentiles						
		5	**10**	**25**	**50**	**75**	**90**	**95**
Weighted Average (Definition 1)	KSB	3.00	3.33	3.67	3.83	4.17	4.50	4.67
Tukey's Hinges	KSB			3.67	3.83	4.17		

Table 4.5
Outlier Detection Test

		Case Number	Value
Highest	1	1	5.00
	2	2	5.00
	3	3	5.00
	4	4	4.83
	5	5	4.83[a]
Lowest	1	148	2.50
	2	147	2.67
	3	146	2.67
	4	145	2.67
	5	144	3.00[b]

Note:

a. *Only a partial list of cases with the value 4.83 is shown in the table of upper extremes.*
b. *Only a partial list of cases with the value 3.00 is shown in the table of lower extremes.*

4.3.5 Multicollinearity

Multicollinearity is the correlation among independent and the dependent variable. However, the exact dependent variable is still knowledge sharing behavior. VIF showed in Table 4.6 is referred to as variance inflation factor which measures the variance of the regression coefficients that is inflated by multicollinearity problems.

Based on Table 4.6 the VIF for all independent variables, the VIF value is around 1.1 and above which meaning that there are no collinearity issues. The VIF that is measure of 1 is an indication to some association among predictor variables. However, literally it is not enough to cause problems. The maximum acceptable VIF value is 5.0 and anything higher could indicate a problem with multicollinearity.

On the other hand, tolerance that stated in the tables is the variance's amount in an independent variable which is not explained by the other independent variables. There are problem with multicollinearity if the other variables explain a lot of variance of the particular variable. Small values of tolerance could suggest there are problems of multicollinearity .20 are the minimum cutoff value for the tolerance. It is meaning to say that the tolerance which is smaller than .20 indicate a problem with multicollinearity. Since, there are no values smaller than .20 were found in this study, problem with multicollinearity was not occurred.

Table 4.6
Coefficients for Collinearity Statistics

(Constant)	Tolerance	VIF
	DV: Management Support	
Attitudes	.599	1.670
Sense of Self-Worth	.644	1.553
Organizational Incentives	.890	1.124
	DV: Organizational Incentives	
Attitudes	.603	1.657
Sense of Self-Worth	.615	1.626
Management Support	.779	1.283
	DV: Sense of self-worth	
Attitudes	.785	1.275
Management Support	.746	1.340
Organizational Incentives	.814	1.229
	DV: Attitudes	
Management Support	.734	1.363
Organizational incentives	.844	1.185
Sense of Self-Worth	.829	1.206

Note:
a: DV (Dependent Variable)

4.4 Factor Analysis

Factor analysis is purposely done to describe the variation between variables in the context of few underlying but unobservable random variables which is namely as factors. The analysis could be viewed as the statistical procedure for grouping the

variables into the subsets like the variables of each set that are mutually highly correlated whereas the variables in different subsets are relatively uncorrelated at the same time. Items that show the value of 'a-square' that is below than .5 will be omitted. First and foremost, the KMO (Keiser-Meyer-Oklin) of the variable will be determined in the factor analysis. Generally, the higher the cumulative variance is the better the correlation among items of the variables.

The factor analysis of this study contributed all of the items that measure the dependent variable (knowledge sharing behavior), independent variables (individual factors and organizational factors) and a moderator (interpersonal trust). The sample size is important before the factor analysis can be run (Pallant, 2010). The number of data is enough as the minimum number of data is 100 to proceed the factor analysis (Barlett, Kotrlik & Higgins, 2001; Hair, Anderson, Tatham & Black., 1998**;** Pallant, 2010).

4.4.1 Knowledge Sharing Behavior (KSB) Constructs

The knowledge sharing behavior constructs were measured with using six items that was adapted from Bock, Zmud, Kim and Lee (2005). Table 4.7 was shown the KMO index that measure the accuracy of the sample is .730 with the significant Barlett's Test of Sphericity (chi-square = 186.523, $p < .001$). Thus, the factor analysis is suitable to be used in these data (Pallant, 2010). The reliability was done to the deleted items to see whether it is reliable to be tested in the actual test. As the Cronbach's Alpha value is < .5, thus, the items will not be used in this study for further analysis. While the

reliability for accepted items is .76, thus all the four items for component 1 is suitable to be analyzed in this study.

Table 4.7
Factor Analysis For Knowledge Sharing Behavior Construct

Items	**Components**	
	1	**2**
KSB 6 I shared know-why knowledge from work with my co-workers.	**.842**	
KSB 5 I shared expertise from education or training with my co-workers.	**.712**	
KSB 4 I shared work experiences with my co-workers.	**.632**	
KSB 1 I shared factual knowledge (know-what) from work with my co-workers.	**.489**	
KSB 2 I shared business knowledge about the customers, products, suppliers and competitors with my co-workers.		.606
KSB 3 I shared internal reports and other official documents with my co-workers.		.550
Eigen value	2.467	1.33
Total variance explained (%) = 44.76	41.11	22.16
Kaiser-Meyer-Olkin (KMO) = 0.730 Barlett's Test of Sphericity Approx. Chi Square = 186.523 df = 15 Sig. = 0.000		

Note: Extraction Method: Principal Axis Factoring.

Table 4.8
Reliability Statistics for Deleted Items (Component 2)

Crobach's Alpha	**Number of items**
.48	2

Table 4.9
Reliability Statistics for Accepted Items (Component 1)

Crobach's Alpha	Number of items
.76	4

4.4.2 Individual Factors (IF) Constructs

Table 4.10 shows the KMO value is .841 which is more than .50 that presents as an acceptable number as it determined that the distribution of the items are nearly normal with a significant of .000. Thus, the factor loading analysis is unnecessary as the KMO value is considered high. The reliability test was done to each component. Two components were selected to be an accepted item to be tested in this study. While component three which consist of reverse type of questions were excluded further analyses.

Table 4.10
Factor Analysis For Individual Factor Constructs

Items	Components		
	1	2	3
Factor 1: Attitudes			
IF11 To me, sharing knowledge with my co-workers is good.	**.766**		
IF 8 If I share my knowledge with other members, I feel very expressive.	**.753**		
IF 9 It is wise move if I share my knowledge with other members.	**.747**		

IF 6 If I share my knowledge with other members, I feel very beneficial.	**.706**		
IF 13 To me, sharing knowledge with my co-worker is wise.	**.644**		
IF 7 If I share my knowledge with other members, I feel very pleasant.	**.464**		
Factor 2: Sense of Self-worth			
IF 3 Sharing my knowledge would improve work processes in the organization.		**.762**	
IF 2 Sharing my knowledge would create new business opportunities for the organization.		**.687**	
IF 4 Sharing my knowledge would increase productivity in the organization.		**.686**	
IF 5 Sharing my knowledge would help the organization achieve its performance objectives.		**.494**	
IF 1 Sharing my knowledge would help other members in the organization solve problems.		**.489**	
IFF10To me, sharing knowledge with my co-workers is harmful.			-.750
IFF 12 To me, sharing knowledge with my co-workers is worthless.			-.601
Eigen value	5.64	1.44	1.37

Total variance explained (%) = 54.66	43.34	11.06	10.49
Kaiser-Meyer-Olkin = .841 Barlett's Test of Sphericity Approx. Chi Square = 937.912 df = 78 Sig. = 0.000			

Note: Extraction Method: Principal Axis Factoring.

Table 4.11
Reliability Statistics for Accepted Items for Attitudes (Component 1)

Crobach's Alpha	**Number of items**
.86	6

Table 4.12
Reliability Statistics for Accepted Items for Sense Of Self-Worth (Component 2)

Crobach's Alpha	**Number of items**
.83	5

Table 4.13
Reliability Statistics for Deleted Items (Component 3)

Crobach's Alpha	**Number of items**
.64	2

Through the reference from the questionnaire, the researcher could determine the areas which each factor are related to. Based on Table 4.14, the factor 1 are consists of IF 11, IF 8, IF 9, IF 6, IF 13, and IF 7 which is measuring the attitudes. Factor 2 is referring to the measurement of sense of self-worth that consists of IF 3, IF 2, IF 4, IF 5 and IF 1.

Table 4.14
Items of Individual Factors According To Factors

Factor 1	Factor 2
IF 11	IF 3
IF 8	IF 2
1F 9	IF 4
IF 6	IF 5
IF 13	IF 1
IF 7	
No of items = 6	**No of items = 5**

4.4.3 Organizational Factor (OF) Constructs

The measurement of KMO for adequate sampling could inform that the high value which is close to 1.0 indicates that the factor analysis is useful with the data. According to the Table 4.15, the KMO value is .821 which is also more than .50 that presents as an acceptable number as it determined that the distribution of the items are nearly normal with a significant of .000. Thus, the factor loading analysis is unnecessary as the KMO value is considered high.

Table 4.15
Factor Analysis Individual Factor Constructs

Items	Components	
	1	
Factor 1: Organizational Incentives		
OF 3 Sharing knowledge with my co-workers improves the likelihoods of getting a higher salary for me.	**.934**	
OF 4 Sharing knowledge with my co-workers improves the likelihod of getting bonus for me.	**.897**	

OF 2 Sharing knowledge with my co-workers improves the likelihood of getting a promotion for me.	**.860**	
OF 5 I expect to get more job security when I share knowledge with my co-workers.	**.660**	
OF 1 Sharing knowledge with my co-workers improves the likelihood of getting better work assignment for me.	**.600**	
Factor 2: Management Support		
OF 7 Top managers always support and encourage employees to share their knowledge with colleagues.		**.898**
OF 9 Top managers are keen to see that the employees are happy to share their knowledge with colleagues.		**.820**
OF 8 Top managers provide most of the necessary help and resources to enable employees to share knowledge.		**.808**
OF 6 Top managers think that encouraging knowledge sharing with colleagues is beneficial.		**.689**
Eigen value	4.24	1.90
Total variance explained (%) = 60.91	47.06	21.06
Kaiser-Meyer-Olkin = .821 Barlett's Test of Sphericity Approx. Chi Square = 760.268 df = 36 Sig. = 0.000		

Note: Extraction Method: Principal Axis Factoring.

Based on Table 4.16, the factor 1 are consists of OF 3, OF 4, OF 2, OF 5 and OF 1 which is measuring the organizational incentives. While, factor 2 is referring to the measurement of management support that consists of OF 7, OF 9, OF 8 and OF 6. Thus, reliability test will be done according to the factors above in order to determine the reliability of every item in the particular factor.

Table 4.16
Items of Organizational Factors According To Factors

Factor 1	Factor 2
OF 3	OF 7
OF 4	OF 9
OF 2	OF 8
OF 5	OF 6
OF 1	
No of items = 5	**No of items = 4**

4.4.4 Interpersonal Trust (IT) Constructs

The interpersonal trust's contruct were measured by using five items that was adopted from Yilmaz and Hunt (2001). The KMO index shown in Table 4.17 is recorded the value of .778 with the significant Barlett's Test of Sphericity (chi-square = 493.637, p< .001). Thus, it means that the factor analysis is suitable to be used in these data (Pallant, 2010).

Table 4.17
Factor Analysis For Interpersonal Trust Constructs

Items	Components
	1
IT 5 I consider my co-workers as people whom I have great confidence in.	**.861**
IT 2 I consider my co-workers as people who can be counted on to do what is right.	**.859**
IT 3 I considermy co-workers as people who can be counted on to get the job done right.	**.802**
IT 4 I consider my co-workers as	**.765**

people whom are always faithful.	
IT 1 I consider my co-workers as people who can be trusted.	**.693**
Eigen value	3.54
Total variance explained (%)	63.75
Kaiser-Meyer-Olkin (KMO) = .778 Barlett's Test of Sphericity Approx. Chi Square = 493.637 df = 10 Sig.= 0.000	

Note: Extraction Method: Principal Axis Factoring.

4.4.5 Deleted Items

There are some items from the variables than have been deleted in order to obtain a better Cronbach's Alpha for the reliability analysis.

Table 4.18
Deleted Items for the Variables after the Factor Analysis

Variables	Deleted Items	No. of Items Deleted
Knowledge sharing behavior	KSB 2 & KSB 3	2
Attitudes	No deleted item	0
Sense of self-worth	IFF 10 & IFF 12	2
Organizational incentives	No deleted item	0
Management support	No deleted item	0
Interpersonal Trust	No deleted item	0

4.5 Correlation Analysis

Table 4.19 presents the means, standard deviations and Pearson correlations of variables for the 148 participants who participated in the study. The internal consistency reliabilities (Cronbach's Alpha) of the research measures are reported in parenthesis

along the diagonal of the correlation table. As shown in Table 4.19, the Cronbach's alphas for the individual factor were .89. The two dimensions of individual factors scale (sense of self-worth and attitudes) also have satisfactory reliability values ranging from .83 to .86. It is noted that Cronbach's alpha for organizational factor was .86 and its two dimensions scale (organizational incentives and management support) have satisfactory reliability values ranging from .84 to .87. Finally, interpersonal trust also has high reliability value of .90.

Overall, individual factors were found positively significantly correlated with knowledge sharing behavior ($r = .54$, $p > .001$). There were also significant positive correlation between all the individual factor's dimensions and knowledge sharing behavior, with correlation coefficients between .44 and .51. These results imply that the more positive attitudes and sense of self-worth the participants have, the more knowledge will be shared. These results support previous study conducted by Ahmad, Sharom and Abdullah (2006) where they also found similar relationship between the variables. This finding was not surprising. Logically, those who have positive attitudes towards knowledge sharing will demonstrate more positive knowledge sharing behavior. Similarly, if individuals feel that it is worth to share knowledge with others they will be more willing to share their knowledge with others.

Table 4.19 also revealed significant positive relationship between organizational factors (overall) with knowledge sharing behavior ($r = .29$, $p > .01$). Also, there were significant positive relationships between organizational incentives, management support and knowledge sharing behavior, with correlation coefficients between .26 and

.23. This result implies that the higher the incentives and management support received by the participants, the higher the knowledge sharing behavior. This results support previous study conducted by Kankanhalli, Tan and Wei (2005), Cockrell, Stone and Wier (2009), Connelly and Kelloway (2003) and O'Dell and Grayson's (1998). One possible explanation for these results might be because they are motivated by the incentives provided by the organization to share knowledge with others. Normally, individuals would like to see the benefits that they would gain by sharing knowledge with others. These benefits act as a motivator or a driver for them to share knowledge. Apart from that, management support such as providing medium for knowledge sharing will also speed up the process to encourage individuals to share their knowledge.

Table 4.19
Descriptive Statistics, Scale Reliabilities and Correlations of Variables

Variables	N	Mean	S.D.	1	2	3	4	5	6	7	8
1. Individual factors - overall	148	4.03	.48	(.89)							
2. Sense of self-worth	148	4.06	.49	.86**	(.83)						
3. Attitudes	148	4.01	.57	.93**	.61**	(.86)					
4. Organizational factors - overall	148	3.48	.58	.42**	.34**	.40**	(.86)				
5. Organizational incentives	148	3.17	.74	.28**	.21**	.29**	.90**	(.87)			
6. Management support	148	3.86	.61	.46**	.41**	.42**	.75**	.39**	(.84)		
7. Interpersonal trust	148	3.20	.78	.36**	.25**	.38**	.45**	.43**	.31**	(.90)	
8. Knowledge sharing behavior	148	4.16	.52	.54**	.44**	.51**	.29**	.26**	.23**	.24**	(.76)

*Note: ** Correlation is significant at the level 0.01 level (2-tailed), * Correlation is significant at the 0.05 level (2-tailed).*

4.6 Multiple Regression Analysis

To test hypothesis 1 to 4, regression analysis was conducted. Results in Table 4.20 showed that 30% (R^2 = .30, F = 15.37 p<.01) of the variance in knowledge sharing behavior was significantly explained by sense of self-worth, attitudes, organizational incentives and management support. In the model, only sense of self-worth (β = .225, p<.05), and attitudes (β = .357, p<.01) were found positively associated with knowledge sharing behavior. Therefore, Hypothesis 1 and 2 were supported. The results demonstrated that people who have positive attitude and have high sense of self-worth are more likely to be involved in knowledge sharing activities with others. Thus, both variables were proved to be significantly affecting the level of knowledge sharing behavior at work between employees.

Table 4.20
Regression Results of Attitudes, Sense Of Self-Worth, Organizational Incentives and Management Support on Knowledge Sharing Behavior

	Dependent variable (Knowledge sharing behavior) (Standardized Beta)	**Significant (*p*)**	**Tolerance**	**VIF**
Independent variables				
Sense of self-worth	.225**	.014	.597	1.675
Attitudes	.357*	.000	.581	1.722
Organizational incentives	.130	.093	.826	1.210
Management support	-.059	.478	.712	1.405
F value	15.37			
R^2	.30			
Adjusted R^2	.28			
Durbin Watson	1.97			

**p< 0.05; *p<0.01

4.7 Hierarchical Regression Analysis

4.7.1 Test of Moderation

The three step of hierarchical regression analysis was done to test the hypotheses that consist of the direct and moderating effects of knowledge sharing behavior among workers at SME Kedah. However, this study is including a moderator which is interpersonal trust. Moderation happens in the regression analysis when the relationship among the two variables is depends on the third variable which is referred to as a moderator (Cohen, Cohen, Leona & West, 2003). The effect of the moderator is characterized statistically as the interaction where it could affects the direction or strength of the relationship among dependent and the independent variables (Cohen, Cohen, Leona & West 2003).

As noted in Table 4.21, the analysis on knowledge sharing behavior revealed that the main effects of the sense of self-worth were significant ($p<.01$). Specifically, Step 2 was found to be not significant on the contribution of interpersonal trust ($p>.01$). The interaction between sense of self-worth and interpersonal trust was not found to be significant in step 3. Therefore, interpersonal trust was not found to be a moderator for the relationships between sense of self-worth and knowledge sharing behavior and hypothesis 5 was rejected. This result implies that trust does not influence the relationship between sense of self-worth and knowledge sharing behavior. In other words, if an individual feels it is worth to share knowledge with others, they don't take into account whether they trust or not the person that they shared the knowledge. To them, sharing knowledge is more important than thinking about the consequences that they will get by sharing the knowledge with others.

Table 4.21
Hierarchical Regression Analysis On Interpersonal Trust As Moderator In Relationship Between Sense Of Self-Worth And Knowledge Sharing Behavior

Variables	**Std Beta Step 1**	**Std Beta Step 2**	**Std Beta Step 3**
Independent variable			
Sense of self-worth	.445	.411	.098
Moderating variable			
Interpersonal Trust		.137	-.513
Interaction between variables			
Sense of self-worth x Knowledge sharing behavior			.793
R^2	.198	.216	.222
Adjusted R^2	.193	.205	.206
Change in R^2	.198	.018	.006
Significant change in F	36.118	3.262	1.070
Durbin Watson			1.868

In Table 4.22, step 1 was found to be significant ($p<.01$). Nevertheless, step 2 and 3 were not found to be significant ($p>.01$). The direct effects of the predictors significantly explained 25.7% of the variability knowledge sharing behavior. Therefore, interpersonal trust was not found to be a moderator for the relationships between attitudes and knowledge sharing behavior and hypotheses 6 was rejected. This results demonstrate that trust was not play a significant role in knowledge sharing when an individual possess positive attitudes about sharing knowledge with others. In other words, people normally would not think about whether they trust the person whom knowledge will be shared when they have such a positive attitude that sharing knowledge with others will create a better benefit for the organizations as a whole.

Table 4.22
Hierarchical Regression Analysis On Interpersonal Trust As Moderator In Relationship Between Attitude And Knowledge Sharing Behavior

Variables	**Std Beta Step 1**	**Std Beta Step 2**	**Std Beta Step 3**
Independent variable			
Attitude	.507	.486	-.022
Moderating variable			
Interpersonal Trust		.055	-.834
Interaction between variables			
Attitude x Knowledge sharing behavior			1.184
R^2	.257	.260	.271
Adjusted R^2	.252	.250	.256
Change in R^2	.257	.003	.011
Significant change in F	50.558	.511	2.221
Durbin Watson			2.072

In Table 4.23, step 1, 2, and 3 were not found to be significant (p>.01). The direct effects of the predictors namely, perceived organizational incentives have significantly explained 66% of the variability in knowledge sharing behavior. Contribution of interpersonal trust was not found to moderate the relationship between organizational incentives and knowledge sharing behavior and thus, hypotheses 7 was not supported. The results indicate that the interaction effects of organizational incentives and interpersonal trust has not added significant contribution in explaining the variation in knowledge sharing behavior. In other words, trust was not considered as important when incentives are involved in knowledge sharing context. One possible explanation for this might be participants in this study regards incentives as more important factor than looking at whether to trust

others before sharing the knowledge. As long as they get the incentives provided by the organization, they won't pay serious attention to the issue of trust.

Table 4.23
Hierarchical Regression Analysis On Interpersonal Trust As Moderator In Relationship Between Perceived Organizational Incentives And Knowledge Sharing Behavior

Variables	**Std Beta Step 1**	**Std Beta Step 2**	**Std Beta Step 3**
Independent variable			
Organizational incentives	.257	.190	.015
Moderating variable			
Interpersonal Trust		.158	-.011
Interaction between variables			
Organizational incentives x Knowledge sharing behavior			.294
R^2	.066	.087	.089
Adjusted R^2	.060	.074	.070
Change in R^2	.066	.020	.002
Significant change in F	10.357	3.252	.332
Durbin Watson			1.824

Based on Table 4.24, the analysis on knowledge sharing behavior revealed that the main effects on the management support were significant ($p<.01$). Specifically, Step 2 was found to be not significant on the contribution respect of interpersonal trust. However, the interaction between management support and interpersonal trust was not found to be significant in step 3. Therefore, interpersonal trust was not found to be a moderator for the relationships between management support and knowledge sharing behavior and hypotheses 8 was not supported. The results demonstrate that trust might not be as important as receiving support from the management when comes to sharing knowledge with others. To them, as long as they

continually received support from the management, they would not worry about the issue of trusting others when sharing the knowledge.

Table 4.24
Hierarchical Regression Analysis On Interpersonal Trust As Moderator In Relationship Between Management Support And Knowledge Sharing Behavior

Variables	**Std Beta Step 1**	**Std Beta Step 2**	**Std Beta Step 3**
Independent variable			
Management support	.233	.176	.105
Moderating variable			
Interpersonal Trust		.185	.079
Interaction between variables			
Management support x Knowledge sharing behavior			.146
R^2	.054	.085	.086
Adjusted R^2	.048	.073	.066
Change in R^2	.054	031	.000
Significant change in F	8.383	4.890	057
Durbin Watson			1.883

4.8 Conclusions

This chapter described the demographic characteristics of the 148 participants and the results of correlation and regression analyses. The results indicated that individual factor such as sense of self-worth and attitudes, and organization factor such as perceived organizational incentives and management support have significant positive relationship with knowledge sharing behavior. However, only individual sense of self-worth and attitudes makes the strongest contribution to explain the knowledge sharing behavior. Interpersonal trust was also not found to moderate the relationship between all the variables tested. The research implications, limitations and direction for future research are discussed in the next chapter, Chapter 5.

CHAPTER 5

RESEARCH IMPLICTIONS, RECOMMENDATIONS AND CONCLUSIONS

5.1 Introduction

In this concluding chapter, summary of research is first discussed. It then followed by the discussions on the research implications which include theoretical and practical implications. The chapter ends with a discussion on the limitations and direction for future research.

5.2 Summary of Research

The main objective of this study is to investigate factors that might influence knowledge sharing behavior among employees at Bumiputra SMEs. Specifically, the study was interested to test the relationship between individual factors such as sense of self-worth and attitudes and organizational factors such as organizational incentives and management support and knowledge sharing behavior. Interpersonal trust was also tested as a moderator in the relationship between sense of self-worth and knowledge sharing behavior, between attitudes and knowledge sharing behavior, between organizational incentives and knowledge sharing behavior and between management support and knowledge sharing behavior.

In this study, the hypotheses were tested using multiple regression analysis and hierarchical regression analysis. Multiple regression analysis was used to test hypotheses 1 to 4. Results indicate that only sense of self-worth and attitudes were found to be positively associated with knowledge sharing behavior. Therefore, only hypotheses 1 and 2 were supported. Results from hierarchical regression analysis revealed that interpersonal trust was found not moderate the relationship between sense of self-worth and knowledge sharing behavior, between attitude and knowledge sharing behavior, between organizational incentives and knowledge sharing behavior and between management support and knowledge sharing behavior. Therefore, hypotheses 5 to 8 were not supported.

5.3 Implications for Practice

The current research findings also have several implications for management. The research results demonstrate that knowledge sharing behavior was influence more by the individual factors rather than by the organizational factors. Since employees' attitude and feeling of self-worth contribute to knowledge sharing behavior, management of organization must find ways of motivating the employees and highlighting the benefits that they and the organization will gain through the knowledge sharing.

Interestingly, results from the study also revealed that organizational factors such as organizational incentives and management support might not be the best way to encourage employees to share their knowledge. Therefore, if the management of the organization plans to continue utilizing incentives as an effort to encourage their

employees to share knowledge, the incentives given must be attractive and relevant with the needs of the employees. Similarly, the kind of support provided by the management must also relevant with what the employees are expected.

In summary, the prescriptions discussed above are suggestive of the types of actions that management of the organization can take in encouraging their employees to share their knowledge. It is hoped that results from the study will encourage new thinking among the management. The research results reported in this study suggest the need for management to reconsider their effort in encouraging knowledge sharing at the workplace.

5.4 Limitations of Study and Directions for Future Research

There are limitations in the design of this study that might influence the interpretations and generalizations of these findings. First, the study was conducted on only Bumiputra SMEs. Thus, the findings only captured perception of Malay employees regarding the knowledge sharing behavior issues and cannot be generalized to other races. Secondly, the study only tested few individual and organizational factors. Based on the regression analysis, the model only explained thirty percent of the variance in knowledge sharing behavior. Therefore, there is a need for future research to extend the exploration of knowledge sharing behavior on other types of industries involving other races and involving other variables such as types of medium for knowledge sharing, technological factors and human resource practices.

5.5 Conclusions

The aim of this study was to examine the factors that influence knowledge sharing behavior. The results indicate that individual factors such as sense of self-worth and attitudes were related to knowledge sharing behavior. Since the study was conducted at Bumiputra SMEs only, the findings must be interpreted with cautious and cannot be generalized to represent other organization. It is hoped that through the examination of the factors that influence knowledge sharing behavior, a more complete understanding of the kind of effort needed to enhance knowledge sharing will be achieved.

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APPENDIX A

Universiti Utara Malaysia

KAJIAN TENTANG GELAGAT PERKONGSIAN PENGETAHUAN

Tuan/Puan yang dihormati,

Terima kasih di atas persetujuan anda untuk menyertai penyelidikan tentang gelagat perkongsian pengetahuan.

Saya amat menghargai sekiranya anda dapat menjawab soalan dengan berhati-hati kerana maklumat yang anda beri akan mempengaruhi ketepatan dan kejayaan penyelidikan ini. Ia akan mengambil masa tidak lebih daripada 30 minit untuk menyiapkan soal selidik ini. Kesemua jawapan akan dianggap sebagai sulit dan hanya akan digunakan untuk tujuan kajian ini sahaja.

Sekiranya anda mempunyai apa-apa persoalan mengenai penyelidikan ini, anda boleh kemukakan kepada saya, Ain Zuraini binti Zin Aris seperti alamat di bawah.

Terima kasih di atas kerjasama yang diberi dan masa yang diambil untuk menjawab soal selidik ini.

Yang benar,

Ain Zuraini binti Zin Aris
Pelajar Pascasiswazah
Othman Yeop Abdullah Graduate School of Business
Universiti Utara Malaysia
Email: ain.tOen@yahoo.com
HP: 016-2062640

BAHAGIAN SATU

ARAHAN: *Sila baca pernyataan berikut dan nyatakan* **TAHAP PERSETUJUAN** *anda dengan membulatkan nombor yang bersesuaian menggunakan skala berikut.*

		Sangat tidak setuju	Tidak setuju	Neutral	Setuju	Sangat Setuju
1.	Saya berkongsi pengetahuan berkaitan kerja (*know-what*) dengan rakan sekerja.	1	2	3	4	5
2.	Saya berkongsi pengetahuan perniagaan seperti pelanggan, produk, pembekal dan pesaing dengan rakan sekerja.	1	2	3	4	5
3.	Saya berkongsi laporan dalaman dan dokumen rasmi yang lain dengan rakan sekerja.	1	2	3	4	5
4.	Saya berkongsi pengalaman kerja dengan rakan sekerja.	1	2	3	4	5
5.	Saya berkongsi kepakaran daripada pembelajaran atau latihan dengan rakan sekerja.	1	2	3	4	5
6.	Saya berkongsi pengetahuan berkaitan kerja (know-why) dengan rakan sekerja.	1	2	3	4	5

BAHAGIAN DUA

ARAHAN: *Sila baca pernyataan berikut dan nyatakan* **TAHAP PERSETUJUAN** *anda dengan membulatkan nombor yang bersesuaian menggunakan skala berikut.*

		Sangat tidak setuju	Tidak setuju	Neutral	Setuju	Sangat setuju
1.	Dengan berkongsi pengetahuan yang saya ada dengan ahli lain dalam organisasi akan dapat membantu menyelesaikan masalah.	1	2	3	4	5
2.	Dengan berkongsi pengetahuan yang saya ada akan mewujudkan peluang perniagaan baru bagi organisasi.	1	2	3	4	5
3.	Dengan berkongsi pengetahuan yang saya ada akan dapat memperbaiki proses kerja dalam organisasi.	1	2	3	4	5
4.	Dengan berkongsi pengetahuan yang saya ada akan dapat meningkatkan produktiviti dalam organisasi.	1	2	3	4	5
5.	Dengan berkongsi pengetahuan yang saya ada akan dapat membantu organisasi mencapai objektif prestasinya.	1	2	3	4	5
6.	Saya berasa sangat bermanfaat sekiranya saya berkongsi pengetahuan dengan ahli-ahli lain.	1	2	3	4	5
7.	Saya berasa sangat gembira sekiranya saya berkongsi pengetahuan dengan ahli-ahli yang lain.	1	2	3	4	5
8.	Saya berasa sangat teruja sekiranya saya berkongsi pengetahuan dengan ahli-ahli yang lain.	1	2	3	4	5
9.	Ia adalah satu langkah yang bijak jika saya berkongsi pengetahuan dengan ahli-ahli yang lain.	1	2	3	4	5

	Sangat tidak setuju	Tidak setuju	Neutral	Setuju	Sangat setuju
10. Bagi saya, berkongsi pengetahuan dengan rakan sekerja adalah tidak selamat.	1	2	3	4	5
11. Bagi saya, berkongsi pengetahuan dengan rakan sekerja adalah baik.	1	2	3	4	5
12. Bagi saya, berkongsi pengetahuan dengan rakan sekerja adalah sia-sia.	1	2	3	4	5
13. Bagi saya, berkongsi pengetahuan dengan rakan sekerja adalah satu tindakan yang bijak.	1	2	3	4	5

BAHAGIAN TIGA

ARAHAN: *Sila baca pernyataan berikut dan nyatakan* **TAHAP PERSETUJUAN** *anda dengan membulatkan nombor yang bersesuaian menggunakan skala berikut.*

	Sangat tidak setuju	Tidak setuju	Neutral	Setuju	Sangat setuju
1. Berkongsi pengetahuan dengan rakan sekerja akan meningkatkan keberangkalian saya dalam mendapatkan tugasan kerja yang lebih baik.	1	2	3	4	5
2. Berkongsi pengetahuan dengan rakan sekerja akan meningkatkan keberangkalian saya mendapatkan kenaikan pangkat.	1	2	3	4	5
3. Berkongsi pengetahuan dengan rakan sekerja akan meningkatkan keberangkalian saya mendapatkan gaji yang lebih tinggi.	1	2	3	4	5
4. Berkongsi pengetahuan dengan rakan sekerja akan meningkatkan keberangkalian saya mendapatkan bonus.	1	2	3	4	5
5. Saya berharap akan mendapat jaminan pekerjaan yang lebih baik apabila saya berkongsi pengetahuan dengan rakan sekerja.	1	2	3	4	5
6. Pengurus atasan berpendapat bahawa menggalakkan perkongsian pengetahuan dengan rakan sekerja adalah berfaedah.	1	2	3	4	5
7. Pengurus atasan sentiasa memberi sokongan dan galakan kepada pekerja untuk berkongsi pengetahuan dengan rakan sekerja mereka.	1	2	3	4	5
8. Pengurus atasan menyediakan bantuan dan sumber yang diperlukan bagi membolehkan pekerja untuk berkongsi pengetahuan.	1	2	3	4	5
9. Pengurus atasan sangat bersungguh untuk melihat pekerja gembira berkongsi pengetahuan dengan rakan sekerja mereka.	1	2	3	4	5

BAHAGIAN EMPAT

ARAHAN: *Sila baca pernyataan berikut dan nyatakan* **TAHAP PERSETUJUAN** *anda dengan membulatkan nombor yang bersesuaian menggunakan skala berikut.*

		Sangat tidak setuju	Tidak setuju	Neutral	Setuju	Sangat setuju
1.	Saya menganggap rakan sekerja sebagai orang yang saya boleh percayai.	1	2	3	4	5
2.	Saya menganggap rakan sekerja sebagai orang yang saya boleh bergantung dalam melakukan apa yang betul.	1	2	3	4	5
3.	Saya menganggap rakan sekerja sebagai orang yang saya boleh bergantung dalam menjalankan kerja dengan betul.	1	2	3	4	5
4.	Saya menganggap rakan sekerja sebagai orang yang sentiasa setia.	1	2	3	4	5
5.	Saya menganggap rakan sekerja sebagai orang yang saya yakini.	1	2	3	4	5

APPENDIX A

MAKLUMAT DEMOGRAFI

Bahagian ini mengandungi beberapa makumat umum mengenai diri sendiri. Sila tandakan (√) di dalam kotak yang sesuai atau isi ruang kosong yang disediakan.

1. Jantina saya:

☐ Lelaki ☐ Perempuan

2. Umur saya:

[ ] Bawah 20 tahun
[ ] 21– 30 tahun
[ ] 31 – 40 tahun
[ ] 41 – 50 tahun
[ ] 51 tahun dan ke atas

3. Status perkahwinan saya:

☐ Bujang ☐ Berkahwin ☐ Bercerai / Berpisah / Duda

4. Kelayakan tertinggi saya:

[ ] PMR
[ ] Sijil
[ ] SPM
[ ] Ijazah
[ ] Lain-lain (sila nyatakan): _____

5. Gaji bulanan saya:

[ ] RM 900 dan ke bawah
[ ] RM 901 – RM 1500
[ ] RM 1500 dan ke atas

6. Bilangan tahun bersama organisasi sekarang:

☐	Kurang dari setahun	☐	1 – 3 tahun
☐	4 – 7 tahun	☐	Lebih daripada 7 tahun

7. Jawatan semasa saya: _____

8. Jenis Perusahaan Kecil dan Sederhana

☐	Pembinaan	☐	Perlombongan dan kuari
☐	Perkilangan (termasuk asas tani)	☐	Pertanian utama
☐	Perkilangan perkhidmatan berkaitan	☐	Perkhidmatan (Termasuk ICT)
☐	Lain-lain, sila nyatakan: _____		

------TERIMA KASIH DI ATAS KERJASAMA ANDA----

SPSS Output

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GET
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DATASET NAME DataSet1 WINDOW=FRONT.
FREQUENCIES VARIABLES=Jantina Umur Status Kelayakan Gaji Biltahun PKS
  /STATISTICS=MINIMUM MAXIMUM
  /ORDER=ANALYSIS.
```

Frequencies

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Statistics

		Jantina	Umur	Status	Kelayakan	Gaji bulanan
N	Valid	148	148	148	148	148
	Missing	0	0	0	0	0
Minimum		1.00	1.00	1.00	1.00	1.00
Maximum		2.00	5.00	3.00	5.00	3.00

Statistics

		Bilangan tahun bersama organisasi sekarang	Jenis PKS
N	Valid	148	148
	Missing	0	0
Minimum		1.00	1.00
Maximum		4.00	7.00

Frequency Table

Jantina

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Lelaki	79	53.4	53.4	53.4
	Perempuan	69	46.6	46.6	100.0
	Total	148	100.0	100.0	

Umur

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bawah 20 tahun	8	5.4	5.4	5.4
	21 - 30 tahun	72	48.6	48.6	54.1
	31 - 40 tahun	42	28.4	28.4	82.4
	41 - 50	20	13.5	13.5	95.9
	51 tahun dan ke atas	6	4.1	4.1	100.0
	Total	148	100.0	100.0	

Jenis PKS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Pembinaan	12	8.1	8.1	8.1
	Perlombongan dan kuari	6	4.1	4.1	12.2
	Perkilangan (termasuk asas tani)	26	17.6	17.6	29.7
	Pertanian utama	9	6.1	6.1	35.8
	Perkilangan perkhidmatan berkaitan	35	23.6	23.6	59.5
	Perkhidmatan (termasuk ICT)	24	16.2	16.2	75.7
	Lain- lain	36	24.3	24.3	100.0
	Total	148	100.0	100.0	

```
MVA VARIABLES=KSB2 KSB3 KSB4 KSB5 KSB6 IF2 IF3 IF4 IF5 IF6 IF7 IF8 IF9 IFF1
0 IF11 IFF12 IF13 OF2 OF3 OF4 OF5 OF6 OF7 OF8 OF9 IT2 IT3 IT4 IT5 IF1 OF1 I
T1 Gender Age Status Qualification Income Jobtenure SME
  /MAXCAT=25
  /ID=KSB1
  /CATEGORICAL=Gender Age Status Qualification Income Jobtenure SME
  /TTEST PROB PERCENT=5
  /CROSSTAB PERCENT=5
  /TPATTERN PERCENT=5
  /LISTWISE
  /PAIRWISE
  /EM(TOLERANCE=0.001 CONVERGENCE=0.0001 ITERATIONS=100)
  /REGRESSION(TOLERANCE=0.001 FLIMIT=4.0 NPREDICTORS=1 ADDTYPE=RESIDUAL).
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MVA

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Warnings

There are no missing values. The t statistics are not computed.
There are no variables with 5% or more missing values. CROSSTAB tables are not produced.
There are no missing values. TPATTERN is not produced.
There are no missing values. EM estimates are not computed.
There are no missing values. Regression estimates are not computed.

Univariate Statistics

	N	Mean	Std. Deviation	Missing		No. of Extremes [b]	
				Count	Percent	Low	High
KSB2	148	3.7905	.85915	0	.0	0	0
KSB3	148	2.8784	1.08738	0	.0	0	0
KSB4	148	4.1757	.74429	0	.0	6	0
KSB5	148	4.1216	.61617	0	.0	.	.
KSB6	148	4.0878	.68937	0	.0	3	0
IF2	148	3.8986	.66741	0	.0	0	0
IF3	148	4.0541	.59228	0	.0	.	.
IF4	148	4.1149	.63378	0	.0	0	0
IF5	148	4.0270	.63830	0	.0	.	.
IF6	148	4.1689	.70362	0	.0	0	0
IF7	148	4.0541	.76295	0	.0	3	0
IF8	148	3.6757	.85090	0	.0	3	0
IF9	148	4.1081	.64031	0	.0	0	0
IFF10	148	2.2500	1.12410	0	.0	0	0
IF11	148	4.0135	.74675	0	.0	.	.
IFF12	148	1.8919	.93412	0	.0	0	14
IF13	148	4.0405	.72729	0	.0	2	0
OF2	148	2.9797	.87652	0	.0	0	0
OF3	148	2.8851	.94418	0	.0	0	0
OF4	148	2.8311	.96460	0	.0	0	8
OF5	148	3.3919	.93048	0	.0	5	0
OF6	148	4.0203	.65434	0	.0	.	.
OF7	148	3.9324	.74379	0	.0	.	.
OF8	148	3.6892	.75459	0	.0	0	0
OF9	148	3.7905	.81025	0	.0	0	0
IT2	148	3.2027	.95447	0	.0	0	0
IT3	148	3.2905	.97068	0	.0	8	0
IT4	148	3.0000	.88832	0	.0	0	0
IT5	148	3.1757	.94557	0	.0	8	0
IF1	148	4.1892	.62107	0	.0	0	0
OF1	148	3.7703	.83377	0	.0	0	0
IT1	148	3.3581	.85722	0	.0	0	0
Gender	148			0	.0		
Age	148			0	.0		
Status	148			0	.0		
Qualification	148			0	.0		
Income	148			0	.0		

```
EXAMINE VARIABLES=MeanKSB MeanIF MeanOF MeanIT
  /PLOT STEMLEAF HISTOGRAM NPPLOT
  /STATISTICS DESCRIPTIVES
  /CINTERVAL 95
  /MISSING LISTWISE
  /NOTOTAL.
```

Explore

```
[DataSet1] C:\Users\Ain\Google Drive\Thesis\SPSS\Actual Test_1.sav
```

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
MeanKSB	148	100.0%	0	.0%	148	100.0%
MeanIF	148	100.0%	0	.0%	148	100.0%
MeanOF	148	100.0%	0	.0%	148	100.0%
MeanIT	148	100.0%	0	.0%	148	100.0%

Descriptives

			Statistic	Std. Error
MeanKSB	Mean		3.8829	.03847
	95% Confidence Interval for Mean	Lower Bound	3.8069	
		Upper Bound	3.9589	
	5% Trimmed Mean		3.8884	
	Median		3.8333	
	Variance		.219	
	Std. Deviation		.46797	
	Minimum		2.50	
	Maximum		5.00	
	Range		2.50	
	Interquartile Range		.50	
	Skewness		-.216	.199
	Kurtosis		.652	.396
MeanIF	Mean		3.7297	.03171
	95% Confidence Interval for Mean	Lower Bound	3.6671	
		Upper Bound	3.7924	
	5% Trimmed Mean		3.7337	
	Median		3.7692	
	Variance		.149	
	Std. Deviation		.38576	
	Minimum		2.85	
	Maximum		4.54	
	Range		1.69	
	Interquartile Range		.38	
	Skewness		-.122	.199
	Kurtosis		-.324	.396

Descriptives

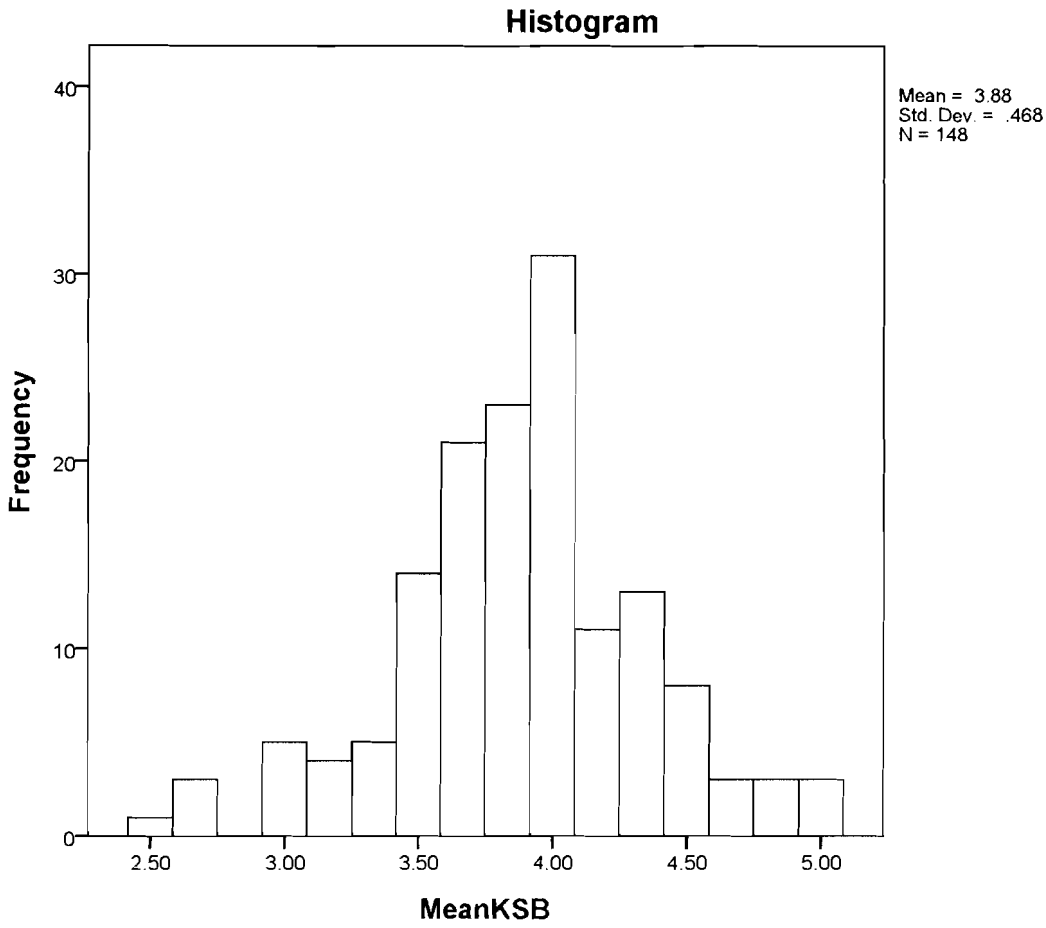
			Statistic	Std. Error
MeanOF	Mean		3.4767	.04734
	95% Confidence Interval for Mean	Lower Bound	3.3832	
		Upper Bound	3.5703	
	5% Trimmed Mean		3.4708	
	Median		3.4444	
	Variance		.332	
	Std. Deviation		.57586	
	Minimum		2.22	
	Maximum		5.00	
	Range		2.78	
	Interquartile Range		.89	
	Skewness		.082	.199
	Kurtosis		-.292	.396
MeanIT	Mean		3.2054	.06389
	95% Confidence Interval for Mean	Lower Bound	3.0792	
		Upper Bound	3.3317	
	5% Trimmed Mean		3.2231	
	Median		3.4000	
	Variance		.604	
	Std. Deviation		.77721	
	Minimum		1.20	
	Maximum		5.00	
	Range		3.80	
	Interquartile Range		1.20	
	Skewness		-.396	.199
	Kurtosis		-.325	.396

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
MeanKSB	.124	148	.000	.972	148	.004
MeanIF	.100	148	.001	.976	148	.012
MeanOF	.080	148	.022	.987	148	.187
MeanIT	.113	148	.000	.964	148	.001

a. Lilliefors Significance Correction

MeanKSB

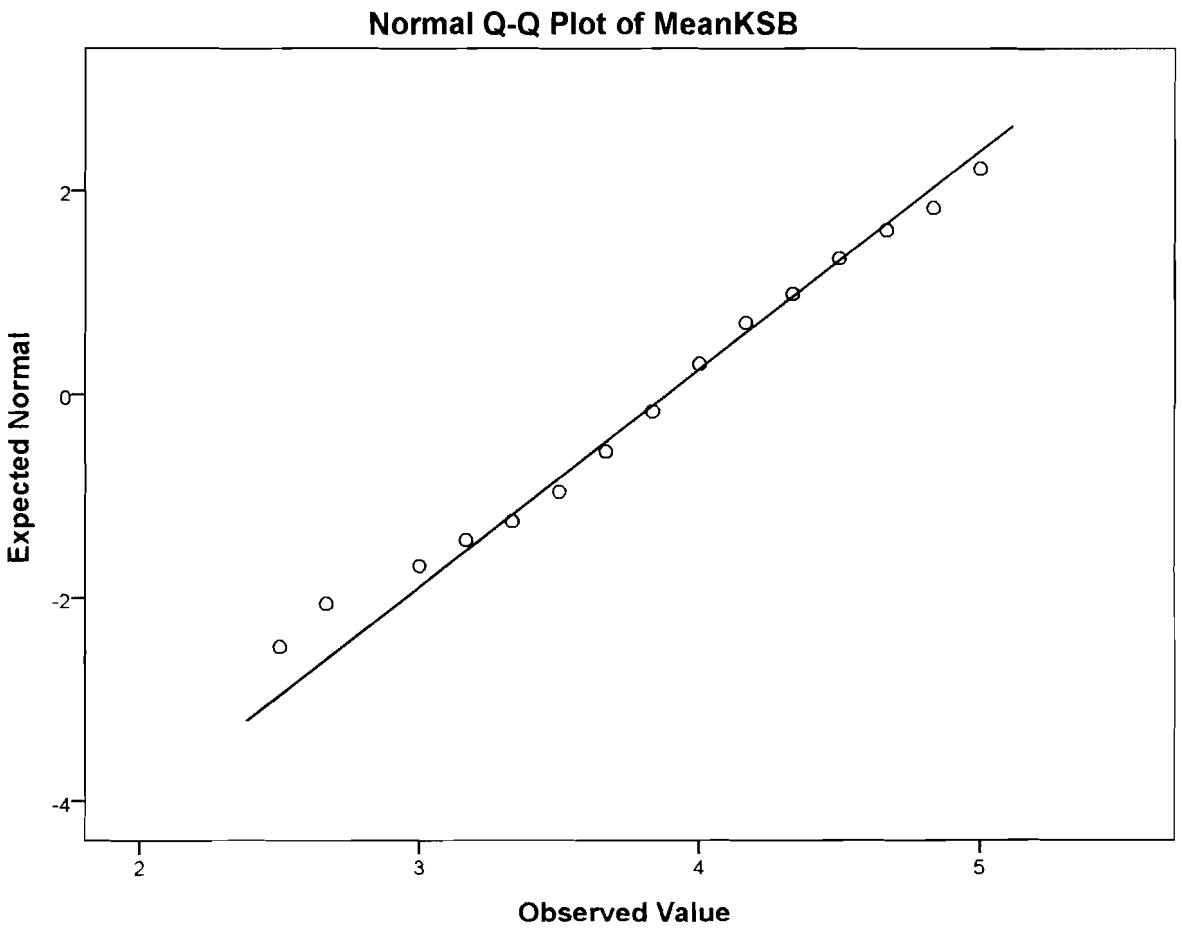


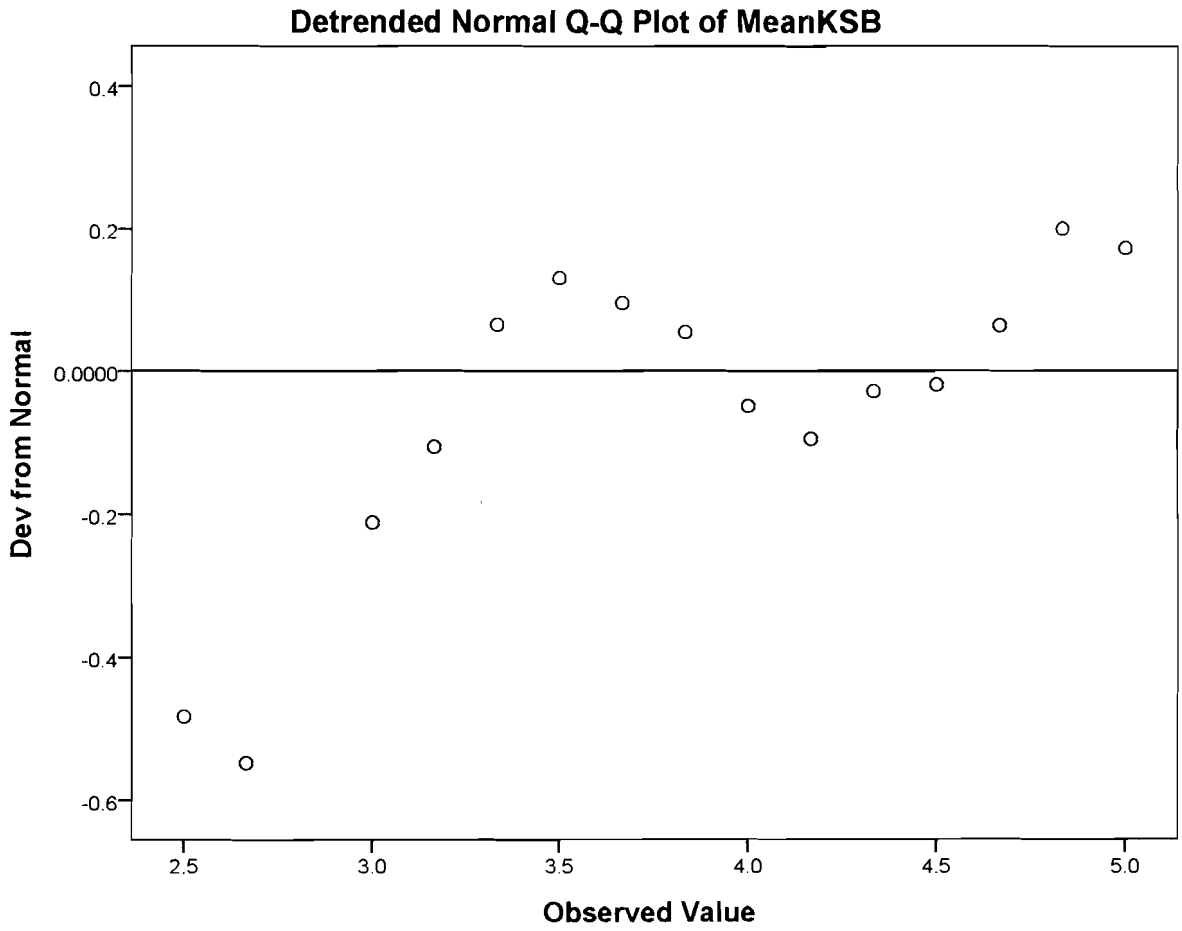
MeanKSB Stem-and-Leaf Plot

Frequency	Stem &	Leaf
4.00	Extremes	(=<2.67)
5.00	30 .	00000
4.00	31 .	6666
.00	32 .	
5.00	33 .	33333
.00	34 .	
14.00	35 .	00000000000000
21.00	36 .	666666666666666666666
.00	37 .	
23.00	38 .	33333333333333333333333
.00	39 .	
31.00	40 .	0000000000000000000000000000000
11.00	41 .	66666666666
.00	42 .	
13.00	43 .	3333333333333
.00	44 .	

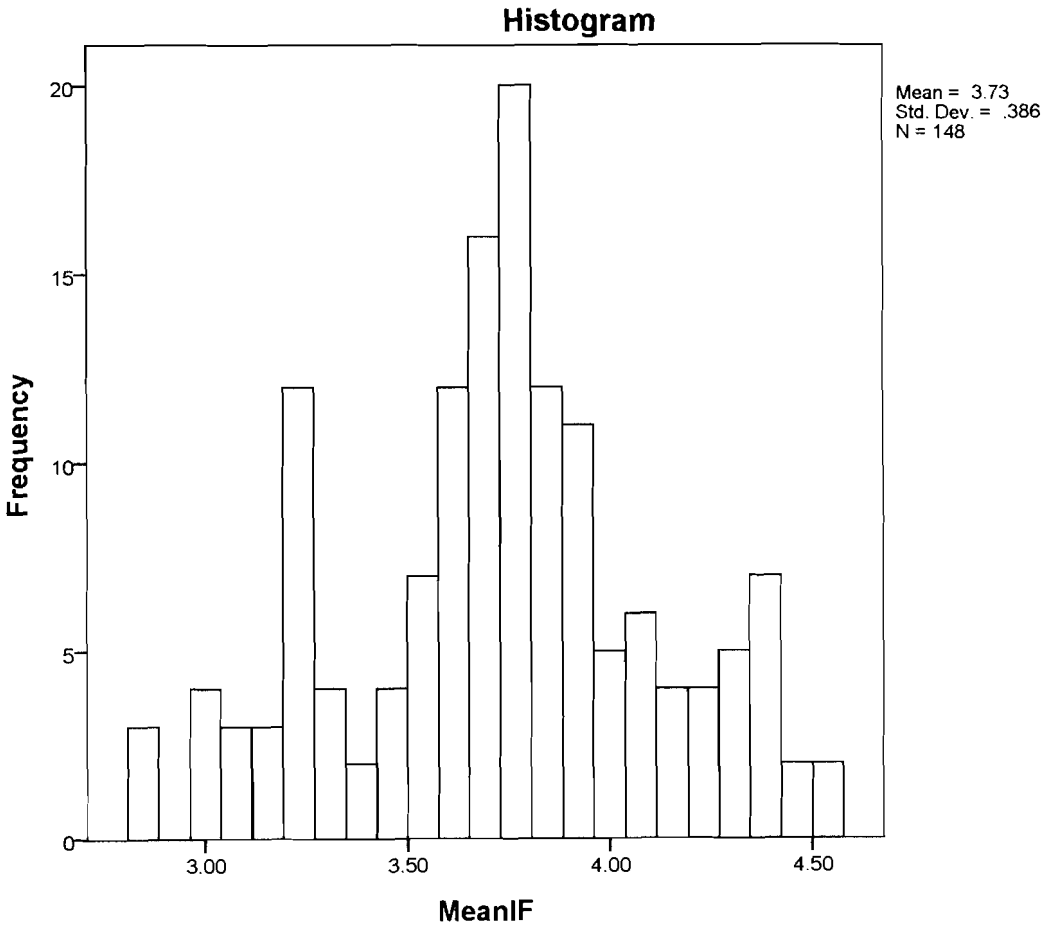
```
     8.00        45 .  00000000
     3.00        46 .  666
      .00        47 .
     3.00        48 .  333
     3.00 Extremes    (>=5.00)

Stem width:        .10
Each leaf:        1 case(s)
```




Detrended Normal Q-Q Plot of MeanKSB
Dev from Normal
0.4
0.2
0.0000
-0.2
-0.4
-0.6
2.5
3.0
3.5
4.0
4.5
5.0
Observed Value

MeanIF

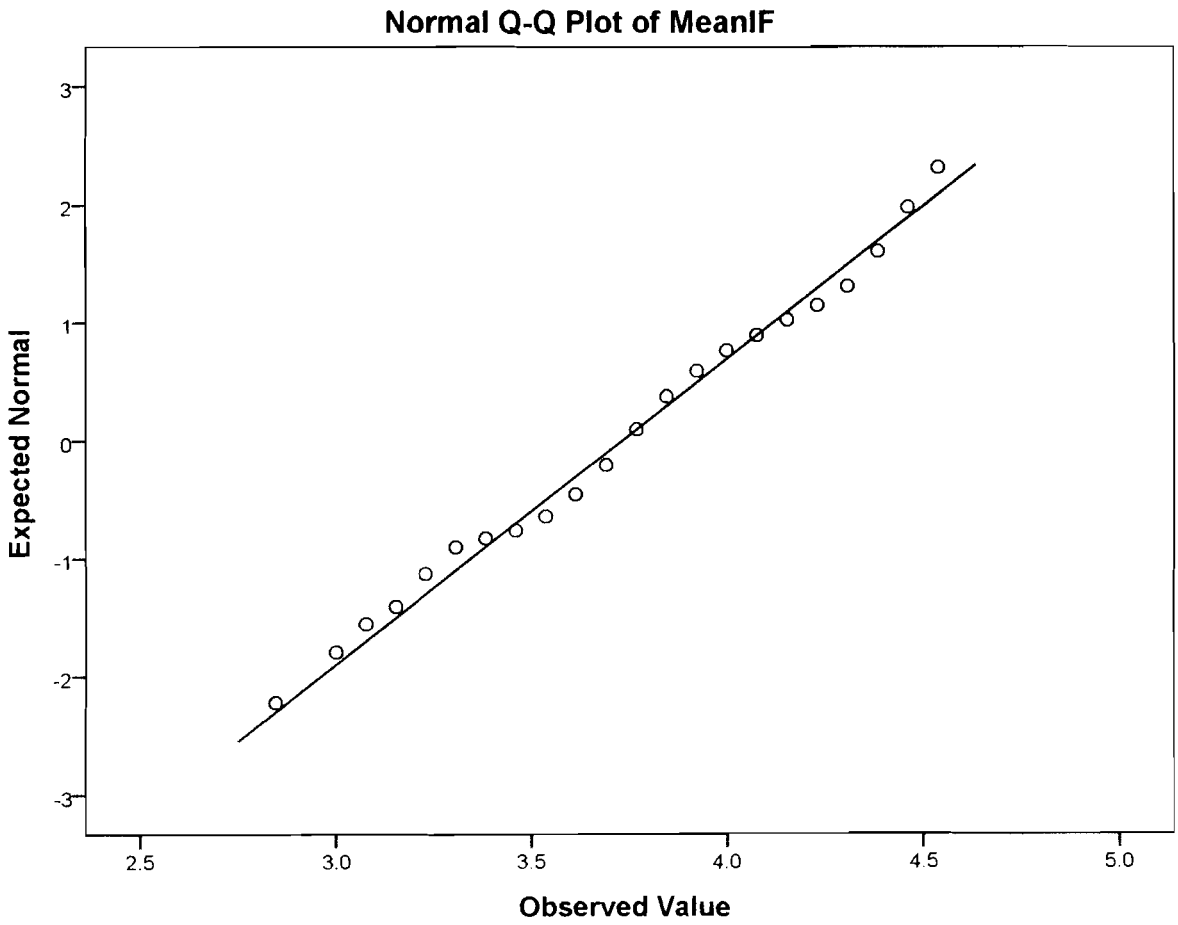


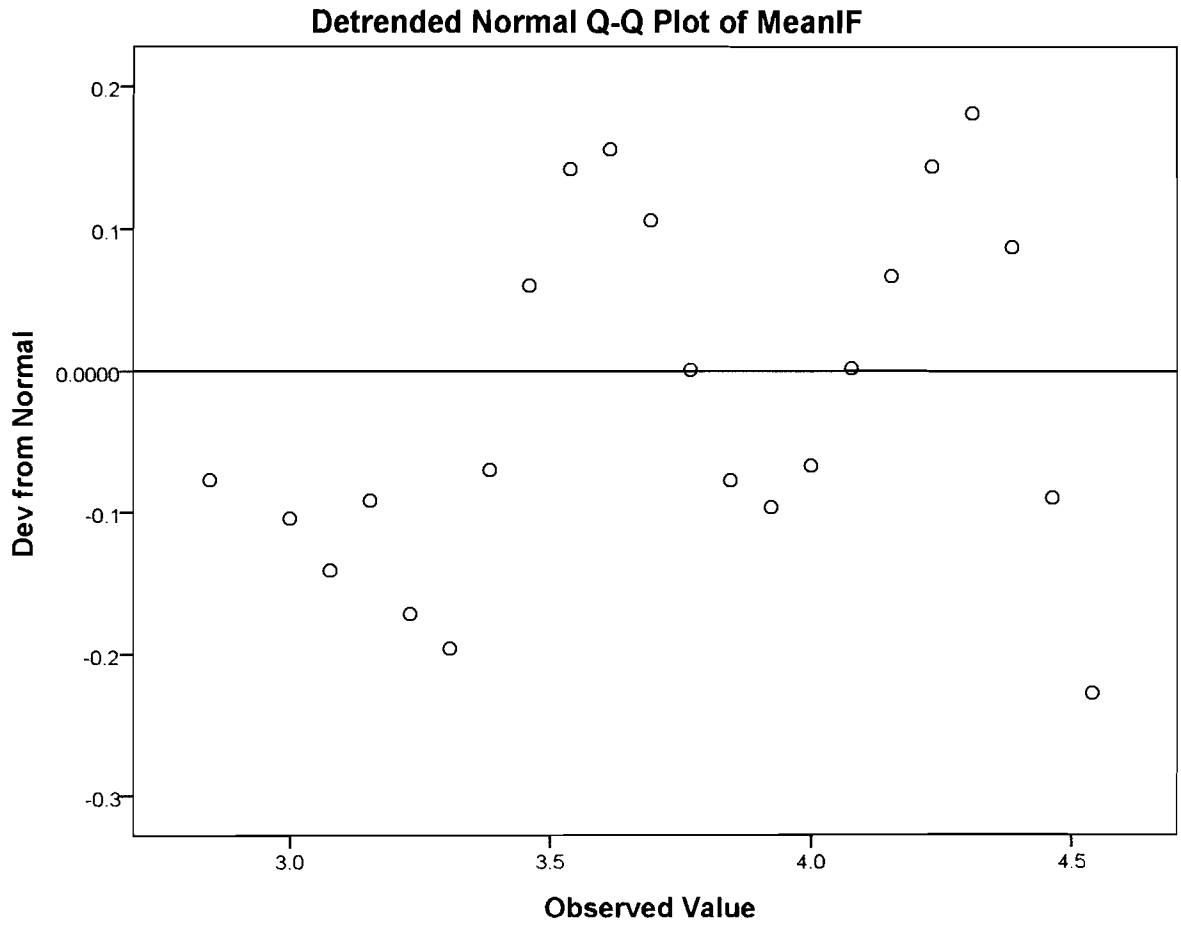
MeanIF Stem-and-Leaf Plot

Frequency	Stem &	Leaf
3.00	Extremes	(=<2.85)
7.00	30 .	0000777
3.00	31 .	555
12.00	32 .	333333333333
6.00	33 .	000088
4.00	34 .	6666
7.00	35 .	3333333
28.00	36 .	1111111111199999999999999999
20.00	37 .	66666666666666666666
12.00	38 .	444444444444
11.00	39 .	22222222222
11.00	40 .	00000777777
4.00	41 .	5555
4.00	42 .	3333
12.00	43 .	000008888888
2.00	44 .	66

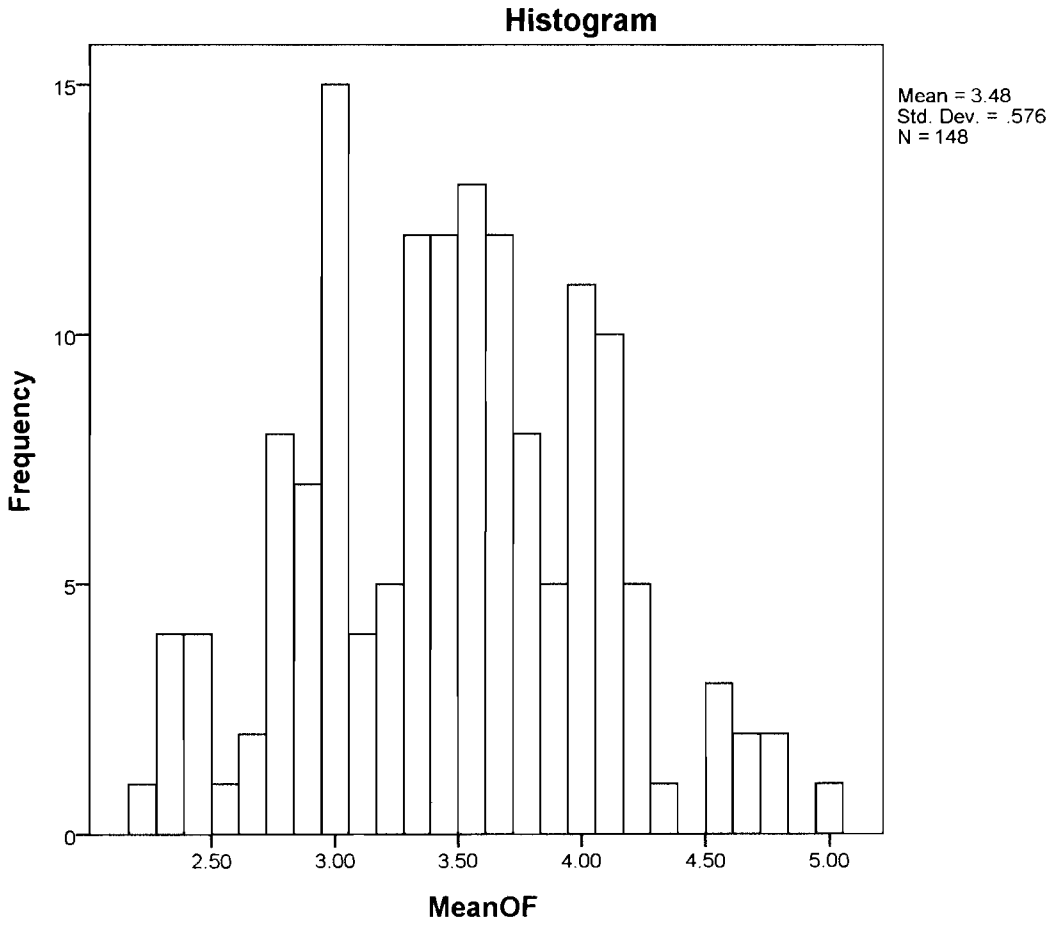
2.00 Extremes (>=4.54)

Stem width: .10
Each leaf: 1 case(s)




Detrended Normal Q-Q Plot of MeanIF
Dev from Normal
0.2
0.1
0.0000
-0.1
-0.2
-0.3
3.0
3.5
4.0
4.5
Observed Value

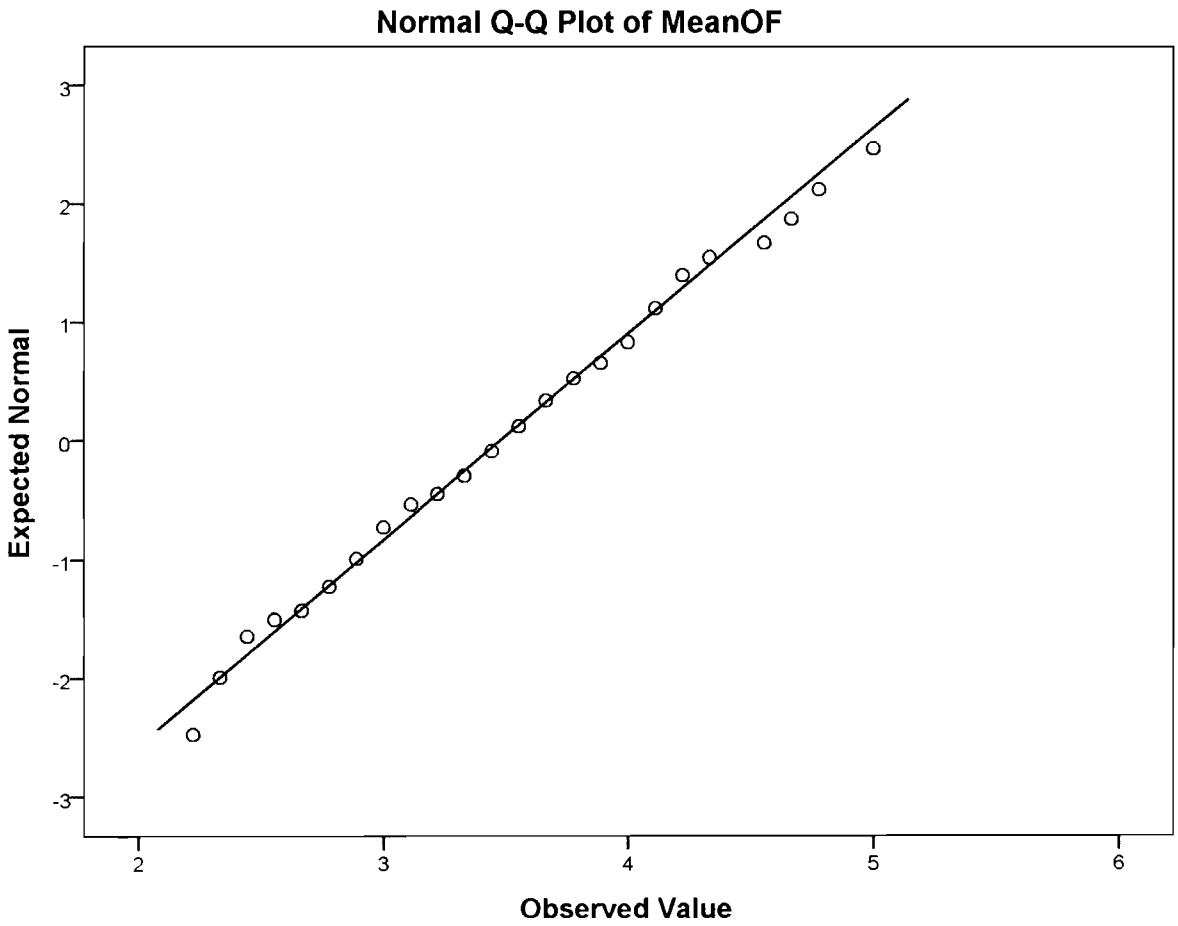
MeanOF

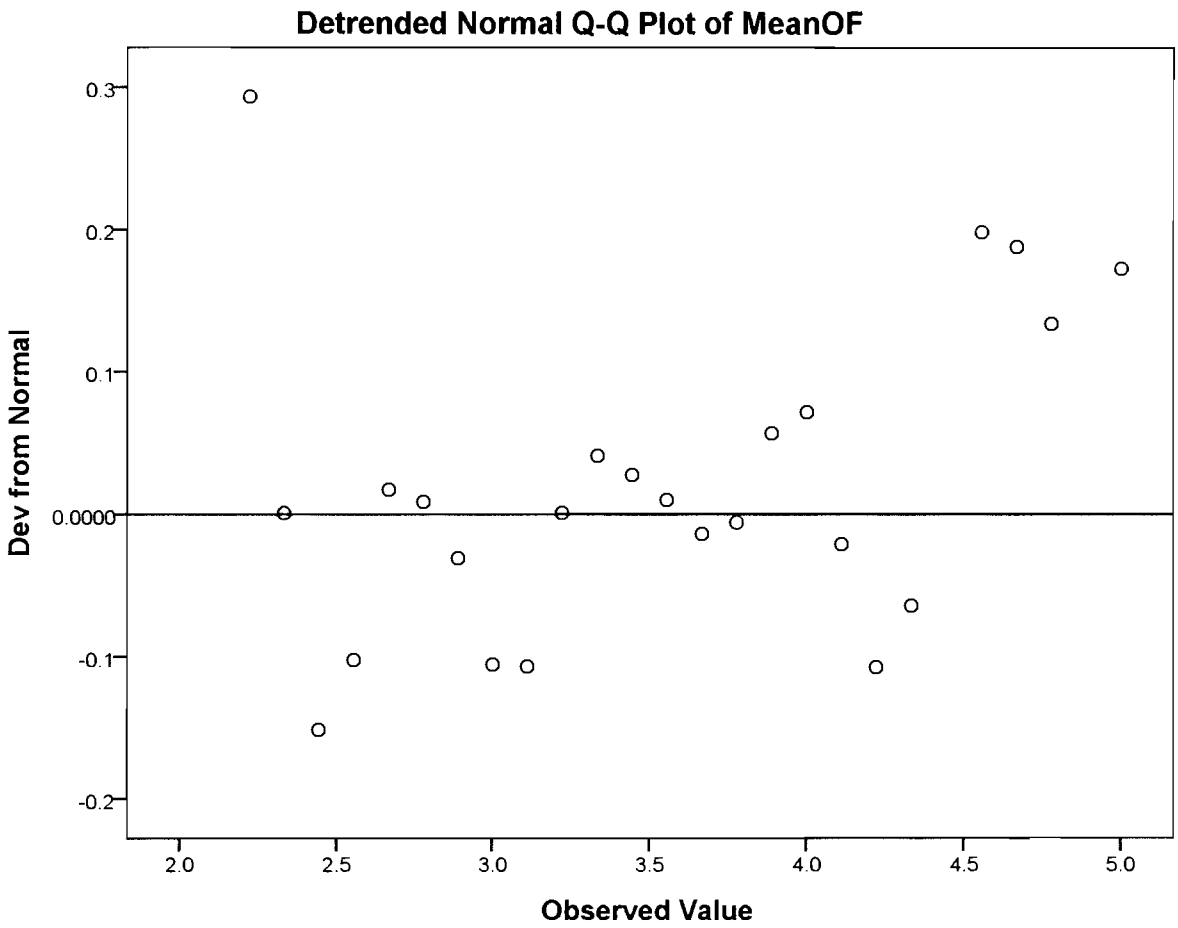


MeanOF Stem-and-Leaf Plot

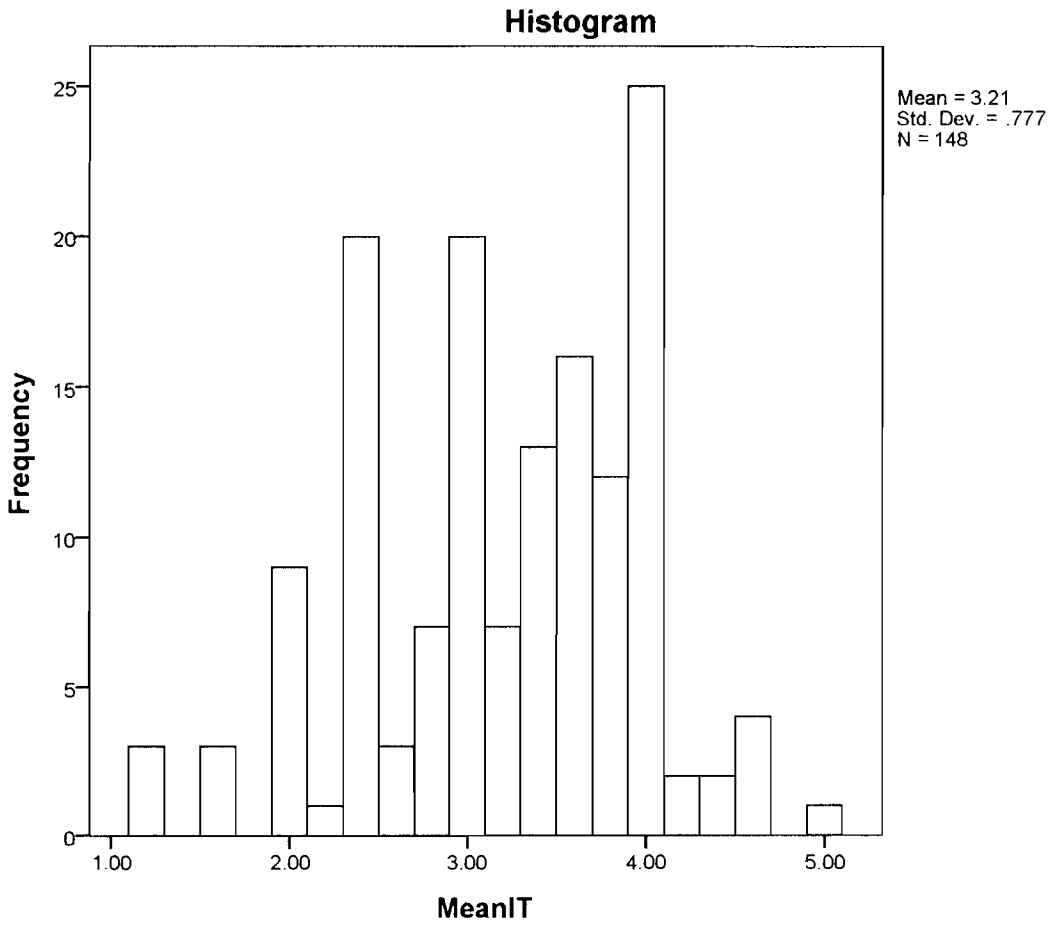
Frequency	Stem &	Leaf
5.00	2 .	23333
5.00	2 .	44445
10.00	2 .	6677777777
7.00	2 .	8888888
19.00	3 .	0000000000000001111
17.00	3 .	22222333333333333
25.00	3 .	4444444444445555555555555
20.00	3 .	66666666666677777777
5.00	3 .	88888
21.00	4 .	000000000001111111111
6.00	4 .	222223
3.00	4 .	555
4.00	4 .	6677
.00	4 .	
1.00	5 .	0

Stem width: 1.00
Each leaf: 1 case(s)




Detrended Normal Q-Q Plot of MeanOF
Dev from Normal
0.3
0.2
0.1
0.0000
-0.1
-0.2
2.0
2.5
3.0
3.5
4.0
4.5
5.0
Observed Value

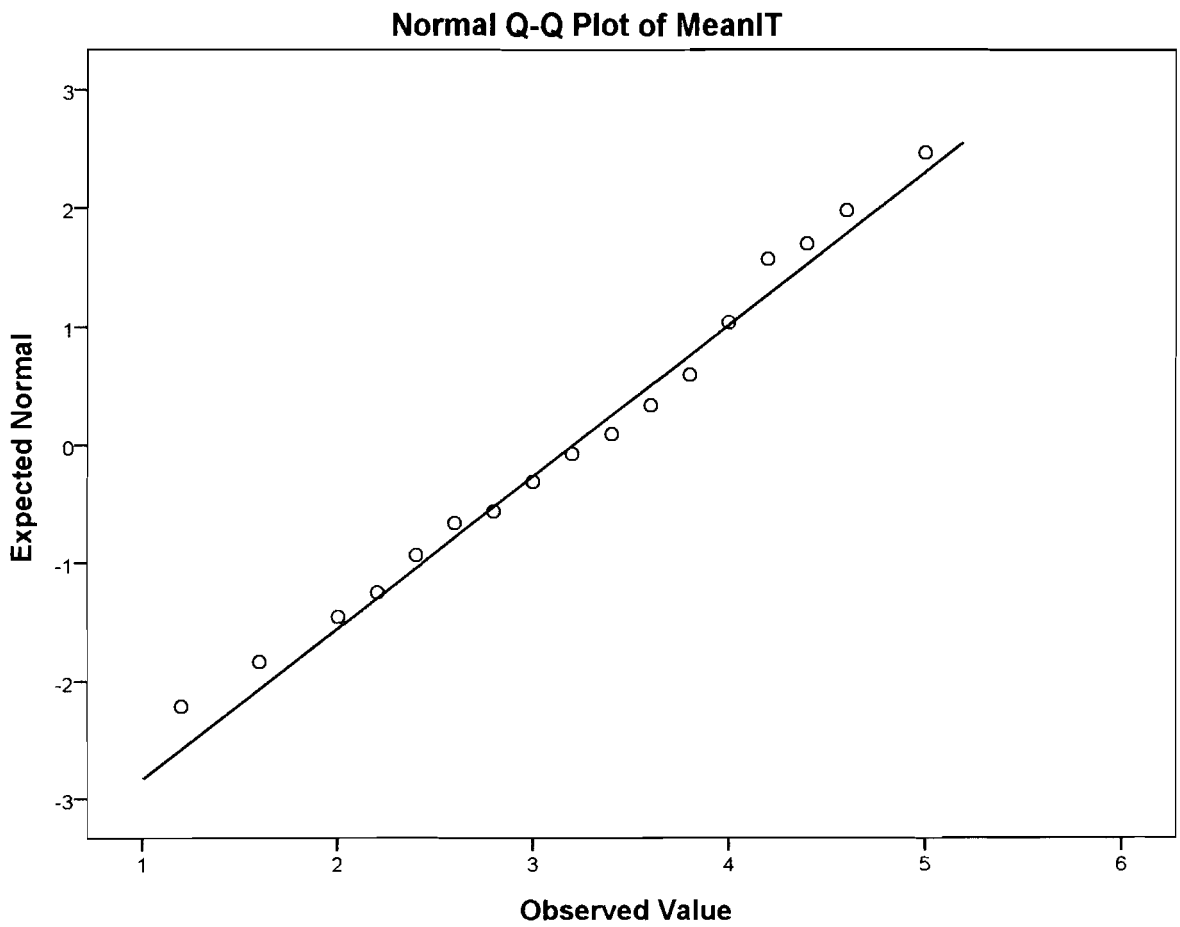
MeanIT

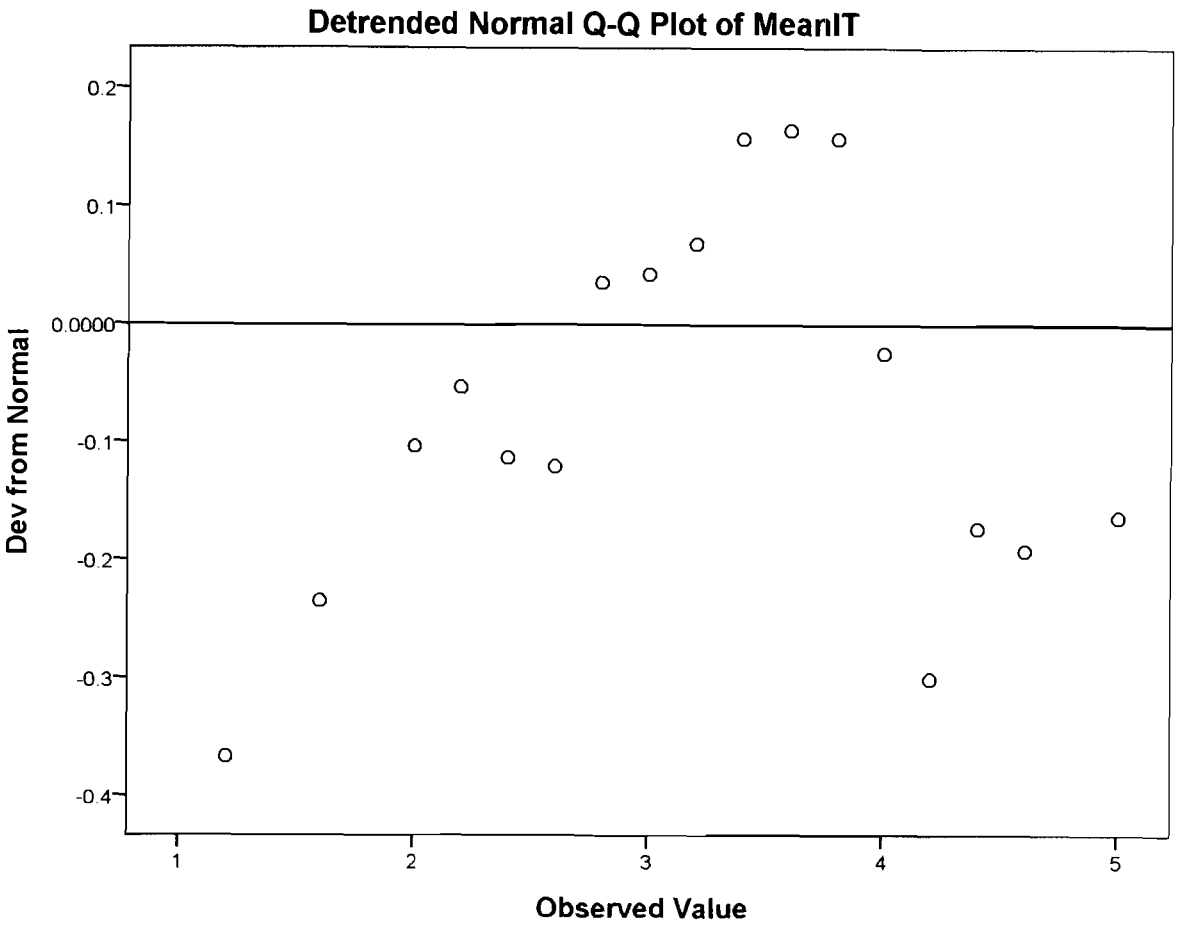


MeanIT Stem-and-Leaf Plot

Frequency	Stem &	Leaf
3.00	1 .	222
3.00	1 .	666
30.00	2 .	000000000244444444444444444444
10.00	2 .	6668888888
40.00	3 .	0000000000000000000022222244444444444444
28.00	3 .	6666666666666666888888888888
29.00	4 .	00000000000000000000000002244
4.00	4 .	6666
1.00	5 .	0

Stem width: 1.00
Each leaf: 1 case(s)


Normal Q-Q Plot of MeanIT
Expected Normal
3
2
1
0
-1
-2
-3
1
2
3
4
5
6
Observed Value


Detrended Normal Q-Q Plot of MeanIT
Dev from Normal
0.2
0.1
0.0000
-0.1
-0.2
-0.3
-0.4
1
2
3
4
5
Observed Value

```
ONEWAY MeanKSB BY Meansense
  /STATISTICS HOMOGENEITY
  /MISSING ANALYSIS.
```

Oneway

[DataSet1] C:\Users\Ain\Google Drive\Thesis\SPSS\Actual Test_1.sav

Test of Homogeneity of Variances

MeanKSB

Levene Statistic	df1	df2	Sig.
.636	10	137	.781

ANOVA

MeanKSB

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	9.758	10	.976	5.959	.000
Within Groups	22.434	137	.164		
Total	32.192	147			

```
EXAMINE VARIABLES=MeanKSB BY MeanAttitudes
  /PLOT=BOXPLOT
  /STATISTICS=NONE
  /NOTOTAL.
```

Explore

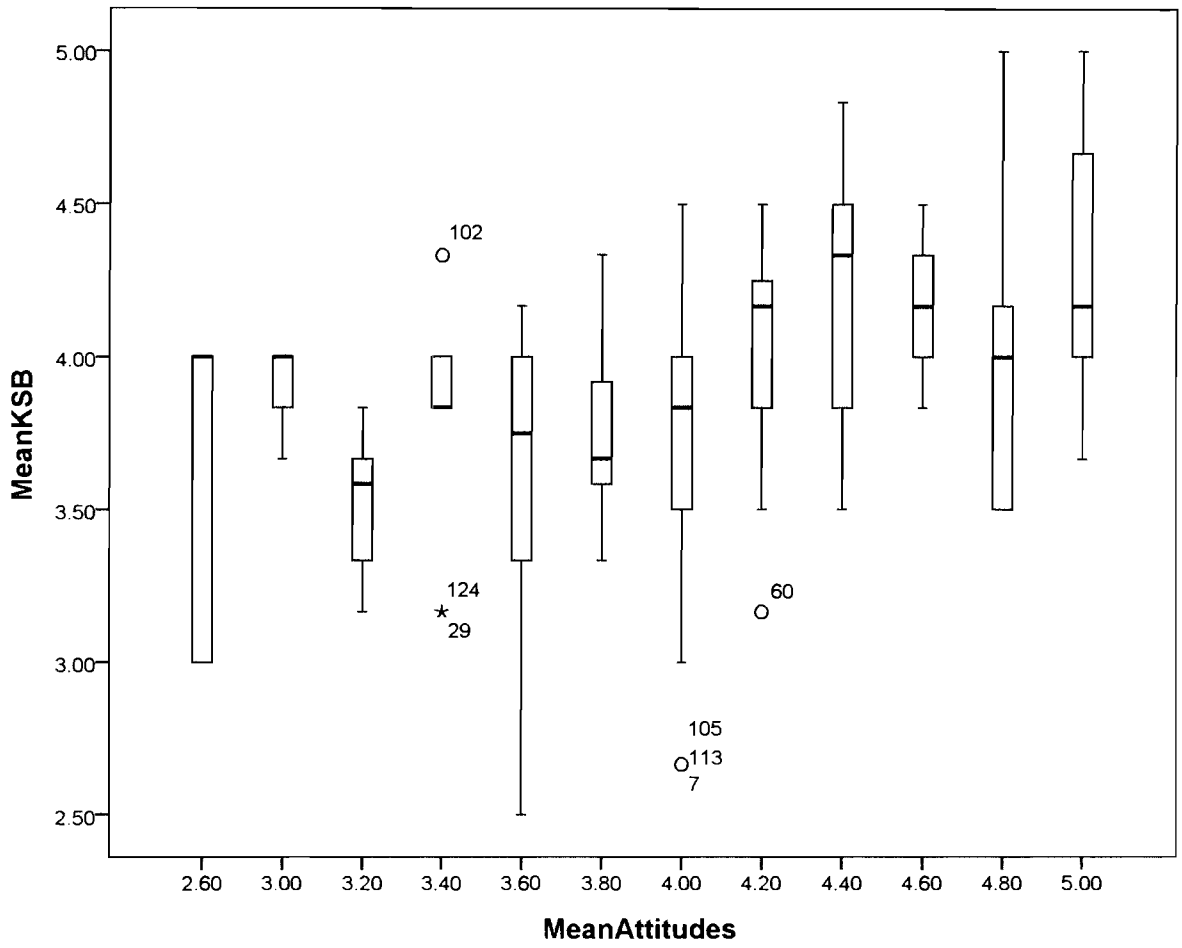
```
[DataSet1] C:\Users\Ain\Google Drive\Thesis\SPSS\Actual Test_1.sav
```

MeanAttitudes

Case Processing Summary

		Cases					
		Valid		Missing		Total	
	MeanAttitudes	N	Percent	N	Percent	N	Percent
MeanKSB	2.60	9	100.0%	0	.0%	9	100.0%
	3.00	3	100.0%	0	.0%	3	100.0%
	3.20	6	100.0%	0	.0%	6	100.0%
	3.40	9	100.0%	0	.0%	9	100.0%
	3.60	6	100.0%	0	.0%	6	100.0%
	3.80	23	100.0%	0	.0%	23	100.0%
	4.00	32	100.0%	0	.0%	32	100.0%
	4.20	15	100.0%	0	.0%	15	100.0%
	4.40	17	100.0%	0	.0%	17	100.0%
	4.60	9	100.0%	0	.0%	9	100.0%
	4.80	6	100.0%	0	.0%	6	100.0%
	5.00	13	100.0%	0	.0%	13	100.0%

MeanKSB




```
ONEWAY MeanKSB BY MeanAttitudes
  /STATISTICS HOMOGENEITY
  /MISSING ANALYSIS.
```

Oneway

[DataSet1] C:\Users\Ain\Google Drive\Thesis\SPSS\Actual Test_1.sav

Test of Homogeneity of Variances

MeanKSB

Levene Statistic	df1	df2	Sig.
1.917	11	136	.042

ANOVA

MeanKSB

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8.057	11	.732	4.128	.000
Within Groups	24.135	136	.177		
Total	32.192	147			

```
ONEWAY MeanKSB BY Meanincentive
  /STATISTICS HOMOGENEITY
  /MISSING ANALYSIS.
```

Oneway

[DataSet1] C:\Users\Ain\Google Drive\Thesis\SPSS\Actual Test_1.sav

Test of Homogeneity of Variances

MeanKSB

Levene Statistic	df1	df2	Sig.
2.790	15	131	.001

ANOVA

MeanKSB

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.823	16	.301	1.443	.132
Within Groups	27.369	131	.209		
Total	32.192	147			

```
ONEWAY MeanKSB BY Meansupport
  /STATISTICS HOMOGENEITY
  /MISSING ANALYSIS.
```

Oneway

[DataSet1] C:\Users\Ain\Google Drive\Thesis\SPSS\Actual Test_1.sav

Test of Homogeneity of Variances

MeanKSB

Levene Statistic	df1	df2	Sig.
1.293	10	136	.241

ANOVA

MeanKSB

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.575	11	.416	2.048	.028
Within Groups	27.617	136	.203		
Total	32.192	147			

```
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS COLLIN TOL
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT Meansupport
  /METHOD=ENTER MeanAttitudes Meansense Meanincentive.
```

Regression

[DataSet1] C:\Users\Ain\Google Drive\Thesis\SPSS\Actual Test_1.sav

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Meanincentive, Meansense, MeanAttitudes	.	Enter

a. All requested variables entered.
b. Dependent Variable: Meansupport

Coefficients[a]

Model		Unstandardized Coefficients	
		B	Std. Error
1	(Constant)	1.138	.382
	MeanAttitudes	.200	.092
	Meansense	.295	.110
	Meanincentive	.228	.061

Coefficients[a]

Model		Standardized Coefficients			Collinearity Statistics	
		Beta	t	Sig.	Tolerance	VIF
1	(Constant)		2.982	.003		
	MeanAttitudes	.196	2.161	.032	.599	1.670
	Meansense	.236	2.693	.008	.644	1.553
	Meanincentive	.278	3.727	.000	.890	1.124

a. Dependent Variable: Meansupport

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index
1	1	3.948	1.000
	2	.035	10.548
	3	.011	18.941
	4	.006	25.738

Collinearity Diagnostics[a]

Model	Dimension	Variance Proportions			
		(Constant)	MeanAttitudes	Meansense	Meanincentive
1	1	.00	.00	.00	.00
	2	.03	.02	.03	.97
	3	.53	.63	.00	.00
	4	.44	.34	.97	.02

a. Dependent Variable: Meansupport

```
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS COLLIN TOL
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT Meanincentive
  /METHOD=ENTER MeanAttitudes Meansense Meansupport.
```

Regression

```
[DataSet1] C:\Users\Ain\Google Drive\Thesis\SPSS\Actual Test_1.sav
```

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Meansupport, Meansense, MeanAttitudes	.	Enter

a. All requested variables entered.
b. Dependent Variable: Meanincentive

Coefficients[a]

Model		Unstandardized Coefficients	
		B	Std. Error
1	(Constant)	.916	.505
	MeanAttitudes	.287	.120
	Meansense	-.093	.146
	Meansupport	.385	.103

Coefficients[a]

Model		Standardized Coefficients			Collinearity Statistics	
		Beta	t	Sig.	Tolerance	VIF
1	(Constant)		1.813	.072		
	MeanAttitudes	.232	2.403	.018	.603	1.657
	Meansense	-.061	-.642	.522	.615	1.626
	Meansupport	.317	3.727	.000	.779	1.283

a. Dependent Variable: Meanincentive

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index
1	1	3.969	1.000
	2	.014	16.634
	3	.011	19.052
	4	.006	25.541

Collinearity Diagnostics[a]

Model	Dimension	Variance Proportions			
		(Constant)	MeanAttitudes	Meansense	Meansupport
1	1	.00	.00	.00	.00
	2	.03	.14	.05	.97
	3	.57	.55	.01	.03
	4	.40	.31	.94	.00

a. Dependent Variable: Meanincentive

```
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS COLLIN TOL
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT Meansense
  /METHOD=ENTER MeanAttitudes Meansupport Meanincentive.
```

Regression

[DataSet1] C:\Users\Ain\Google Drive\Thesis\SPSS\Actual Test_1.sav

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Meanincentive, Mean Attitudes, Meansupport	.	Enter

a. All requested variables entered.
b. Dependent Variable: Meansense

Coefficients[a]

Model		Unstandardized Coefficients	
		B	Std. Error
1	(Constant)	1.819	.249
	MeanAttitudes	.427	.060
	Meansupport	.162	.060
	Meanincentive	-.031	.048

Coefficients[a]

Model		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		Beta			Tolerance	VIF
1	(Constant)		7.295	.000		
	MeanAttitudes	.525	7.122	.000	.785	1.275
	Meansupport	.203	2.693	.008	.746	1.340
	Meanincentive	-.046	-.642	.522	.814	1.229

a. Dependent Variable: Meansense

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index
1	1	3.944	1.000
	2	.032	11.087
	3	.013	17.216
	4	.011	19.078

Collinearity Diagnostics[a]

Model	Dimension	Variance Proportions			
		(Constant)	MeanAttitudes	Meansupport	Meanincentive
1	1	.00	.00	.00	.00
	2	.06	.05	.03	.98
	3	.05	.39	.90	.01
	4	.90	.56	.08	.00

a. Dependent Variable: Meansense

```
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS COLLIN TOL
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT MeanAttitudes
  /METHOD=ENTER Meansupport Meanincentive Meansense.
```

Regression

```
[DataSet1] C:\Users\Ain\Google Drive\Thesis\SPSS\Actual Test_1.sav
```

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Meansense, Meanincentive , Meansupport	.	Enter

a. All requested variables entered.
b. Dependent Variable: MeanAttitudes

Coefficients[a]

Model		Unstandardized Coefficients	
		B	Std. Error
1	(Constant)	.492	.347
	Meansupport	.157	.073
	Meanincentive	.134	.056
	Meansense	.611	.086

Coefficients[a]

Model		Standardized Coefficients			Collinearity Statistics	
		Beta	t	Sig.	Tolerance	VIF
1	(Constant)		1.418	.158		
	Meansupport	.160	2.161	.032	.734	1.363
	Meanincentive	.166	2.403	.018	.844	1.185
	Meansense	.496	7.122	.000	.829	1.206

a. Dependent Variable: MeanAttitudes

Collinearity Diagnostics [a]

Model	Dimension	Eigenvalue	Condition Index
1	1	3.946	1.000
	2	.034	10.746
	3	.013	17.323
	4	.007	23.653

Collinearity Diagnostics [a]

Model	Dimension	Variance Proportions			
		(Constant)	Meansupport	Meanincentive	Meansense
1	1	.00	.00	.00	.00
	2	.04	.01	.94	.05
	3	.16	.97	.05	.08
	4	.80	.01	.01	.87

a. Dependent Variable: MeanAttitudes

```
GET
  FILE='C:\Users\Ain\Google Drive\Thesis\SPSS\Actual Test Ain.sav'.
DATASET NAME DataSet1 WINDOW=FRONT.
FACTOR
  /VARIABLES KSB1 KSB2 KSB3 KSB4 KSB5 KSB6
  /MISSING LISTWISE
  /ANALYSIS KSB1 KSB2 KSB3 KSB4 KSB5 KSB6
  /PRINT INITIAL CORRELATION SIG DET KMO REPR AIC EXTRACTION ROTATION FSCOR
E
  /FORMAT SORT BLANK(.45)
  /CRITERIA MINEIGEN(1) ITERATE(25)
  /EXTRACTION PAF
  /CRITERIA ITERATE(25)
  /ROTATION VARIMAX
  /METHOD=CORRELATION.
```

Factor Analysis

[DataSet1] C:\Users\Ain\Google Drive\Thesis\SPSS\Actual Test Ain.sav

Correlation Matrix[a]

		KSB1	KSB2	KSB3	KSB4	KSB5	KSB6
Correlation	KSB1	1.000	.299	.151	.333	.386	.392
	KSB2	.299	1.000	.322	.100	.190	.181
	KSB3	.151	.322	1.000	.001	-.008	-.067
	KSB4	.333	.100	.001	1.000	.443	.540
	KSB5	.386	.190	-.008	.443	1.000	.599
	KSB6	.392	.181	-.067	.540	.599	1.000
Sig. (1-tailed)	KSB1		.000	.033	.000	.000	.000
	KSB2	.000		.000	.112	.010	.014
	KSB3	.033	.000		.493	.460	.208
	KSB4	.000	.112	.493		.000	.000
	KSB5	.000	.010	.460	.000		.000
	KSB6	.000	.014	.208	.000	.000	

a. Determinant = .274

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.730
Bartlett's Test of Sphericity	Approx. Chi-Square	186.523
	df	15
	Sig.	.000

Anti-image Matrices

		KSB1	KSB2	KSB3	KSB4	KSB5	KSB6
Anti-image Covariance	KSB1	.742	-.150	-.092	-.091	-.109	-.096
	KSB2	-.150	.815	-.260	.040	-.045	-.057
	KSB3	-.092	-.260	.867	-.024	.016	.092
	KSB4	-.091	.040	-.024	.673	-.097	-.212
	KSB5	-.109	-.045	.016	-.097	.598	-.237
	KSB6	-.096	-.057	.092	-.212	-.237	.522
Anti-image Correlation	KSB1	.818[a]	-.192	-.115	-.129	-.163	-.154
	KSB2	-.192	.649[a]	-.309	.054	-.065	-.087
	KSB3	-.115	-.309	.505[a]	-.031	.022	.137
	KSB4	-.129	.054	-.031	.780[a]	-.152	-.357
	KSB5	-.163	-.065	.022	-.152	.760[a]	-.424
	KSB6	-.154	-.087	.137	-.357	-.424	.702[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

	Initial	Extraction
KSB1	.258	.354
KSB2	.185	.402
KSB3	.133	.307
KSB4	.327	.400
KSB5	.402	.514
KSB6	.478	.708

Extraction Method:
Principal Axis Factoring.

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Factor	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.467	41.109	41.109	1.980	32.995	32.995
2	1.330	22.160	63.268	.706	11.762	44.757
3	.676	11.274	74.543			
4	.619	10.316	84.859			
5	.536	8.927	93.785			
6	.373	6.215	100.000			

Total Variance Explained

Factor	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	1.892	31.538	31.538
2	.793	13.219	44.757
3			
4			
5			
6			

Extraction Method: Principal Axis Factoring.

Factor Matrix[a]

	Factor	
	1	2
KSB6	.812	
KSB5	.709	
KSB4	.616	
KSB1	.561	
KSB3		.548
KSB2		.535

Extraction Method:
Principal Axis Factoring.

a. 2 factors extracted. 12 iterations required.

Reproduced Correlations

		KSB1	KSB2	KSB3	KSB4	KSB5	KSB6
Reproduced Correlation	KSB1	.354[a]	.298	.155	.317	.377	.411
	KSB2	.298	.402[a]	.321	.134	.186	.159
	KSB3	.155	.321	.307[a]	-.027	.001	-.055
	KSB4	.317	.134	-.027	.400[a]	.452	.532
	KSB5	.377	.186	.001	.452	.514[a]	.599
	KSB6	.411	.159	-.055	.532	.599	.708[a]
Residual[b]	KSB1		.001	-.003	.016	.009	-.020
	KSB2	.001		.001	-.034	.004	.022
	KSB3	-.003	.001		.029	-.009	-.012
	KSB4	.016	-.034	.029		-.009	.008
	KSB5	.009	.004	-.009	-.009		.000
	KSB6	-.020	.022	-.012	.008	.000	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities
b. Residuals are computed between observed and reproduced correlations. There are 0 (.0%) nonredundant residuals with absolute values greater than 0.05.

Rotated Factor Matrix[a]

	Factor	
	1	2
KSB6	.842	
KSB5	.712	
KSB4	.632	
KSB1	.489	
KSB2		.606
KSB3		.550

Extraction Method: Principal Axis Factoring.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

Factor Transformation Matrix

Factor	1	2
1	.965	.262
2	-.262	.965

Extraction Method: Principal Axis Factoring.
Rotation Method: Varimax with Kaiser Normalization.

Factor Score Coefficient Matrix

	Factor	
	1	2
KSB1	.124	.204
KSB2	.002	.451
KSB3	-.047	.365
KSB4	.188	-.023
KSB5	.262	.015
KSB6	.532	-.132

Extraction Method: Principal Axis Factoring.
Rotation Method: Varimax with Kaiser Normalization.

Factor Score Covariance Matrix

Factor	1	2
1	.816	.045
2	.045	.544

Extraction Method: Principal Axis Factoring.
Rotation Method: Varimax with Kaiser Normalization.

```
FACTOR
  /VARIABLES IF1 IF2 IF3 IF4 IF5 IF6 IF7 IF8 IF9 IFF10 IF11 IFF12 IF13
  /MISSING LISTWISE
  /ANALYSIS IF1 IF2 IF3 IF4 IF5 IF6 IF7 IF8 IF9 IFF10 IF11 IFF12 IF13
  /PRINT INITIAL CORRELATION SIG DET KMO REPR AIC EXTRACTION ROTATION FSCOR
E
  /FORMAT SORT BLANK(.45)
  /CRITERIA MINEIGEN(1) ITERATE(25)
  /EXTRACTION PAF
  /CRITERIA ITERATE(25)
  /ROTATION VARIMAX
  /METHOD=CORRELATION.
```

Factor Analysis

```
[DataSet2] C:\Users\Ain\Google Drive\Thesis\SPSS\Actual Test_1.sav
```

Correlation Matrix[a]

		IF1	IF2	IF3	IF4	IF5	IF6
Correlation	IF1	1.000	.408	.527	.480	.399	.440
	IF2	.408	1.000	.582	.478	.374	.326
	IF3	.527	.582	1.000	.636	.410	.402
	IF4	.480	.478	.636	1.000	.715	.582
	IF5	.399	.374	.410	.715	1.000	.490
	IF6	.440	.326	.402	.582	.490	1.000
	IF7	.366	.251	.280	.367	.276	.452
	IF8	.452	.169	.264	.410	.442	.615
	IF9	.530	.217	.361	.539	.542	.669
	IFF10	-.156	-.029	-.112	-.146	-.256	-.217
	IF11	.390	.180	.291	.457	.342	.630
	IFF12	-.187	-.214	-.309	-.347	-.303	-.355
	IF13	.344	.205	.342	.477	.364	.492
Sig. (1-tailed)	IF1		.000	.000	.000	.000	.000
	IF2	.000		.000	.000	.000	.000
	IF3	.000	.000		.000	.000	.000
	IF4	.000	.000	.000		.000	.000
	IF5	.000	.000	.000	.000		.000
	IF6	.000	.000	.000	.000	.000	
	IF7	.000	.001	.000	.000	.000	.000
	IF8	.000	.020	.001	.000	.000	.000
	IF9	.000	.004	.000	.000	.000	.000
	IFF10	.029	.361	.087	.039	.001	.004
	IF11	.000	.014	.000	.000	.000	.000
	IFF12	.011	.004	.000	.000	.000	.000
	IF13	.000	.006	.000	.000	.000	.000

Correlation Matrix[a]

		IF7 .	IF8	IF9	IFF10	IF11
Correlation	IF1	.366	.452	.530	-.156	.390
	IF2	.251	.169	.217	-.029	.180
	IF3	.280	.264	.361	-.112	.291
	IF4	.367	.410	.539	-.146	.457
	IF5	.276	.442	.542	-.256	.342
	IF6	.452	.615	.669	-.217	.630
	IF7 .	1.000	.394	.392	.000	.369
	IF8	.394	1.000	.652	-.092	.542
	IF9	.392	.652	1.000	-.151	.552
	IFF10	.000	-.092	-.151	1.000	-.304
	IF11	.369	.542	.552	-.304	1.000
	IFF12	-.097	-.173	-.185	.473	-.203
	IF13	.315	.494	.487	-.204	.738
Sig. (1-tailed)	IF1	.000	.000	.000	.029	.000
	IF2	.001	.020	.004	.361	.014
	IF3	.000	.001	.000	.087	.000
	IF4	.000	.000	.000	.039	.000
	IF5	.000	.000	.000	.001	.000
	IF6	.000	.000	.000	.004	.000
	IF7 .		.000	.000	.500	.000
	IF8	.000		.000	.132	.000
	IF9	.000	.000		.033	.000
	IFF10	.500	.132	.033		.000
	IF11	.000	.000	.000	.000	
	IFF12	.121	.018	.012	.000	.007
	IF13	.000	.000	.000	.006	.000

Correlation Matrix[a]

		IFF12	IF13
Correlation	IF1	-.187	.344
	IF2	-.214	.205
	IF3	-.309	.342
	IF4	-.347	.477
	IF5	-.303	.364
	IF6	-.355	.492
	IF7	-.097	.315
	IF8	-.173	.494
	IF9	-.185	.487
	IFF10	.473	-.204
	IF11	-.203	.738
	IFF12	1.000	-.264
	IF13	-.264	1.000
Sig. (1-tailed)	IF1	.011	.000
	IF2	.004	.006
	IF3	.000	.000
	IF4	.000	.000
	IF5	.000	.000
	IF6	000	.000
	IF7	.121	.000
	IF8	.018	.000
	IF9	.012	.000
	IFF10	.000	.006
	IF11	.007	.000
	IFF12		.001
	IF13	.001	

a. Determinant = .001

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.841
Bartlett's Test of Sphericity	Approx. Chi-Square	937.912
	df	78
	Sig.	.000

Anti-image Matrices

		IF1	IF2	IF3	IF4	IF5	IF6
Anti-image Covariance	IF1	.542	-.090	-.129	-.009	.010	.033
	IF2	-.090	.594	-.182	-.018	-.069	-.054
	IF3	-.129	-.182	.441	-.133	.058	.001
	IF4	-.009	-.018	-.133	.290	-.188	-.048
	IF5	.010	-.069	.058	-.188	.399	.009
	IF6	.033	-.054	.001	-.048	.009	.349
	IF7	-.075	-.038	.005	-.027	.013	-.081
	IF8	-.077	.040	.017	.048	-.073	-.090
	IF9	-.108	.069	-.007	-.013	-.079	-.108
	IFF10	.059	-.061	.006	-.076	.124	-.007
	IF11	-.022	.008	.026	-.030	.054	-.105
	IFF12	-.024	.015	.050	.048	-.010	.109
	IF13	.025	.006	-.034	-.032	-.006	.056
Anti-image Correlation	IF1	.902[a]	-.159	-.264	-.022	.021	.076
	IF2	-.159	.844[a]	-.355	-.043	-.142	-.118
	IF3	-.264	-.355	.838[a]	-.371	.139	.002
	IF4	-.022	-.043	-.371	.839[a]	-.551	-.149
	IF5	.021	-.142	.139	-.551	.814[a]	.025
	IF6	.076	-.118	.002	-.149	.025	.882[a]
	IF7	-.119	-.058	.009	-.059	.024	-.160
	IF8	-.155	.076	.037	.131	-.171	-.226
	IF9	-.238	.146	-.017	-.040	-.204	-.298
	IFF10	.100	-.098	.010	-.177	.245	-.015
	IF11	-.053	.019	.070	-.100	.153	-.317
	IFF12	-.041	.025	.095	.113	-.021	.233
	IF13	.053	.012	-.080	-.094	-.014	.148

Anti-image Matrices

		IF7 .	IF8	IF9	IFF10	IF11
Anti-image Covariance	IF1	-.075	-.077	-.108	.059	-.022
	IF2	-.038	.040	.069	-.061	.008
	IF3	.005	.017	-.007	.006	.026
	IF4	-.027	.048	-.013	-.076	-.030
	IF5	.013	-.073	-.079	.124	.054
	IF6	-.081	-.090	-.108	-.007	-.105
	IF7 .	.724	-.048	-.007	-.065	-.028
	IF8	-.048	.455	-.107	-.074	-.035
	IF9	-.007	-.107	.378	-.010	-.018
	IFF10	-.065	-.074	-.010	.642	.133
	IF11	-.028	-.035	-.018	.133	.313
	IFF12	-.025	.013	-.048	-.287	-.092
	IF13	-.006	-.054	-.022	-.044	-.211
Anti-image Correlation	IF1	-.119	-.155	-.238	.100	-.053
	IF2	-.058	.076	.146	-.098	.019
	IF3	.009	.037	-.017	.010	.070
	IF4	-.059	.131	-.040	-.177	-.100
	IF5	.024	-.171	-.204	.245	.153
	IF6	-.160	-.226	-.298	-.015	-.317
	IF7 .	.948[a]	-.084	-.014	-.096	-.059
	IF8	-.084	.900[a]	-.257	-.137	-.092
	IF9	-.014	-.257	.901[a]	-.021	-.052
	IFF10	-.096	-.137	-.021	.560[a]	.298
	IF11	-.059	-.092	-.052	.298	.789[a]
	IFF12	-.037	.024	-.100	-.453	-.208
	IF13	-.012	-.127	-.056	-.086	-.594

Anti-image Matrices

		IFF12	IF13
Anti-image Covariance	IF1	-.024	.025
	IF2	.015	.006
	IF3	.050	-.034
	IF4	.048	-.032
	IF5	-.010	-.006
	IF6	.109	.056
	IF7	-.025	-.006
	IF8	.013	-.054
	IF9	-.048	-.022
	IFF10	-.287	-.044
	IF11	-.092	-.211
	IFF12	.626	.080
	IF13	.080	.404
Anti-image Correlation	IF1	-.041	.053
	IF2	.025	.012
	IF3	.095	-.080
	IF4	.113	-.094
	IF5	-.021	-.014
	IF6	.233	.148
	IF7	-.037	-.012
	IF8	.024	-.127
	IF9	-.100	-.056
	IFF10	-.453	-.086
	IF11	-.208	-.594
	IFF12	.717[a]	.159
	IF13	.159	.826[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

	Initial	Extraction
IF1	.458	.436
IF2	.406	.483
IF3	.559	.640
IF4	.710	.707
IF5	.601	.474
IF6	.651	.652
IF7	.276	.294
IF8	.545	.595
IF9	.622	.644
IFF10	.358	.576
IF11	.687	.663
IFF12	.374	.444
IF13	.596	.497

Extraction Method:
Principal Axis Factoring.

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Factor	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.639	43.378	43.378	5.212	40.096	40.096
2	1.437	11.056	54.434	1.015	7.810	47.906
3	1.364	10.492	64.927	.878	6.752	54.658
4	.775	5.964	70.890			
5	.718	5.525	76.416			
6	.659	5.067	81.483			
7	.554	4.261	85.744			
8	.470	3.619	89.362			
9	.398	3.062	92.425			
10	.333	2.559	94.983			
11	.285	2.190	97.173			
12	.191	1.467	98.640			
13	.177	1.360	100.000			

Total Variance Explained

Factor	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	3.482	26.786	26.786
2	2.406	18.510	45.296
3	1.217	9.363	54.658
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			

Extraction Method: Principal Axis Factoring.

Factor Matrix[a]

	Factor		
	1	2	3
IF4	.792		
IF6	.791		
IF9	.757		
IF11	.711		
IF8	.680		
IF5	.670		
IF13	.657		
IF1	.637		
IF3	.633	.487	
IF7	.496		
IF2	.482	.491	
IFF10			.696
IFF12			.508

Extraction Method: Principal Axis Factoring.

a. Attempted to extract 3 factors. More than 25 iterations required. (Convergence=.001). Extraction was terminated.

Reproduced Correlations

		IF1	IF2	IF3	IF4	IF5
Reproduced Correlation	IF1	.436[a]	.381	.471	.543	.439
	IF2	.381	.483[a]	.549	.522	.389
	IF3	.471	.549	.640[a]	.639	.493
	IF4	.543	.522	.639	.707[a]	.570
	IF5	.439	.389	.493	.570	.474[a]
	IF6	.485	.304	.424	.582	.506
	IF7	.334	.230	.294	.382	.312
	IF8	.414	.188	.284	.454	.400
	IF9	.473	.272	.380	.543	.467
	IFF10	-.093	-.036	-.117	-.193	-.225
	IF11	.395	.144	.257	.452	.423
	IFF12	-.215	-.216	-.303	-.348	-.322
	IF13	.381	.188	.291	.449	.407
Residual[b]	IF1		.027	.056	-.063	-.040
	IF2	.027		.033	-.044	-.015
	IF3	.056	.033		-.004	-.083
	IF4	-.063	-.044	-.004		.145
	IF5	-.040	-.015	-.083	.145	
	IF6	-.045	.023	-.021	-.001	-.017
	IF7	.032	.021	-.015	-.015	-.035
	IF8	.038	-.019	-.019	-.044	.043
	IF9	.057	-.055	-.019	-.004	.075
	IFF10	-.063	.007	.004	.047	-.031
	IF11	-.005	.036	.034	.005	-.081
	IFF12	.028	.002	-.006	.002	.019
	IF13	-.036	.016	.051	.028	-.043

Reproduced Correlations

		IF6	IF7 .	IF8	IF9	IFF10
Reproduced Correlation	IF1	.485	.334	.414	473	-.093
	IF2	.304	.230	.188	.272	-.036
	IF3	.424	.294	.284	.380	-.117
	IF4	.582	.382	.454	.543	-.193
	IF5	.506	.312	.400	.467	-.225
	IF6	.652[a]	.404	.591	.636	-.236
	IF7 .	.404	.294[a]	.393	.420	-.003
	IF8	.591	.393	.595[a]	.611	-.102
	IF9	.636	.420	.611	.644[a]	-.134
	IFF10	-.236	-.003	-.102	-.134	.576[a]
	IF11	.624	.363	.597	.615	-.282
	IFF12	-.293	-.085	-.142	-.200	.462
	IF13	.560	.331	.518	.545	-.246
Residual[b]	IF1	-.045	.032	.038	.057	-.063
	IF2	.023	.021	-.019	-.055	.007
	IF3	-.021	-.015	-.019	-.019	.004
	IF4	-.001	-.015	-.044	-.004	.047
	IF5	-.017	-.035	.043	.075	-.031
	IF6		.047	.023	.033	.019
	IF7 .	.047		.001	-.029	.003
	IF8	.023	.001		.040	.009
	IF9	.033	-.029	.040		-.017
	IFF10	.019	.003	.009	-.017	
	IF11	.006	.006	-.055	-.063	-.022
	IFF12	-.062	-.011	-.031	.015	.011
	IF13	-.068	-.016	-.024	-.058	.042

Reproduced Correlations

		IF11	IFF12	IF13
Reproduced Correlation	IF1	.395	-.215	.381
	IF2	.144	-.216	.188
	IF3	.257	-.303	.291
	IF4	.452	-.348	.449
	IF5	.423	-.322	.407
	IF6	.624	-.293	.560
	IF7	.363	-.085	.331
	IF8	.597	-.142	.518
	IF9	.615	-.200	.545
	IFF10	-.282	.462	-.246
	IF11	.663[a]	-.265	.568
	IFF12	-.265	.444[a]	-.256
	IF13	.568	-.256	.497[a]
Residual[b]	IF1	-.005	.028	-.036
	IF2	.036	.002	.016
	IF3	.034	-.006	.051
	IF4	.005	.002	.028
	IF5	-.081	.019	-.043
	IF6	.006	-.062	-.068
	IF7	.006	-.011	-.016
	IF8	-.055	-.031	-.024
	IF9	-.063	.015	-.058
	IFF10	-.022	.011	.042
	IF11		.063	.170
	IFF12	.063		-.008
	IF13	.170	-.008	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities
b. Residuals are computed between observed and reproduced correlations. There are 17 (21.0%) nonredundant residuals with absolute values greater than 0.05.

Rotated Factor Matrix[a]

	Factor		
	1	2	3
IF11	.766		
IF8	.753		
IF9	.747		
IF6	.706		
IF13	.644		
IF7 .	.464		
IF3		.762	
IF2		.687	
IF4		.686	
IF5		.494	
IF1		.489	
IFF10			-.750
IFF12			-.601

Extraction Method: Principal Axis Factoring.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

Factor Transformation Matrix

Factor	1	2	3
1	.768	.577	.280
2	-.601	.799	.002
3	.222	.170	-.960

Extraction Method: Principal Axis Factoring.
Rotation Method: Varimax with Kaiser Normalization.

Factor Score Coefficient Matrix

	Factor		
	1	2	3
IF1	.037	.112	-.053
IF2	-.090	.275	-.046
IF3	-.124	.384	-.005
IF4	-.004	.360	.045
IF5	.010	.065	.057
IF6	.175	.006	.046
IF7	.072	.031	-.087
IF8	.257	-.063	-.099
IF9	.257	-.023	-.098
IFF10	.073	.069	-.567
IF11	.336	-.218	.080
IFF12	.063	-.022	-.317
IF13	.113	-.053	.062

Extraction Method: Principal Axis Factoring.
Rotation Method: Varimax with Kaiser Normalization.

Factor Score Covariance Matrix

Factor	1	2	3
1	.842	.090	.060
2	.090	.787	.042
3	.060	.042	.674

Extraction Method: Principal Axis Factoring.
Rotation Method: Varimax with Kaiser Normalization.

```
RELIABILITY
  /VARIABLES=IF11 IF8 IF9 IF6 IF13 IF7
  /SCALE('ALL VARIABLES') ALL
  /MODEL=ALPHA
  /STATISTICS=DESCRIPTIVE SCALE
  /SUMMARY=TOTAL.
```

Reliability

```
[DataSet2] C:\Users\Ain\Google Drive\Thesis\SPSS\Actual Test_1.sav
```

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	148	100.0
	Excluded[a]	0	.0
	Total	148	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.863	6

Item Statistics

	Mean	Std. Deviation	N
IF11	4.0135	.74675	148
IF8	3.6757	.85090	148
IF9	4.1081	.64031	148
IF6	4.1689	.70362	148
IF13	4.0405	.72729	148
IF7	4.0541	.76295	148

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
IF11	20.0473	8.086	.730	.826
IF8	20.3851	7.762	.687	.836
IF9	19.9527	8.658	.710	.833
IF6	19.8919	8.260	.739	.826
IF13	20.0203	8.496	.641	.843
IF7	20.0068	9.014	.469	.873

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
24.0608	11.745	3.42704	6

```
RELIABILITY
  /VARIABLES=IF3 IF2 IF4 IF5 IF1
  /SCALE('ALL VARIABLES') ALL
  /MODEL=ALPHA
  /STATISTICS=DESCRIPTIVE SCALE
  /SUMMARY=TOTAL.
```

Reliability

[DataSet2] C:\Users\Ain\Google Drive\Thesis\SPSS\Actual Test_1.sav

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	148	100.0
	Excluded[a]	0	.0
	Total	148	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.832	5

Item Statistics

	Mean	Std. Deviation	N
IF3	4.0541	.59228	148
IF2	3.8986	.66741	148
IF4	4.1149	.63378	148
IF5	4.0270	.63830	148
IF1	4.1892	.62107	148

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
IF3	16.2297	3.974	.692	.783
IF2	16.3851	3.994	.570	.817
IF4	16.1689	3.720	.752	.764
IF5	16.2568	4.029	.595	.809
IF1	16.0946	4.154	.561	.818

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
20.2838	5.960	2.44126	5

```
RELIABILITY
  /VARIABLES=IFF10 IFF12
  /SCALE('ALL VARIABLES') ALL
  /MODEL=ALPHA
  /STATISTICS=DESCRIPTIVE SCALE
  /SUMMARY=TOTAL.
```

Reliability

[DataSet2] C:\Users\Ain\Google Drive\Thesis\SPSS\Actual Test_1.sav

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	148	100.0
	Excluded[a]	0	.0
	Total	148	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.635	2

Item Statistics

	Mean	Std. Deviation	N
IFF10	2.2500	1.12410	148
IFF12	1.8919	.93412	148

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
IFF10	1.8919	.873	.473	.
IFF12	2.2500	1.264	.473	.

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
4.1419	3.129	1.76901	2

```
GET
  FILE='C:\Users\Ain\Google Drive\Thesis\SPSS\Actual Test_1.sav'.
DATASET NAME DataSet1 WINDOW=FRONT.
FACTOR
  /VARIABLES OF1 OF2 OF3 OF4 OF5 OF6 OF7 OF8 OF9
  /MISSING LISTWISE
  /ANALYSIS OF1 OF2 OF3 OF4 OF5 OF6 OF7 OF8 OF9
  /PRINT INITIAL CORRELATION SIG DET KMO REPR AIC EXTRACTION ROTATION FSCOR
E
  /FORMAT SORT BLANK(.45)
  /CRITERIA MINEIGEN(1) ITERATE(25)
  /EXTRACTION PAF
  /CRITERIA ITERATE(25)
  /ROTATION VARIMAX
  /METHOD=CORRELATION.
```

Factor Analysis

[DataSet1] C:\Users\Ain\Google Drive\Thesis\SPSS\Actual Test_1.sav

Correlation Matrix [a]

		OF1	OF2	OF3	OF4	OF5	OF6
Correlation	OF1	1.000	.450	.467	.434	.362	.233
	OF2	.450	1.000	.794	.728	.452	.262
	OF3	.467	.794	1.000	.838	.594	.202
	OF4	.434	.728	.838	1.000	.628	.243
	OF5	.362	.452	.594	.628	1.000	.333
	OF6	.233	.262	.202	.243	.333	1.000
	OF7	.227	.196	.154	.221	.363	.646
	OF8	.199	.268	.226	.273	.349	.371
	OF9	.240	.233	.262	.337	.407	.393
Sig. (1-tailed)	OF1		.000	000	.000	.000	.002
	OF2	.000		.000	.000	.000	.001
	OF3	.000	.000		.000	.000	.007
	OF4	.000	.000	.000		.000	.001
	OF5	.000	.000	.000	.000		.000
	OF6	.002	.001	.007	.001	.000	
	OF7	.003	.008	.031	.003	.000	.000
	OF8	.008	.000	.003	.000	.000	.000
	OF9	.002	.002	.001	.000	.000	.000

Correlation Matrix[a]

		OF7	OF8	OF9
Correlation	OF1	.227	.199	.240
	OF2	.196	.268	.233
	OF3	.154	.226	.262
	OF4	.221	.273	.337
	OF5	.363	.349	.407
	OF6	.646	.371	.393
	OF7	1.000	.629	.654
	OF8	.629	1.000	.705
	OF9	.654	.705	1.000
Sig. (1-tailed)	OF1	.003	.008	.002
	OF2	.008	.000	.002
	OF3	.031	.003	.001
	OF4	.003	.000	.000
	OF5	.000	.000	.000
	OF6	.000	.000	.000
	OF7		.000	.000
	OF8	.000		.000
	OF9	.000	.000	

a. Determinant = .005

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.821
Bartlett's Test of Sphericity	Approx. Chi-Square	760.268
	df	36
	Sig.	.000

Anti-image Matrices

		OF1 .	OF2	OF3	OF4	OF5	OF6
Anti-image Covariance	OF1 .	.737	-.062	-.047	-.005	-.038	-.026
	OF2	-.062	.327	-.127	-.059	.063	-.052
	OF3	-.047	-.127	.208	-.117	-.072	.015
	OF4	-.005	-.059	-.117	.255	-.093	-.001
	OF5	-.038	.063	-.072	-.093	.511	-.049
	OF6	-.026	-.052	.015	-.001	-.049	.551
	OF7	-.029	-.001	.024	.007	-.039	-.235
	OF8	.020	-.057	.010	.014	-.022	.034
	OF9	-.024	.043	-.005	-.042	-.033	.022
Anti-image Correlation	OF1 .	.957[a]	-.126	-.121	-.012	-.062	-.042
	OF2	-.126	.829[a]	-.488	-.206	.153	-.123
	OF3	-.121	-.488	.785[a]	-.509	-.221	.044
	OF4	-.012	-.206	-.509	.844[a]	-.259	-.002
	OF5	-.062	.153	-.221	-.259	.906[a]	-.093
	OF6	-.042	-.123	.044	-.002	-.093	.766[a]
	OF7	-.057	-.003	.088	.022	-.093	-.533
	OF8	.036	-.151	.033	.041	-.047	.069
	OF9	-.043	.118	-.018	-.132	-.072	.048

Anti-image Matrices

		OF7	OF8	OF9
Anti-image Covariance	OF1 .	-.029	.020	-.024
	OF2	-.001	-.057	.043
	OF3	.024	.010	-.005
	OF4	.007	.014	-.042
	OF5	-.039	-.022	-.033
	OF6	-.235	.034	.022
	OF7	.352	-.111	-.122
	OF8	-.111	.439	-.201
	OF9	-.122	-.201	.401
Anti-image Correlation	OF1 .	-.057	.036	-.043
	OF2	-.003	-.151	.118
	OF3	.088	.033	-.018
	OF4	.022	.041	-.132
	OF5	-.093	-.047	-.072
	OF6	-.533	.069	.048
	OF7	.758[a]	-.283	-.325
	OF8	-.283	.802[a]	-.479
	OF9	-.325	-.479	.804[a]

a. Measures of Sampling Adequacy(MSA)

a. Measures of Sampling Adequacy(MSA)

Communalities

	Initial	Extraction
OF1	.263	.273
OF2	.673	.660
OF3	.792	.917
OF4	.745	.803
OF5	.489	.474
OF6	.449	.362
OF7	.648	.812
OF8	.561	.560
OF9	.599	.620

Extraction Method:
Principal Axis Factoring.

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Factor	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.235	47.057	47.057	3.886	43.181	43.181
2	1.895	21.060	68.117	1.595	17.724	60.905
3	.761	8.455	76.572			
4	.667	7.413	83.985			
5	.537	5.972	89.957			
6	.305	3.385	93.341			
7	.247	2.740	96.081			
8	.209	2.323	98.404			
9	.144	1.596	100.000			

Total Variance Explained

	Rotation Sums of Squared Loadings		
Factor	Total	% of Variance	Cumulative %
1	3.019	33.549	33.549
2	2.462	27.355	60.905
3			
4			
5			
6			
7			
8			
9			

Extraction Method: Principal Axis Factoring.

Factor Matrix[a]

	Factor	
	1	2
OF4	.801	
OF3	.799	-.527
OF2	.716	
OF5	.684	
OF9	.631	.471
OF8	.586	.465
OF1	.503	
OF6	.498	
OF7	.619	.655

Extraction Method: Principal Axis Factoring.

a. 2 factors extracted. 10 iterations required.

Reproduced Correlations

		OF1	OF2	OF3	OF4	OF5
Reproduced Correlation	OF1	.273[a]	.415	.477	.460	.355
	OF2	.415	.660[a]	.775	.728	.520
	OF3	.477	.775	.917[a]	.852	.588
	OF4	.460	.728	.852	.803[a]	.579
	OF5	.355	.520	.588	.579	.474[a]
	OF6	.202	.226	.220	.262	.314
	OF7	.218	.192	.150	.232	.373
	OF8	.228	.241	.223	.282	.365
	OF9	.250	.270	.256	.315	.395
Residual[b]	OF1		.035	-.009	-.026	.007
	OF2	.035		.020	-7.244E-5	-.068
	OF3	-.009	.020		-.015	.006
	OF4	-.026	-7.244E-5	-.015		.049
	OF5	.007	-.068	.006	.049	
	OF6	.031	.035	-.018	-.020	.019
	OF7	.009	.004	.003	-.011	-.010
	OF8	-.029	.027	.003	-.009	-.016
	OF9	-.009	-.037	.006	.022	.012

Reproduced Correlations

		OF6	OF7	OF8	OF9
Reproduced Correlation	OF1	.202	.218	.228	.250
	OF2	.226	.192	.241	.270
	OF3	.220	.150	.223	.256
	OF4	.262	.232	.282	.315
	OF5	.314	.373	.365	.395
	OF6	.362[a]	.529	.449	.473
	OF7	.529	.812[a]	.668	.699
	OF8	.449	.668	.560[a]	.589
	OF9	.473	.699	.589	.620[a]
Residual[b]	OF1	.031	.009	-.029	-.009
	OF2	.035	.004	.027	-.037
	OF3	-.018	.003	.003	.006
	OF4	-.020	-.011	-.009	.022
	OF5	.019	-.010	-.016	.012
	OF6		.116	-.078	-.080
	OF7	.116		-.039	-.045
	OF8	-.078	-.039		.116
	OF9	-.080	-.045	.116	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities
b. Residuals are computed between observed and reproduced correlations. There are 5 (13.0%) nonredundant residuals with absolute values greater than 0.05.

Rotated Factor Matrix[a]

	Factor	
	1	2
OF3	.954	
OF4	.879	
OF2	.801	
OF5	.587	
OF1	.484	
OF7		.897
OF9		.759
OF8		.727
OF6		.572

Extraction Method: Principal Axis Factoring.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

Factor Transformation Matrix

Factor	1	2
1	.788	.615
2	-.615	.788

Extraction Method: Principal Axis Factoring.
Rotation Method: Varimax with Kaiser Normalization.

Factor Score Coefficient Matrix

	Factor	
	1	2
OF1 .	.044	.014
OF2	.077	.021
OF3	.650	-.187
OF4	.275	-.004
OF5	.020	.070
OF6	.030	.026
OF7	-.100	.610
OF8	-.007	.175
OF9	-.033	.241

Extraction Method: Principal Axis Factoring.
Rotation Method: Varimax with Kaiser Normalization.

Factor Score Covariance Matrix

Factor	1	2
1	.946	.021
2	.021	.888

Extraction Method: Principal Axis Factoring.
Rotation Method: Varimax with Kaiser Normalization.

```
FACTOR
  /VARIABLES IT1 IT2 IT3 IT4 IT5
  /MISSING LISTWISE
  /ANALYSIS IT1 IT2 IT3 IT4 IT5
  /PRINT INITIAL CORRELATION SIG DET KMO REPR AIC EXTRACTION ROTATION FSCOR
E
  /FORMAT SORT BLANK(0.45)
  /CRITERIA FACTORS(1) ITERATE(25)
  /EXTRACTION PAF
  /CRITERIA ITERATE(25)
  /ROTATION VARIMAX
  /METHOD=CORRELATION.
```

Factor Analysis

[DataSet1] C:\Users\Ain\Google Drive\Thesis\SPSS\Actual Test_1.sav

Correlation Matrix[a]

		IT1	IT2	IT3	IT4	IT5
Correlation	IT1	1.000	.659	.544	.482	.585
	IT2	.659	1.000	.795	.594	.646
	IT3	.544	.795	1.000	.552	.648
	IT4	.482	.594	.552	1.000	.818
	IT5	.585	.646	.648	.818	1.000
Sig. (1-tailed)	IT1		.000	.000	.000	.000
	IT2	.000		.000	.000	.000
	IT3	.000	.000		.000	.000
	IT4	.000	.000	.000		.000
	IT5	.000	.000	.000	.000	

a. Determinant = .033

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.778
Bartlett's Test of Sphericity	Approx. Chi-Square	493.637
	df	10
	Sig.	.000

Anti-image Matrices

		IT1	IT2	IT3	IT4	IT5
Anti-image Covariance	IT1	.519	-.148	.018	.028	-.090
	IT2	-.148	.281	-.188	-.050	.003
	IT3	.018	-.188	.335	.021	-.074
	IT4	.028	-.050	.021	.321	-.199
	IT5	-.090	.003	-.074	-.199	.256
Anti-image Correlation	IT1	.857[a]	-.387	.043	.069	-.247
	IT2	-.387	.768[a]	-.613	-.167	.011
	IT3	.043	-.613	.788[a]	.063	-.252
	IT4	.069	-.167	.063	.751[a]	-.693
	IT5	-.247	.011	-.252	-.693	.754[a]

a. Measures of Sampling Adequacy(MSA)

Communalities

	Initial	Extraction
IT1	.481	.480
IT2	.719	.738
IT3	.665	.643
IT4	.679	.586
IT5	.744	.741

Extraction Method:
Principal Axis Factoring.

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Factor	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.538	70.753	70.753	3.188	63.753	63.753
2	.631	12.627	83.380			
3	.474	9.475	92.855			
4	.208	4.162	97.018			
5	.149	2.982	100.000			

Extraction Method: Principal Axis Factoring.

Factor Matrix[a]

	Factor
	1
IT5	.861
IT2	.859
IT3	.802
IT4	.765
IT1	.693

Extraction Method: Principal Axis Factoring.

a. 1 factors extracted. 6 iterations required.

Reproduced Correlations

		IT1	IT2	IT3	IT4	IT5
Reproduced Correlation	IT1	.480[a]	.595	.555	.530	.596
	IT2	.595	.738[a]	.689	.658	.739
	IT3	.555	.689	.643[a]	.614	.690
	IT4	.530	.658	.614	.586[a]	.659
	IT5	.596	.739	.690	.659	.741[a]
Residual[b]	IT1		.064	-.011	-.048	-.011
	IT2	.064		.106	-.064	-.093
	IT3	-.011	.106		-.062	-.042
	IT4	-.048	-.064	-.062		.159
	IT5	-.011	-.093	-.042	.159	

Extraction Method: Principal Axis Factoring.

a. Reproduced communalities
b. Residuals are computed between observed and reproduced correlations. There are 6 (60.0%) nonredundant residuals with absolute values greater than 0.05.

Rotated Factor Matrix[a]

a. Only one factor was extracted. The solution cannot be rotated.

Factor Score Coefficient Matrix

	Factor
	1
IT1	.092
IT2	.364
IT3	.154
IT4	.102
IT5	.388

Extraction Method: Principal Axis Factoring. Rotation Method: Varimax with Kaiser Normalization.

Factor Score Covariance Matrix

Factor	1
1	.913

Extraction Method: Principal Axis Factoring. Rotation Method: Varimax with Kaiser Normalization.

```
CORRELATIONS
  /VARIABLES=MeanIF MeanSenseofs MeanAttitudes MeanOF MeanIncentives MeanMS
upport MeanTrust MeanKSB
  /PRINT=TWOTAIL NOSIG
  /STATISTICS DESCRIPTIVES
  /MISSING=PAIRWISE.
```

Correlations

[DataSet1] C:\Users\Ain\Google Drive\Thesis\SPSS\Actual Test Ain.sav

Descriptive Statistics

	Mean	Std. Deviation	N
MeanIF	4.0313	.48043	148
MeanSenseofs	4.0568	.48825	148
MeanAttitudes	4.0101	.57117	148
MeanOF	3.4767	.57586	148
MeanIncentives	3.1716	.74249	148
MeanMSupport	3.8581	.61110	148
MeanTrust	3.2054	.77721	148
MeanKSB	4.1571	.52187	148

Correlations

		MeanIF	MeanSenseofs	MeanAttitudes	MeanOF
MeanIF	Pearson Correlation	1	.858**	.931**	.421**
	Sig. (2-tailed)		.000	.000	.000
	N	148	148	148	148
MeanSenseofs	Pearson Correlation	.858**	1	.611**	.342**
	Sig. (2-tailed)	.000		.000	.000
	N	148	148	148	148
MeanAttitudes	Pearson Correlation	.931**	.611**	1	.405**
	Sig. (2-tailed)	.000	.000		.000
	N	148	148	148	148
MeanOF	Pearson Correlation	.421**	.342**	.405**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	148	148	148	148
MeanIncentives	Pearson Correlation	.284**	.207*	.291**	.901**
	Sig. (2-tailed)	.000	.012	.000	.000
	N	148	148	148	148
MeanMSupport	Pearson Correlation	.460**	.410**	.417**	.752**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	148	148	148	148
MeanTrust	Pearson Correlation	.361**	.249**	.379**	.453**
	Sig. (2-tailed)	.000	.002	.000	.000
	N	148	148	148	148
MeanKSB	Pearson Correlation	.535**	.445**	.507**	.294**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	148	148	148	148

Correlations

		MeanIncentives	Mean MSupport	MeanTrust	MeanKSB
MeanIF	Pearson Correlation	.284**	.460**	.361**	.535**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	148	148	148	148
MeanSenseofs	Pearson Correlation	.207*	.410**	.249**	.445**
	Sig. (2-tailed)	.012	.000	.002	.000
	N	148	148	148	148
MeanAttitudes	Pearson Correlation	.291**	.417**	.379**	.507**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	148	148	148	148
MeanOF	Pearson Correlation	.901**	.752**	.453**	.294**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	148	148	148	148
MeanIncentives	Pearson Correlation	1	.391**	.427**	.257**
	Sig. (2-tailed)		.000	.000	.002
	N	148	148	148	148
MeanMSupport	Pearson Correlation	.391**	1	.311**	.233**
	Sig. (2-tailed)	.000		.000	.004
	N	148	148	148	148
MeanTrust	Pearson Correlation	.427**	.311**	1	.239**
	Sig. (2-tailed)	.000	.000		.003
	N	148	148	148	148
MeanKSB	Pearson Correlation	.257**	.233**	.239**	1
	Sig. (2-tailed)	.002	.004	.003	
	N	148	148	148	148

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

```
REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING PAIRWISE
  /STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE ZPP
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT MeanKSB
  /METHOD=ENTER MeanSenseofs MeanAttitudes MeanIncentives MeanMSupport
  /SCATTERPLOT=(*ZRESID ,*ZPRED)
  /RESIDUALS DURBIN NORMPROB(ZRESID)
  /CASEWISE PLOT(ZRESID) OUTLIERS(3)
  /SAVE MAHAL COOK.
```

Regression

[DataSet1] C:\Users\Ain\Google Drive\Thesis\SPSS\Actual Test Ain.sav

Descriptive Statistics

	Mean	Std. Deviation	N
MeanKSB	4.1571	.52187	148
MeanSenseofs	4.0568	.48825	148
MeanAttitudes	4.0101	.57117	148
MeanIncentives	3.1716	.74249	148
MeanMSupport	3.8581	.61110	148

Correlations

		MeanKSB	MeanSenseofs	MeanAttitudes
Pearson Correlation	MeanKSB	1.000	.445	.507
	MeanSenseofs	.445	1.000	.611
	MeanAttitudes	.507	.611	1.000
	MeanIncentives	.257	.207	.291
	MeanMSupport	.233	.410	.417
Sig. (1-tailed)	MeanKSB	.	.000	.000
	MeanSenseofs	000	.	.000
	MeanAttitudes	.000	.000	.
	MeanIncentives	.001	.006	.000
	MeanMSupport	.002	.000	.000
N	MeanKSB	148	148	148
	MeanSenseofs	148	148	148
	MeanAttitudes	148	148	148
	MeanIncentives	148	148	148
	MeanMSupport	148	148	148

Correlations

		Mean Incentives	Mean MSupport
Pearson Correlation	MeanKSB	.257	.233
	MeanSenseofs	.207	.410
	MeanAttitudes	.291	.417
	MeanIncentives	1.000	.391
	MeanMSupport	.391	1.000
Sig. (1-tailed)	MeanKSB	.001	.002
	MeanSenseofs	.006	.000
	MeanAttitudes	.000	.000
	MeanIncentives	.	.000
	MeanMSupport	.000	.
N	MeanKSB	148	148
	MeanSenseofs	148	148
	MeanAttitudes	148	148
	MeanIncentives	148	148
	MeanMSupport	148	148

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Mean MSupport, Mean Incentives, Mean Senseofs, MeanAttitudes	.	Enter

a. All requested variables entered.
b. Dependent Variable: MeanKSB

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.548[a]	.301	.281	.44248

Model Summary[b]

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.301	15.371	4	143	.000	1.971

a. Predictors: (Constant), MeanMSupport, MeanIncentives, MeanSenseofs, MeanAttitudes
b. Dependent Variable: MeanKSB

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.038	4	3.009	15.371	.000[a]
	Residual	27.998	143	.196		
	Total	40.035	147			

a. Predictors: (Constant), MeanMSupport, MeanIncentives, MeanSenseofs, MeanAttitudes
b. Dependent Variable: MeanKSB

Coefficients[a]

Model		Unstandardized Coefficients	
		B	Std. Error
1	(Constant)	1.780	.337
	MeanSenseofs	.240	.097
	MeanAttitudes	.326	.084
	MeanIncentives	.091	.054
	MeanMSupport	-.050	.071

Coefficients[a]

Model		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		Beta			Lower Bound	Upper Bound
1	(Constant)		5.286	.000	1.115	2.446
	MeanSenseofs	.225	2.482	.014	.049	.431
	MeanAttitudes	.357	3.886	.000	.160	.492
	MeanIncentives	.130	1.691	.093	-.015	.198
	MeanMSupport	-.059	-.711	.478	-.190	.090

Coefficients[a]

Model		Correlations			Collinearity Statistics	
		Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)					
	MeanSenseofs	.445	.203	.174	.597	1.675
	MeanAttitudes	.507	.309	.272	.581	1.722
	MeanIncentives	.257	.140	.118	.826	1.210
	MeanMSupport	.233	-.059	-.050	.712	1.405

a. Dependent Variable: MeanKSB

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index
1	1	4.934	1.000
	2	.036	11.659
	3	.014	18.863
	4	.010	22.341
	5	.006	29.068

Collinearity Diagnostics[a]

Model	Dimension	Variance Proportions				
		(Constant)	MeanSenseofs	MeanAttitudes	Mean Incentives	Mean MSupport
1	1	.00	.00	.00	.00	.00
	2	.02	.02	.02	.92	.00
	3	.03	.03	.09	.07	.98
	4	.67	.00	.49	.00	.02
	5	.28	.95	.40	.02	.00

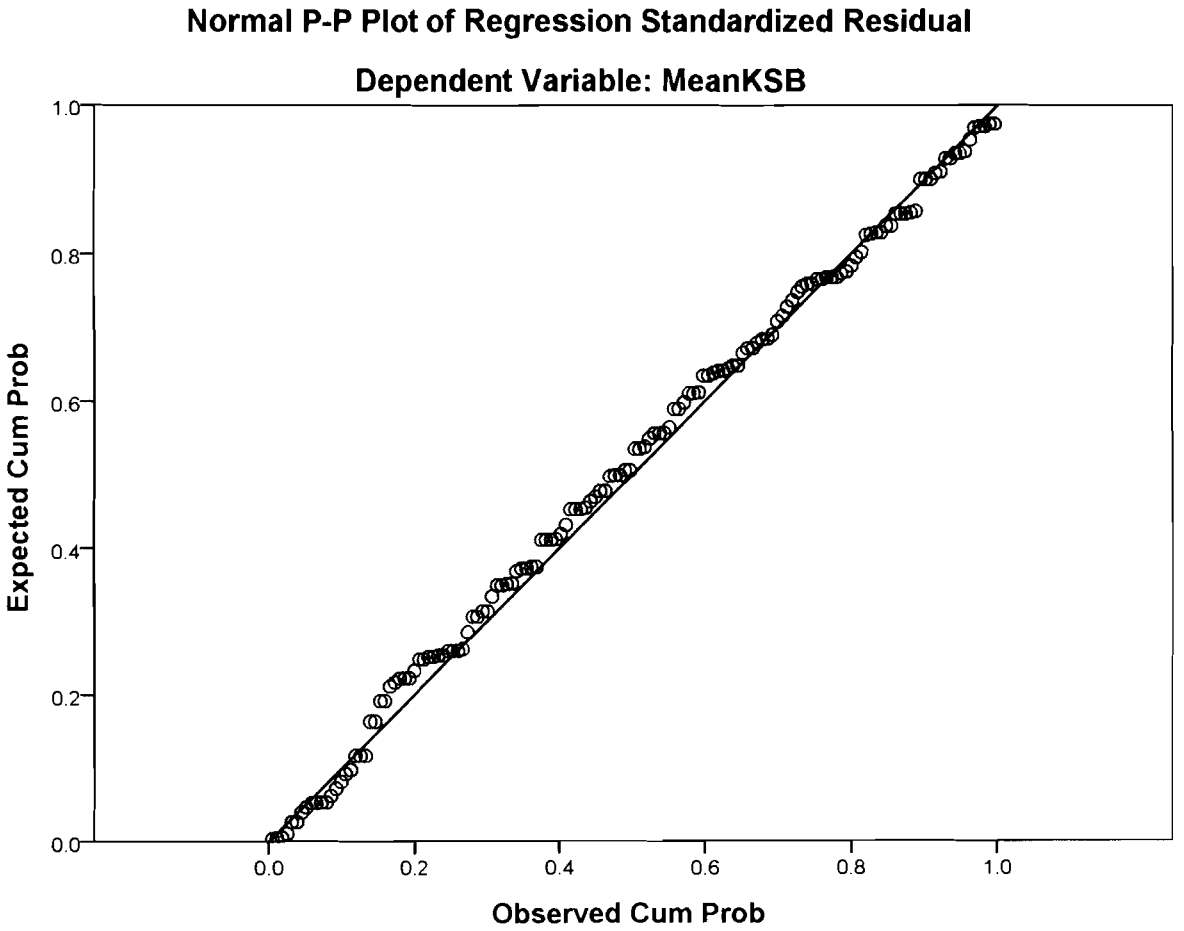
a. Dependent Variable: MeanKSB

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.5879	4.8119	4.1571	.28616	148
Std. Predicted Value	-1.989	2.288	.000	1.000	148
Standard Error of Predicted Value	.037	.186	.078	.024	148
Adjusted Predicted Value	3.5843	4.7964	4.1565	.28718	148
Residual	-1.19980	.86743	.00000	.43642	148
Std. Residual	-2.712	1.960	.000	.986	148
Stud. Residual	-2.752	2.014	.001	1.002	148
Deleted Residual	-1.23584	.91566	.00060	.45066	148
Stud. Deleted Residual	-2.818	2.036	-.001	1.009	148
Mahal. Distance	.055	24.960	3.973	3.122	148
Cook's Distance	.000	.045	.007	.009	148
Centered Leverage Value	.000	.170	.027	.021	148

a. Dependent Variable: MeanKSB

Charts


Normal P-P Plot of Regression Standardized Residual
Dependent Variable: MeanKSB
Expected Cum Prob
Observed Cum Prob
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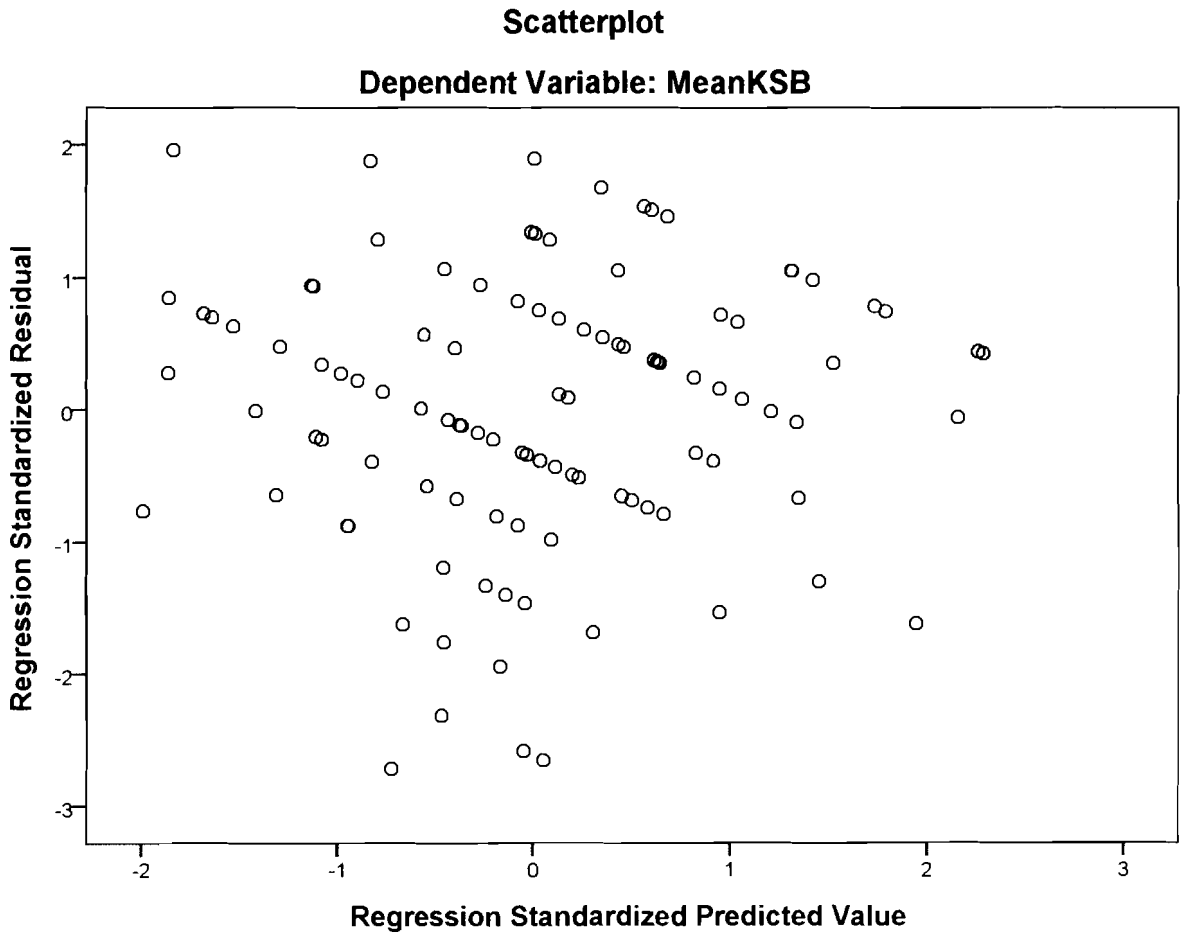
0.2
0.4
0.6
0.8
1.0


Scatterplot
Dependent Variable: MeanKSB
Regression Standardized Residual
Regression Standardized Predicted Value
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-1
-2
-3
-2
-1
0
1
2
3

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EXECUTE.
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  /MISSING PAIRWISE
  /STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE ZPP
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT MeanKSB
  /METHOD=ENTER MeanSenseofs
  /METHOD=ENTER MeanSenseofs MeanTrust
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  /CASEWISE PLOT(ZRESID) OUTLIERS(3)
  /SAVE MAHAL COOK.
```

Regression

[DataSet1] C:\Users\Ain\Google Drive\Thesis\SPSS\Actual Test Ain.sav

Descriptive Statistics

	Mean	Std. Deviation	N
MeanKSB	4.1571	.52187	148
MeanSenseofs	4.0568	.48825	148
MeanTrust	3.2054	.77721	148
MeanSensexTrust	13.0973	3.97571	148

Correlations

		MeanKSB	MeanSenseofs	MeanTrust	MeanSensexTrust
Pearson Correlation	MeanKSB	1.000	.445	.239	.380
	MeanSenseofs	.445	1.000	.249	.599
	MeanTrust	.239	.249	1.000	.919
	MeanSensexTrust	.380	.599	.919	1.000
Sig. (1-tailed)	MeanKSB	.	.000	.002	.000
	MeanSenseofs	.000	.	.001	.000
	MeanTrust	.002	.001	.	.000
	MeanSensexTrust	.000	.000	.000	.
N	MeanKSB	148	148	148	148
	MeanSenseofs	148	148	148	148
	MeanTrust	148	148	148	148
	MeanSensexTrust	148	148	148	148

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	MeanSenseofs	.	Enter
2	MeanTrust[a]	.	Enter
3	MeanSensexTrust	.	Enter

a. All requested variables entered.
b. Dependent Variable: MeanKSB

Model Summary[d]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.445[a]	.198	.193	.46886
2	.465[b]	.216	.205	.46527
3	.471[c]	.222	.206	.46516

Model Summary[d]

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.198	36.118	1	146	.000	
2	.018	3.262	1	145	.073	
3	.006	1.070	1	144	.303	1.868

a. Predictors: (Constant), MeanSenseofs
b. Predictors: (Constant), MeanSenseofs, MeanTrust
c. Predictors: (Constant), MeanSenseofs, MeanTrust, MeanSensexTrust
d. Dependent Variable: MeanKSB

ANOVA[d]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.940	1	7.940	36.118	.000[a]
	Residual	32.095	146	.220		
	Total	40.035	147			
2	Regression	8.646	2	4.323	19.970	.000[b]
	Residual	31.389	145	.216		
	Total	40.035	147			
3	Regression	8.878	3	2.959	13.676	.000[c]
	Residual	31.158	144	.216		
	Total	40.035	147			

a. Predictors: (Constant), MeanSenseofs
b. Predictors: (Constant), MeanSenseofs, MeanTrust
c. Predictors: (Constant), MeanSenseofs, MeanTrust, MeanSensexTrust
d. Dependent Variable: MeanKSB

Coefficients[a]

Model		Unstandardized Coefficients	
		B	Std. Error
1	(Constant)	2.226	.324
	MeanSenseofs	.476	.079
2	(Constant)	2.079	.331
	MeanSenseofs	.440	.081
	MeanTrust	.092	.051
3	(Constant)	3.475	1.389
	MeanSenseofs	.105	.334
	MeanTrust	-.345	.425
	MeanSensexTrust	.104	.101

Coefficients[a]

Model		Standardized Coefficients			95.0% Confidence Interval for B	
		Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)		6.879	.000	1.587	2.866
	MeanSenseofs	.445	6.010	.000	.319	.633
2	(Constant)		6.274	.000	1.424	2.734
	MeanSenseofs	.411	5.417	.000	.279	.600
	MeanTrust	.137	1.806	.073	-.009	.193
3	(Constant)		2.501	.014	.728	6.221
	MeanSenseofs	.098	.314	.754	-.555	.764
	MeanTrust	-.513	-.811	.419	-1.185	.496
	MeanSensexTrust	.793	1.034	.303	-.095	.303

Coefficients[a]

Model		Correlations			Collinearity Statistics	
		Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)					
	MeanSenseofs	.445	.445	.445	1.000	1.000
2	(Constant)					
	MeanSenseofs	.445	.410	.398	.938	1.066
	MeanTrust	.239	.148	.133	.938	1.066
3	(Constant)					
	MeanSenseofs	.445	.026	.023	.055	18.040
	MeanTrust	.239	-.067	-.060	.013	74.243
	MeanSensexTrust	.380	.086	.076	.009	108.683

a. Dependent Variable: MeanKSB

Excluded Variables[c]

Model		Beta In	t	Sig.	Partial Correlation
1	MeanTrust	.137[a]	1.806	.073	.148
	MeanSensexTrust	.176[a]	1.920	.057	.157
2	MeanSensexTrust	.793[b]	1.034	.303	.086

Excluded Variables[c]

Model		Collinearity Statistics		
		Tolerance	VIF	Minimum Tolerance
1	MeanTrust	.938	1.066	.938
	MeanSensexTrust	.641	1.560	.641
2	MeanSensexTrust	.009	108.683	.009

a. Predictors in the Model: (Constant), MeanSenseofs
b. Predictors in the Model: (Constant), MeanSenseofs, MeanTrust
c. Dependent Variable: MeanKSB

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index
1	1	1.993	1.000
	2	.007	16.734
2	1	2.958	1.000
	2	.035	9.210
	3	.007	20.387
3	1	3.929	1.000
	2	.058	8.229
	3	.013	17.543
	4	.000	142.086

Collinearity Diagnostics[a]

		Variance Proportions			
Model	Dimension	(Constant)	MeanSenseofs	MeanTrust	MeanSensexTrust
1	1	.00	.00		
	2	1.00	1.00		
2	1	.00	.00	.01	
	2	.06	.06	.99	
	3	.94	.94	.00	
3	1	.00	.00	.00	.00
	2	.00	.00	.00	.00
	3	.01	.02	.02	.01
	4	.99	.98	.98	.99

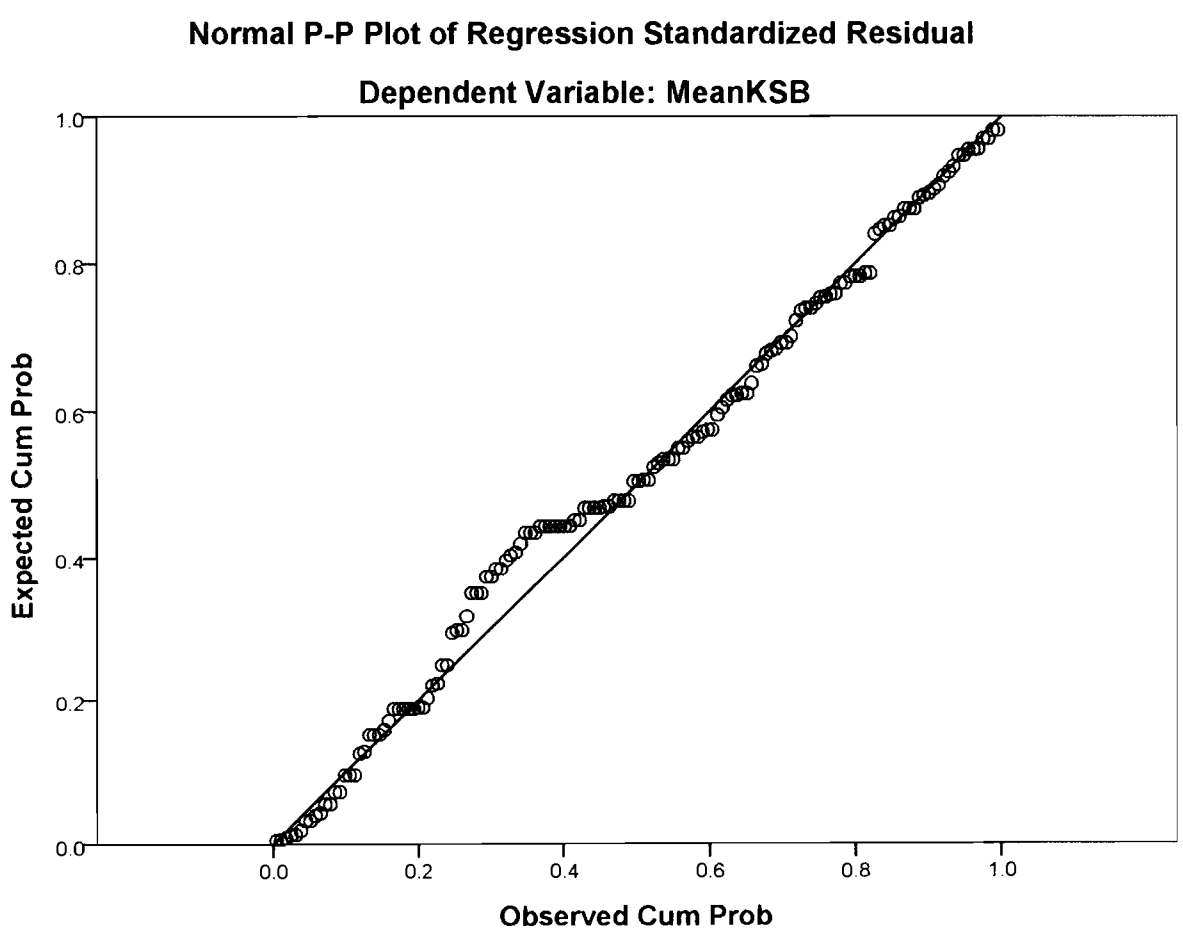
a. Dependent Variable: MeanKSB

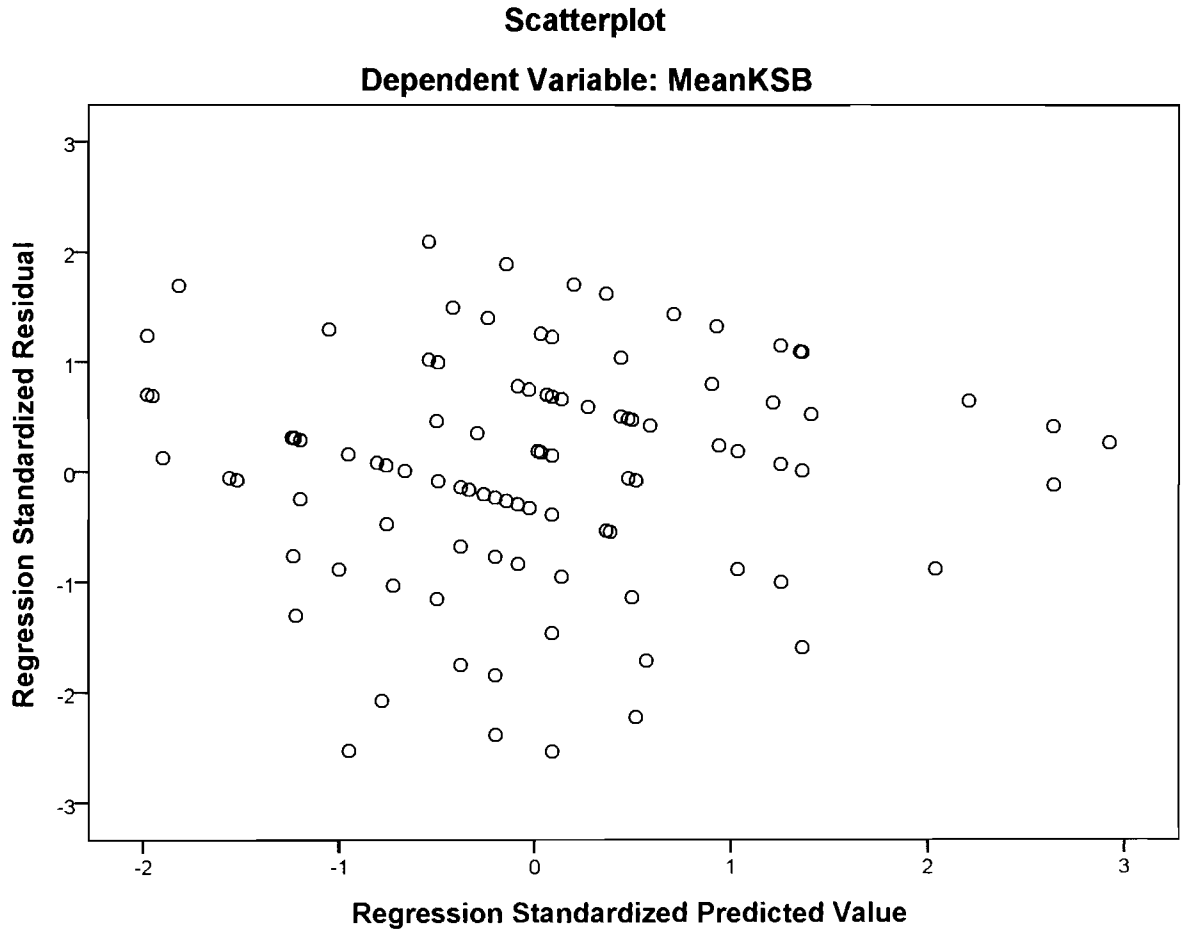
Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.6714	4.8758	4.1571	.24575	148
Std. Predicted Value	-1.976	2.925	.000	1.000	148
Standard Error of Predicted Value	.040	.192	.071	.029	148
Adjusted Predicted Value	3.6339	4.8557	4.1563	.24750	148
Residual	-1.17930	.97560	.00000	.46039	148
Std. Residual	-2.535	2.097	.000	.990	148
Stud. Residual	-2.558	2.107	.001	1.002	148
Deleted Residual	-1.20271	.98423	.00076	.47175	148
Stud. Deleted Residual	-2.609	2.132	.000	1.009	148
Mahal. Distance	.072	24.005	2.980	3.920	148
Cook's Distance	.000	.080	.006	.012	148
Centered Leverage Value	.000	.163	.020	.027	148

a. Dependent Variable: MeanKSB

Charts




Scatterplot
Dependent Variable: MeanKSB
Regression Standardized Residual
Regression Standardized Predicted Value
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2
1
0
-1
-2
-3
-2
-1
0
1
2
3

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GET
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COMPUTE MeanAttitudesxKSB=MeanAttitudes * MeanKSB.
EXECUTE.
COMPUTE MeanAttitudesxTrust=MeanAttitudes * MeanTrust.
EXECUTE.
REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING PAIRWISE
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  /CASEWISE PLOT(ZRESID) OUTLIERS(3)
  /SAVE MAHAL COOK.
```

Regression

[DataSet1] C:\Users\Ain\Google Drive\Thesis\SPSS\Actual Test Ain.sav

Descriptive Statistics

	Mean	Std. Deviation	N
MeanKSB	4.1571	.52187	148
MeanAttitudes	4.0101	.57117	148
MeanTrust	3.2054	.77721	148
MeanAttitudesxTrust	13.0212	4.22699	148

Correlations

		MeanKSB	MeanAttitudes	MeanTrust	MeanAttitudes xTrust
Pearson Correlation	MeanKSB	1.000	.507	.239	.407
	MeanAttitudes	.507	1.000	.379	.713
	MeanTrust	.239	.379	1.000	.913
	MeanAttitudesxTrust	.407	.713	.913	1.000
Sig. (1-tailed)	MeanKSB	.	.000	.002	.000
	MeanAttitudes	.000	.	.000	.000
	MeanTrust	.002	.000	.	.000
	MeanAttitudesxTrust	.000	.000	.000	.
N	MeanKSB	148	148	148	148
	MeanAttitudes	148	148	148	148
	MeanTrust	148	148	148	148
	MeanAttitudesxTrust	148	148	148	148

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	MeanAttitudes	.	Enter
2	MeanTrust[a]	.	Enter
3	MeanAttitudes xTrust	.	Enter

a. All requested variables entered.
b. Dependent Variable: MeanKSB

Model Summary[d]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.507[a]	.257	.252	.45131
2	.510[b]	.260	.250	.45207
3	.521[c]	.271	.256	.45018

Model Summary[d]

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.257	50.558	1	146	.000	
2	.003	.511	1	145	.476	
3	.011	2.221	1	144	.138	2.072

a. Predictors: (Constant), MeanAttitudes
b. Predictors: (Constant), MeanAttitudes, MeanTrust
c. Predictors: (Constant), MeanAttitudes, MeanTrust, MeanAttitudesxTrust
d. Dependent Variable: MeanKSB

ANOVA[d]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.298	1	10.298	50.558	.000[a]
	Residual	29.737	146	.204		
	Total	40.035	147			
2	Regression	10.402	2	5.201	25.450	.000[b]
	Residual	29.633	145	.204		
	Total	40.035	147			
3	Regression	10.852	3	3.617	17.850	.000[c]
	Residual	29.183	144	.203		
	Total	40.035	147			

a. Predictors: (Constant), MeanAttitudes
b. Predictors: (Constant), MeanAttitudes, MeanTrust
c. Predictors: (Constant), MeanAttitudes, MeanTrust, MeanAttitudesxTrust
d. Dependent Variable: MeanKSB

Coefficients[a]

Model		Unstandardized Coefficients	
		B	Std. Error
1	(Constant)	2.299	.264
	MeanAttitudes	.463	.065
2	(Constant)	2.257	.271
	MeanAttitudes	444	.071
	MeanTrust	.037	.052
3	(Constant)	4.128	1.284
	MeanAttitudes	-.020	.319
	MeanTrust	-.560	.404
	MeanAttitudesxTrust	.146	.098

Coefficients[a]

Model		Standardized Coefficients			95.0% Confidence Interval for B
		Beta	t	Sig.	Lower Bound
1	(Constant)		8.709	.000	1.777
	MeanAttitudes	.507	7.110	.000	.335
2	(Constant)		8.330	.000	1.721
	MeanAttitudes	.486	6.299	.000	.305
	MeanTrust	.055	.715	.476	-.065
3	(Constant)		3.214	.002	1.590
	MeanAttitudes	-.022	-.062	.951	-.651
	MeanTrust	-.834	-1.386	.168	-1.358
	MeanAttitudesxTrust	1.184	1.490	.138	-.048

Coefficients[a]

Model		95.0% Confidence Interval for B	Correlations		
		Upper Bound	Zero-order	Partial	Part
1	(Constant)	2.821			
	MeanAttitudes	.592	.507	.507	.507
2	(Constant)	2.792			
	MeanAttitudes	.584	.507	.463	.450
	MeanTrust	.140	.239	.059	.051
3	(Constant)	6.666			
	MeanAttitudes	.611	.507	-.005	-.004
	MeanTrust	.238	.239	-.115	-.099
	MeanAttitudesxTrust	.340	.407	.123	.106

Coefficients[a]

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	MeanAttitudes	1.000	1.000
2	(Constant)		
	MeanAttitudes	.856	1.168
	MeanTrust	.856	1.168
3	(Constant)		
	MeanAttitudes	.041	24.108
	MeanTrust	.014	71.460
	MeanAttitudesxTrust	.008	124.663

a. Dependent Variable: MeanKSB

Excluded Variables[c]

Model		Beta In	t	Sig.	Partial Correlation
1	MeanTrust	.055[a]	.715	.476	.059
	MeanAttitudesxTrust	.092[a]	.899	.370	.074
2	MeanAttitudesxTrust	1.184[b]	1.490	.138	.123

Excluded Variables[c]

Model		Collinearity Statistics		
		Tolerance	VIF	Minimum Tolerance
1	MeanTrust	.856	1.168	.856
	MeanAttitudesxTrust	.491	2.037	.491
2	MeanAttitudesxTrust	.008	124.663	.008

a. Predictors in the Model: (Constant), MeanAttitudes
b. Predictors in the Model: (Constant), MeanAttitudes, MeanTrust
c. Dependent Variable: MeanKSB

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index
1	1	1.990	1.000
	2	.010	14.160
2	1	2.958	1.000
	2	.032	9.586
	3	.010	17.372
3	1	3.926	1.000
	2	.058	8.203
	3	.015	15.999
	4	.000	139.449

Collinearity Diagnostics[a]

Model	Dimension	Variance Proportions			
		(Constant)	MeanAttitudes	MeanTrust	MeanAttitudes xTrust
1	1	.00	.00		
	2	1.00	1.00		
2	1	.00	.00	.01	
	2	.12	.07	.98	
	3	.88	.93	.02	
3	1	.00	.00	.00	.00
	2	.01	.00	.00	.00
	3	.01	.02	.02	.01
	4	.99	.98	.98	.99

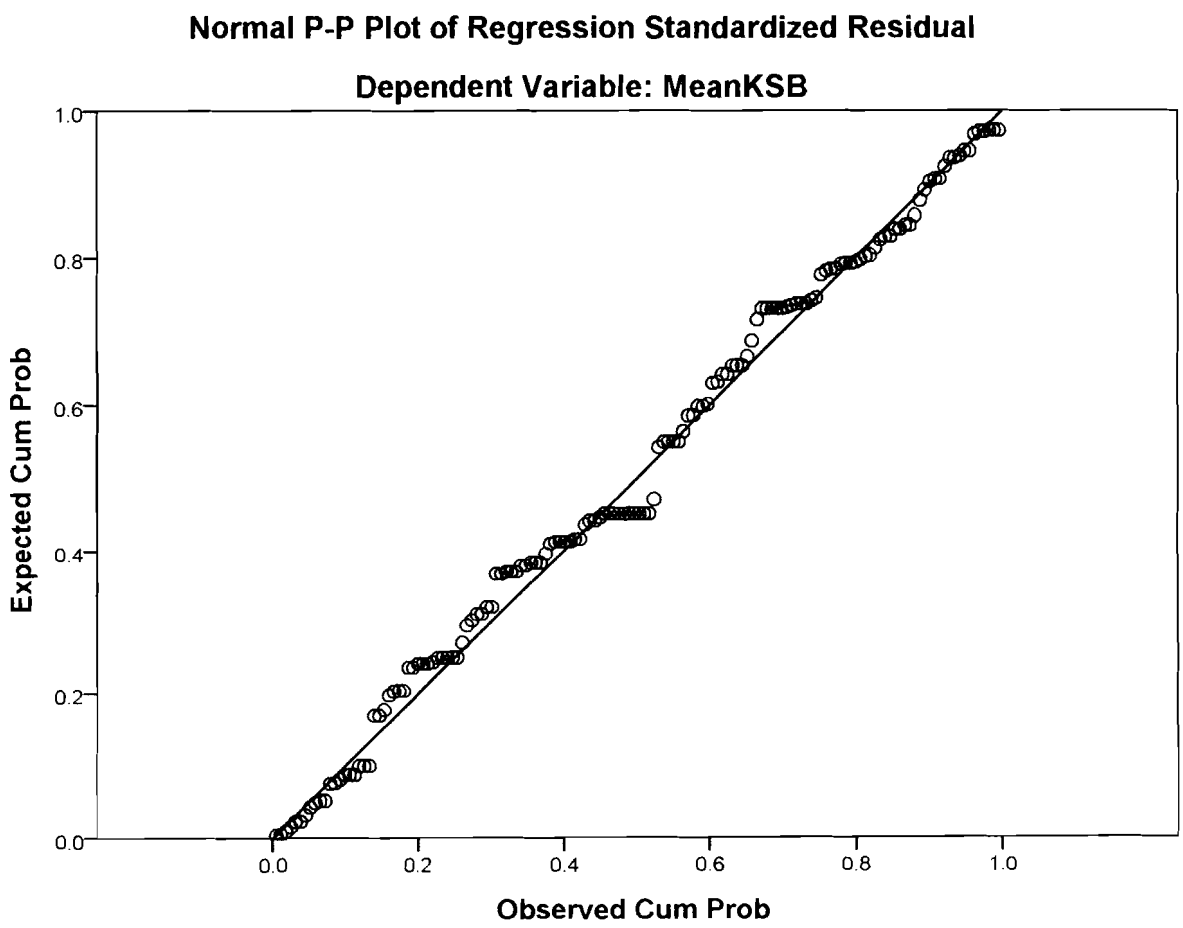
a. Dependent Variable: MeanKSB

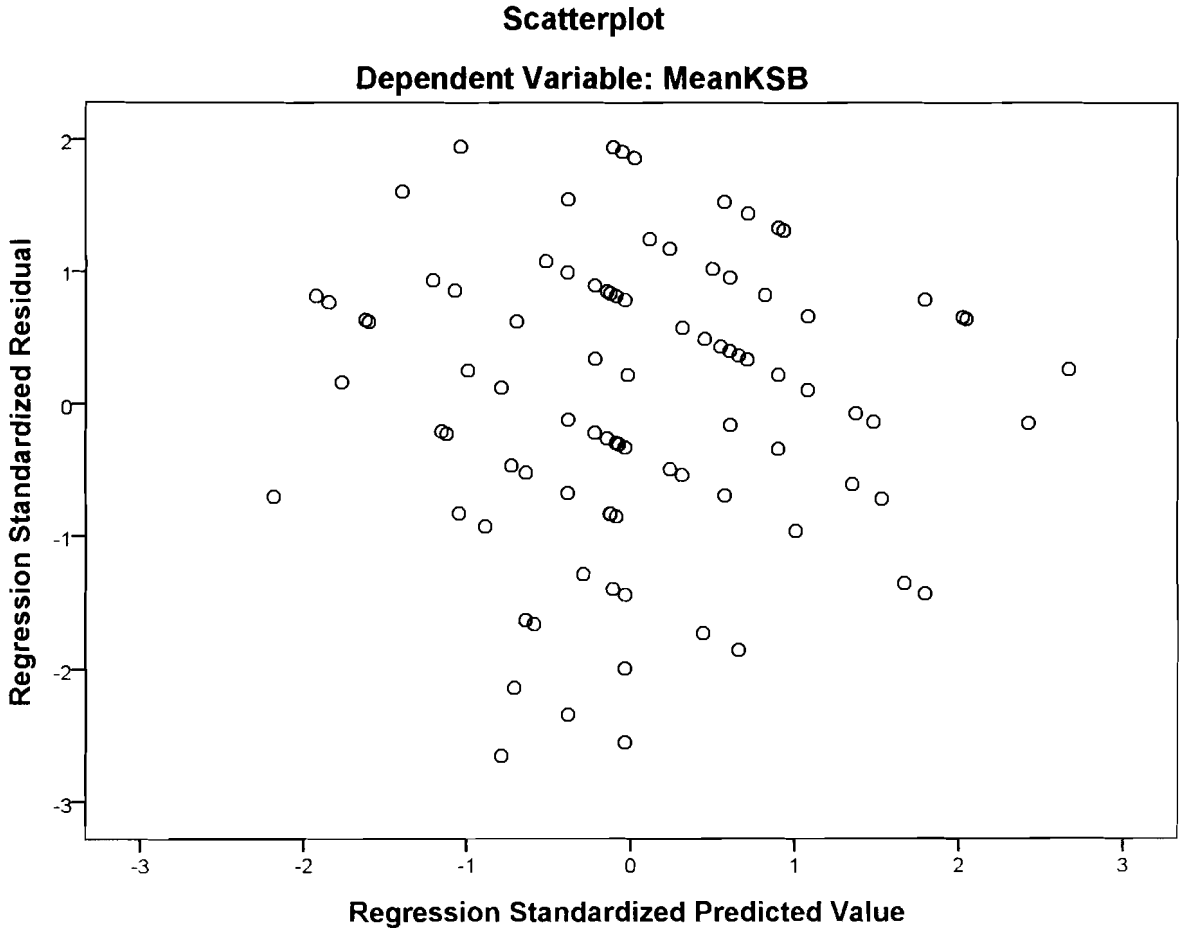
Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.5647	4.8837	4.1571	.27171	148
Std. Predicted Value	-2.180	2.674	.000	1.000	148
Standard Error of Predicted Value	.040	.178	.070	.025	148
Adjusted Predicted Value	3.5805	4.8620	4.1561	.27278	148
Residual	-1.19264	.87498	.00000	.44556	148
Std. Residual	-2.649	1.944	.000	.990	148
Stud. Residual	-2.676	1.979	.001	1.002	148
Deleted Residual	-1.21695	.90689	.00096	.45634	148
Stud. Deleted Residual	-2.736	1.999	.000	1.008	148
Mahal. Distance	.195	22.044	2.980	3.217	148
Cook's Distance	.000	.036	.006	.008	148
Centered Leverage Value	.001	.150	.020	.022	148

a. Dependent Variable: MeanKSB

Charts




Scatterplot
Dependent Variable: MeanKSB
Regression Standardized Residual
Regression Standardized Predicted Value
2
1
0
-1
-2
-3
-3
-2
-1
0
1
2
3

```
GET
  FILE='C:\Users\Ain\Google Drive\Thesis\SPSS\Actual Test Ain.sav'.
DATASET NAME DataSet1 WINDOW=FRONT.
COMPUTE MeanIncentivexTrust=MeanIncentives * MeanTrust.
EXECUTE.
REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING PAIRWISE
  /STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE ZPP
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT MeanKSB
  /METHOD=ENTER MeanIncentives
  /METHOD=ENTER MeanIncentives MeanTrust
  /METHOD=ENTER MeanIncentivexTrust
  /SCATTERPLOT=(*ZRESID ,*ZPRED)
  /RESIDUALS DURBIN NORMPROB(ZRESID)
  /CASEWISE PLOT(ZRESID) OUTLIERS(3)
  /SAVE MAHAL COOK.
```

Regression

[DataSet1] C:\Users\Ain\Google Drive\Thesis\SPSS\Actual Test Ain.sav

Descriptive Statistics

	Mean	Std. Deviation	N
MeanKSB	4.1571	.52187	148
MeanIncentives	3.1716	.74249	148
MeanTrust	3.2054	.77721	148
MeanIncentivexTrust	10.4114	4.05809	148

Correlations

		MeanKSB	Mean Incentives	MeanTrust
Pearson Correlation	MeanKSB	1.000	.257	.239
	MeanIncentives	.257	1.000	.427
	MeanTrust	.239	.427	1.000
	MeanIncentivexTrust	.298	.840	.829
Sig. (1-tailed)	MeanKSB	.	.001	.002
	MeanIncentives	.001	.	.000
	MeanTrust	.002	.000	.
	MeanIncentivexTrust	.000	.000	.000
N	MeanKSB	148	148	148
	MeanIncentives	148	148	148
	MeanTrust	148	148	148
	MeanIncentivexTrust	148	148	148

Correlations

		Mean Incentivex Trust
Pearson Correlation	MeanKSB	.298
	MeanIncentives	.840
	MeanTrust	.829
	MeanIncentivexTrust	1.000
Sig. (1-tailed)	MeanKSB	.000
	MeanIncentives	.000
	MeanTrust	.000
	MeanIncentivexTrust	.
N	MeanKSB	148
	MeanIncentives	148
	MeanTrust	148
	MeanIncentivexTrust	148

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Mean Incentives	.	Enter
2	MeanTrust[a]	.	Enter
3	Mean Incentivex Trust	.	Enter

a. All requested variables entered.
b. Dependent Variable: MeanKSB

Model Summary[d]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.257[a]	.066	.060	.50601
2	.294[b]	.087	.074	.50215
3	.298[c]	.089	.070	.50331

Model Summary[d]

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.066	10.357	1	146	.002	
2	.020	3.252	1	145	.073	
3	.002	.332	1	144	.565	1.824

a. Predictors: (Constant), MeanIncentives
b. Predictors: (Constant), MeanIncentives, MeanTrust
c. Predictors: (Constant), MeanIncentives, MeanTrust, MeanIncentivexTrust
d. Dependent Variable: MeanKSB

ANOVA[d]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.652	1	2.652	10.357	.002[a]
	Residual	37.383	146	.256		
	Total	40.035	147			
2	Regression	3.472	2	1.736	6.885	.001[b]
	Residual	36.563	145	.252		
	Total	40.035	147			
3	Regression	3.556	3	1.185	4.679	.004[c]
	Residual	36.479	144	.253		
	Total	40.035	147			

a. Predictors: (Constant), MeanIncentives
b. Predictors: (Constant), MeanIncentives, MeanTrust
c. Predictors: (Constant), MeanIncentives, MeanTrust, MeanIncentivexTrust
d. Dependent Variable: MeanKSB

Coefficients[a]

Model		Unstandardized Coefficients	
		B	Std. Error
1	(Constant)	3.583	.183
	MeanIncentives	.181	.056
2	(Constant)	3.393	.210
	MeanIncentives	.133	.062
	MeanTrust	.106	.059
3	(Constant)	3.753	.658
	MeanIncentives	.011	.222
	MeanTrust	-.007	.205
	MeanIncentivexTrust	.038	.066

Coefficients[a]

Model		Standardized Coefficients			95.0% Confidence Interval for B
		Beta	t	Sig.	Lower Bound
1	(Constant)		19.574	.000	3.222
	MeanIncentives	.257	3.218	.002	.070
2	(Constant)		16.161	.000	2.978
	MeanIncentives	.190	2.161	.032	.011
	MeanTrust	.158	1.803	.073	-.010
3	(Constant)		5.705	.000	2.453
	MeanIncentives	.015	.048	.962	-.427
	MeanTrust	-.011	-.034	.973	-.413
	MeanIncentivexTrust	.294	.577	.565	-.092

Coefficients[a]

Model		95.0% Confidence Interval for B	Correlations		
		Upper Bound	Zero-order	Partial	Part
1	(Constant)	3.945			
	MeanIncentives	.292	.257	.257	.257
2	(Constant)	3.808			
	MeanIncentives	.255	.257	.177	.171
	MeanTrust	.223	.239	.148	.143
3	(Constant)	5.053			
	MeanIncentives	.449	.257	.004	.004
	MeanTrust	.399	.239	-.003	-.003
	MeanIncentivexTrust	.167	.298	.048	.046

Coefficients[a]

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	MeanIncentives	1.000	1.000
2	(Constant)		
	MeanIncentives	.817	1.224
	MeanTrust	.817	1.224
3	(Constant)		
	MeanIncentives	.064	15.715
	MeanTrust	.068	14.779
	MeanIncentivexTrust	.024	41.029

a. Dependent Variable: MeanKSB

Excluded Variables[c]

Model		Beta In	t	Sig.	Partial Correlation
1	MeanTrust	.158[a]	1.803	.073	.148
	MeanIncentivexTrust	.277[a]	1.896	.060	.156
2	MeanIncentivexTrust	.294[b]	.577	.565	.048

Excluded Variables[c]

Model		Collinearity Statistics		
		Tolerance	VIF	Minimum Tolerance
1	MeanTrust	.817	1.224	.817
	MeanIncentivexTrust	.294	3.397	.294
2	MeanIncentivexTrust	.024	41.029	.024

a. Predictors in the Model: (Constant), MeanIncentives
b. Predictors in the Model: (Constant), MeanIncentives, MeanTrust
c. Dependent Variable: MeanKSB

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index
1	1	1.974	1.000
	2	.026	8.687
2	1	2.944	1.000
	2	.031	9.774
	3	.026	10.709
3	1	3.901	1.000
	2	.068	7.575
	3	.031	11.292
	4	.001	65.213

Collinearity Diagnostics[a]

		Variance Proportions			
Model	Dimension	(Constant)	Mean Incentives	MeanTrust	Mean Incentivex Trust
1	1	.01	.01		
	2	.99	.99		
2	1	.00	.00	.01	
	2	.04	.50	.88	
	3	.96	.49	.11	
3	1	.00	.00	.00	.00
	2	.03	.00	.00	.02
	3	.00	.05	.06	.00
	4	.97	.95	.94	.98

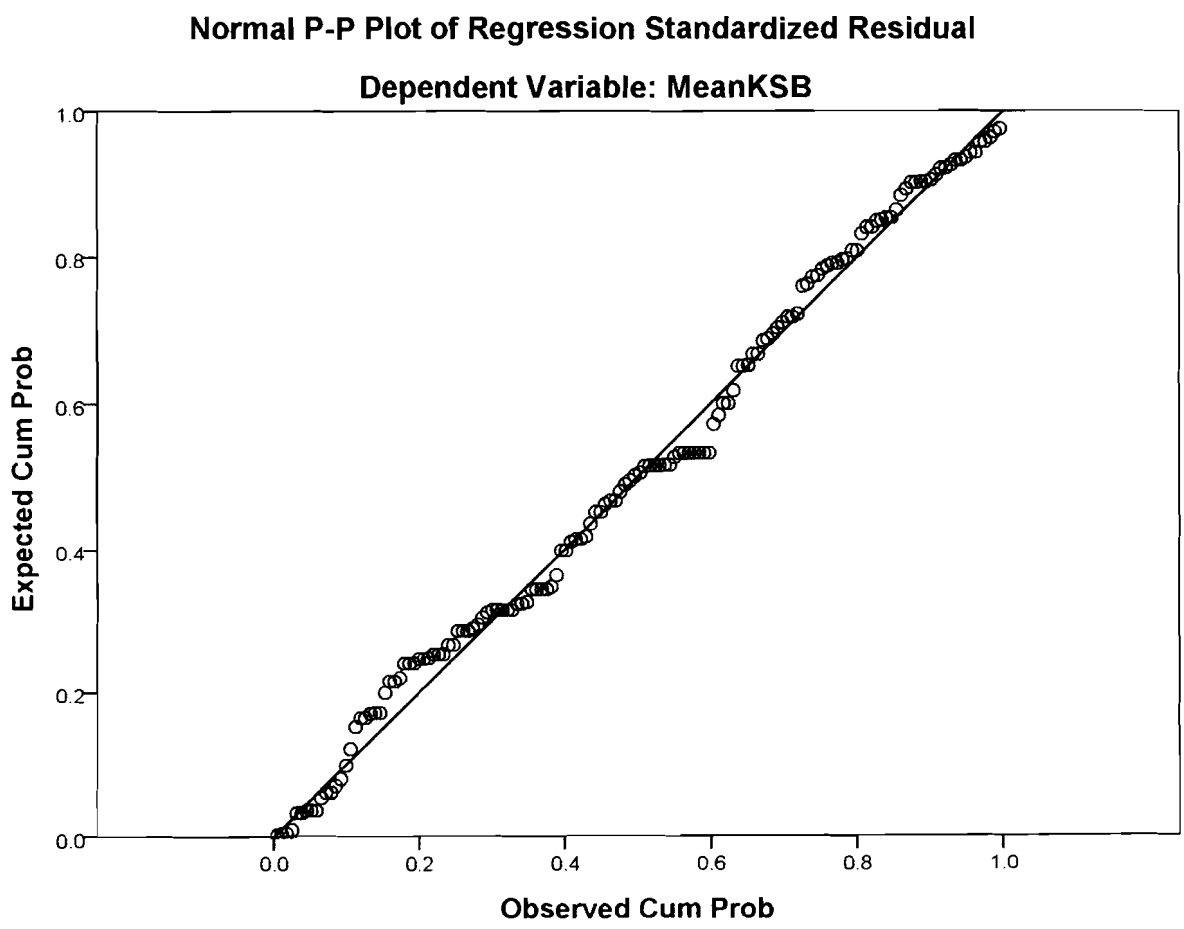
a. Dependent Variable: MeanKSB

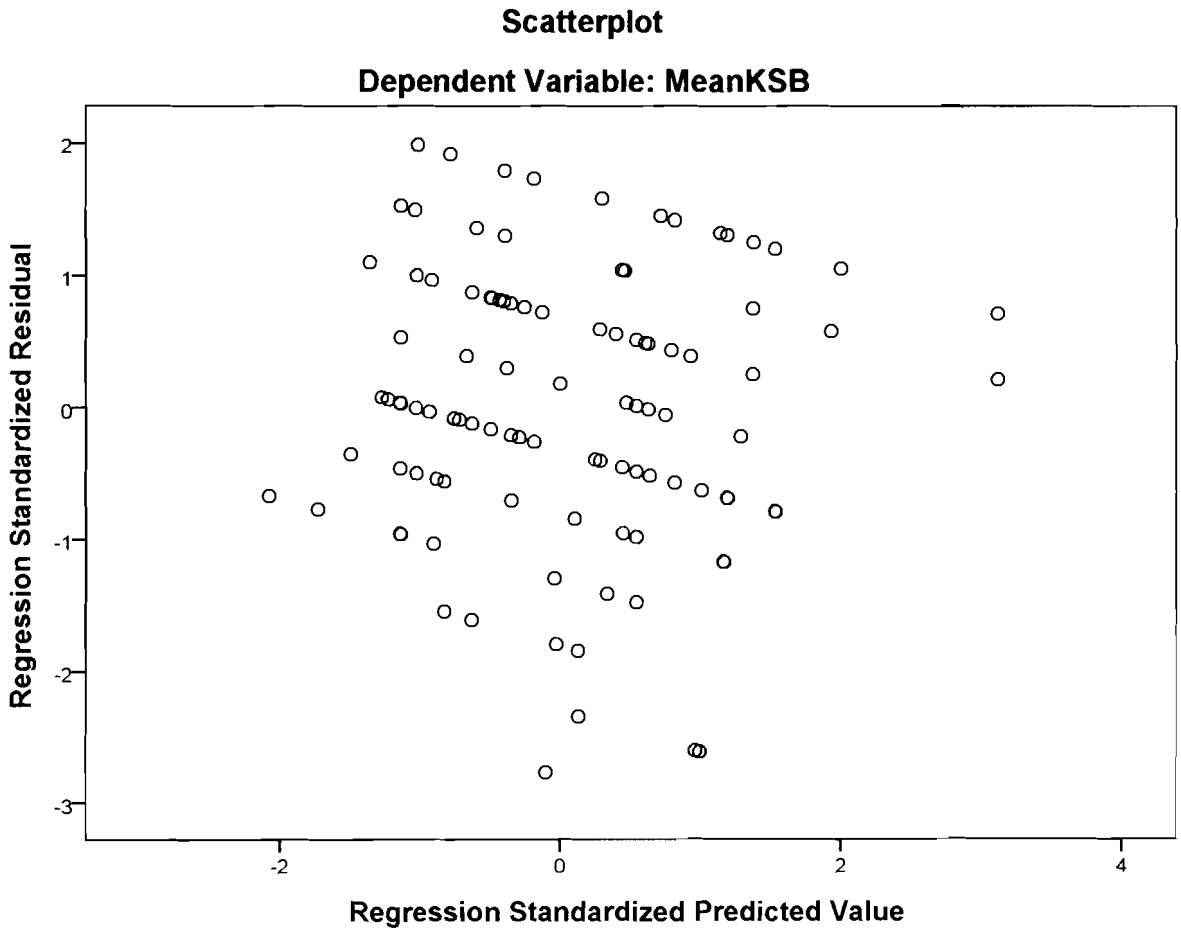
Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.8338	4.6422	4.1571	.15554	148
Std. Predicted Value	-2.079	3.119	.000	1.000	148
Standard Error of Predicted Value	.044	.212	.076	.033	148
Adjusted Predicted Value	3.9061	4.6224	4.1568	.15135	148
Residual	-1.39093	1.00086	.00000	.49815	148
Std. Residual	-2.764	1.989	.000	.990	148
Stud. Residual	-2.842	2.004	.000	1.002	148
Deleted Residual	-1.47069	1.01624	.00034	.51095	148
Stud. Deleted Residual	-2.915	2.025	-.001	1.009	148
Mahal. Distance	.155	25.175	2.980	4.507	148
Cook's Distance	.000	.116	.006	.012	148
Centered Leverage Value	.001	.171	.020	.031	148

a. Dependent Variable: MeanKSB

Charts




Scatterplot
Dependent Variable: MeanKSB
Regression Standardized Residual
Regression Standardized Predicted Value
2
1
0
-1
-2
-3
-2
0
2
4

```
GET
  FILE='C:\Users\Ain\Google Drive\Thesis\SPSS\Actual Test Ain.sav'.
DATASET NAME DataSet1 WINDOW=FRONT.
COMPUTE MeanMSupportxTrust=MeanMSupport * MeanTrust.
EXECUTE.
REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING PAIRWISE
  /STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE ZPP
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT MeanKSB
  /METHOD=ENTER MeanMSupport
  /METHOD=ENTER MeanMSupport MeanTrust
  /METHOD=ENTER MeanMSupportxTrust
  /SCATTERPLOT=(*ZRESID ,*ZPRED)
  /RESIDUALS DURBIN NORMPROB(ZRESID)
  /CASEWISE PLOT(ZRESID) OUTLIERS(3)
  /SAVE MAHAL COOK.
```

Regression

```
[DataSet1] C:\Users\Ain\Google Drive\Thesis\SPSS\Actual Test Ain.sav
```

Descriptive Statistics

	Mean	Std. Deviation	N
MeanKSB	4.1571	.52187	148
MeanMSupport	3.8581	.61110	148
MeanTrust	3.2054	.77721	148
MeanMSupportxTrust	12.5135	4.08748	148

Correlations

		MeanKSB	Mean MSupport	MeanTrust
Pearson Correlation	MeanKSB	1.000	.233	.239
	MeanMSupport	.233	1.000	.311
	MeanTrust	.239	.311	1.000
	MeanMSupportxTrust	.290	.712	.877
Sig. (1-tailed)	MeanKSB	.	.002	.002
	MeanMSupport	.002	.	.000
	MeanTrust	.002	.000	.
	MeanMSupportxTrust	.000	.000	.000
N	MeanKSB	148	148	148
	MeanMSupport	148	148	148
	MeanTrust	148	148	148
	MeanMSupportxTrust	148	148	148

Correlations

		Mean MSupportx Trust
Pearson Correlation	MeanKSB	.290
	MeanMSupport	.712
	MeanTrust	.877
	MeanMSupportxTrust	1.000
Sig. (1-tailed)	MeanKSB	.000
	MeanMSupport	.000
	MeanTrust	.000
	MeanMSupportxTrust	.
N	MeanKSB	148
	MeanMSupport	148
	MeanTrust	148
	MeanMSupportxTrust	148

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	Mean MSupport	.	Enter
2	MeanTrust[a]	.	Enter
3	Mean MSupportx Trust	.	Enter

a. All requested variables entered.
b. Dependent Variable: MeanKSB

Model Summary[d]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.233[a]	.054	.048	.50924
2	.292[b]	.085	.073	.50259
3	.292[c]	.086	.066	.50423

Model Summary[d]

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.054	8.383	1	146	.004	
2	.031	4.890	1	145	.029	
3	.000	.057	1	144	.812	1.883

a. Predictors: (Constant), MeanMSupport
b. Predictors: (Constant), MeanMSupport, MeanTrust
c. Predictors: (Constant), MeanMSupport, MeanTrust, MeanMSupportxTrust
d. Dependent Variable: MeanKSB

ANOVA[d]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.174	1	2.174	8.383	.004[a]
	Residual	37.861	146	.259		
	Total	40.035	147			
2	Regression	3.409	2	1.705	6.748	.002[b]
	Residual	36.626	145	.253		
	Total	40.035	147			
3	Regression	3.423	3	1.141	4.488	.005[c]
	Residual	36.612	144	.254		
	Total	40.035	147			

a. Predictors: (Constant), MeanMSupport
b. Predictors: (Constant), MeanMSupport, MeanTrust
c. Predictors: (Constant), MeanMSupport, MeanTrust, MeanMSupportxTrust
d. Dependent Variable: MeanKSB

Coefficients[a]

Model		Unstandardized Coefficients	
		B	Std. Error
1	(Constant)	3.389	.268
	MeanMSupport	.199	.069
2	(Constant)	3.181	.281
	MeanMSupport	.150	.071
	MeanTrust	.124	.056
3	(Constant)	3.409	.998
	MeanMSupport	.089	.264
	MeanTrust	.053	.303
	MeanMSupportxTrust	.019	.078

Coefficients[a]

Model		Standardized Coefficients			95.0% Confidence Interval for B
		Beta	t	Sig.	Lower Bound
1	(Constant)		12.625	.000	2.859
	MeanMSupport	.233	2.895	.004	.063
2	(Constant)		11.312	.000	2.625
	MeanMSupport	.176	2.100	.037	.009
	MeanTrust	.185	2.211	.029	.013
3	(Constant)		3.415	.001	1.436
	MeanMSupport	.105	.339	.735	-.431
	MeanTrust	.079	.175	.862	-.547
	MeanMSupportxTrust	.146	.238	.812	-.136

Coefficients[a]

Model		95.0% Confidence Interval for B	Correlations		
		Upper Bound	Zero-order	Partial	Part
1	(Constant)	3.920			
	MeanMSupport	.335	.233	.233	.233
2	(Constant)	3.737			
	MeanMSupport	.291	.233	.172	.167
	MeanTrust	.235	.239	.181	.176
3	(Constant)	5.382			
	MeanMSupport	.610	.233	.028	.027
	MeanTrust	.653	.239	.015	.014
	MeanMSupportxTrust	.173	.290	.020	.019

Coefficients[a]

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	MeanMSupport	1.000	1.000
2	(Constant)		
	MeanMSupport	.903	1.107
	MeanTrust	.903	1.107
3	(Constant)		
	MeanMSupport	.067	14.996
	MeanTrust	.031	32.160
	MeanMSupportxTrust	.017	58.859

a. Dependent Variable: MeanKSB

Excluded Variables[c]

Model		Beta In	t	Sig.	Partial Correlation
1	MeanTrust	.185[a]	2.211	.029	.181
	MeanMSupportxTrust	.251[a]	2.218	.028	.181
2	MeanMSupportxTrust	.146[b]	.238	.812	.020

Excluded Variables[c]

Model		Collinearity Statistics		
		Tolerance	VIF	Minimum Tolerance
1	MeanTrust	.903	1.107	.903
	MeanMSupportxTrust	.494	2.026	.494
2	MeanMSupportxTrust	.017	58.859	.017

a. Predictors in the Model: (Constant), MeanMSupport
b. Predictors in the Model: (Constant), MeanMSupport, MeanTrust
c. Dependent Variable: MeanKSB

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index
1	1	1.988	1.000
	2	.012	12.748
2	1	2.954	1.000
	2	.034	9.385
	3	.012	15.544
3	1	3.922	1.000
	2	.057	8.287
	3	.020	13.832
	4	.000	95.541

Collinearity Diagnostics[a]

		Variance Proportions			
Model	Dimension	(Constant)	Mean MSupport	MeanTrust	Mean MSupportx Trust
1	1	.01	.01		
	2	.99	.99		
2	1	.00	.00	.01	
	2	.10	.11	.99	
	3	.90	.88	.00	
3	1	.00	.00	.00	.00
	2	.01	.00	.00	.01
	3	.01	.03	.03	.01
	4	.98	.97	.96	.98

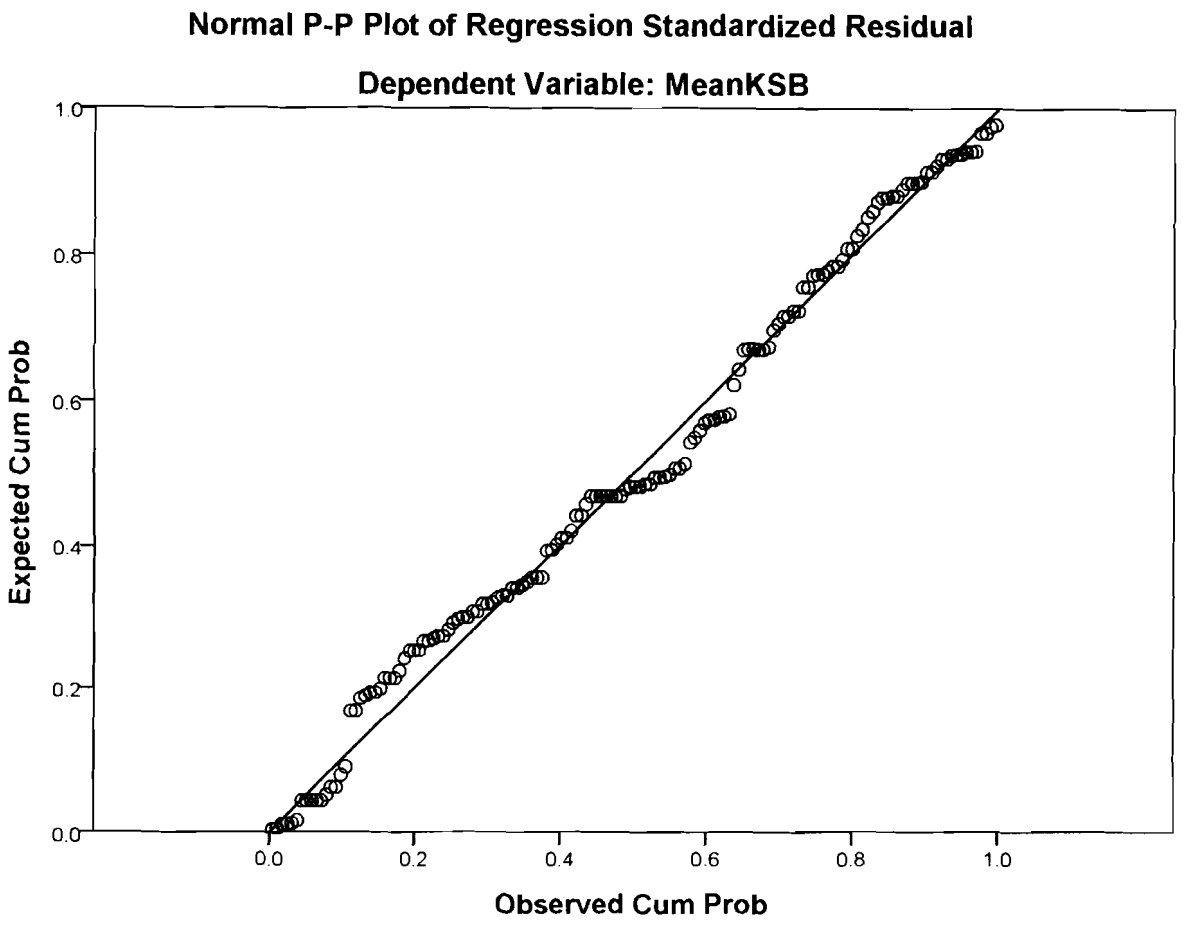
a. Dependent Variable: MeanKSB

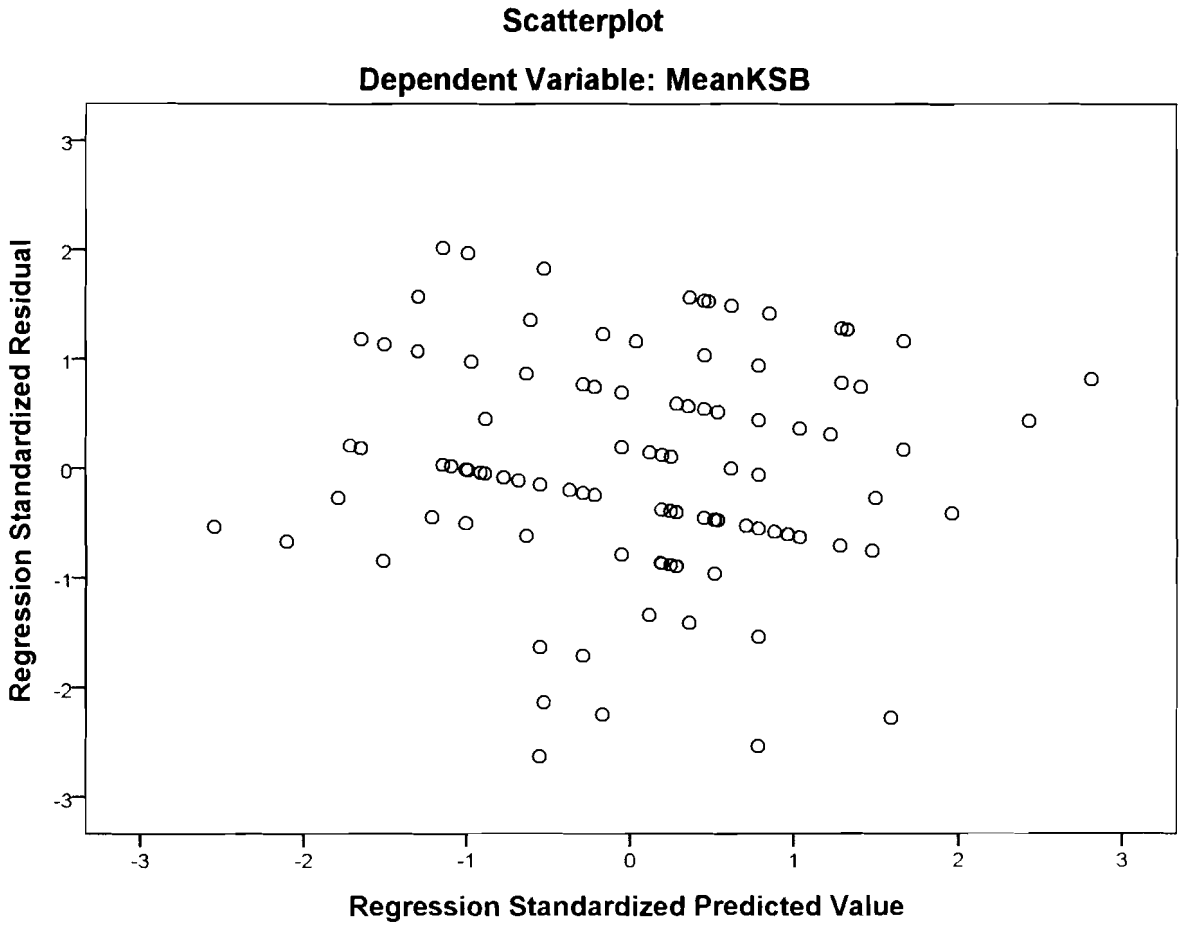
Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.7686	4.5867	4.1571	.15261	148
Std. Predicted Value	-2.546	2.815	.000	1.000	148
Standard Error of Predicted Value	.044	.215	.075	.035	148
Adjusted Predicted Value	3.8279	4.5187	4.1559	.15184	148
Residual	-1.32287	1.01770	.00000	.49906	148
Std. Residual	-2.624	2.018	.000	.990	148
Stud. Residual	-2.648	2.040	.001	1.001	148
Deleted Residual	-1.34781	1.03997	.00114	.51052	148
Stud. Deleted Residual	-2.706	2.063	.000	1.008	148
Mahal. Distance	.137	25.610	2.980	4.616	148
Cook's Distance	.000	.050	.006	.009	148
Centered Leverage Value	.001	.174	.020	.031	148

a. Dependent Variable: MeanKSB

Charts




Scatterplot
Dependent Variable: MeanKSB
Regression Standardized Residual
Regression Standardized Predicted Value
3
2
1
0
-1
-2
-3
-3
-2
-1
0
1
2
3