

A STUDY ON SUPERIOR-SUBORDINATE ATTRIBUTION DIFFERENCES

by

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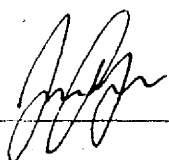
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ABSTRAK

Cara pihak pengurus membuat penilaian tentang kakitangannya adalah satu bidang kajian yang menarik. Mekanisme seseorang pengurus menilai prestasi kakitangannya adalah dipercayai mengikut Teori "Attribution" yang dikemukakan oleh Heider (1958). Salah satu unsur teori ini ialah bahawa sememangnya akan wujud perbezaan di dalam penilaian kalau dibandingkan dari segi pandangan pengurus dan pandangan kakitangan. Tujuan kajian ini ialah untuk menentukan sama ada faktor komunikasi and kerenggangan sosial di antara pengurus and kakitangannya memainkan peranan di dalam menentukan jurang perbezaan ini. Kajian ini juga menentukan sama ada tempoh masa, paras pengurus di dalam organisasi dan jenis syarikat, memainkan peranan yang penting untuk menentukan komunikasi dan kerenggangan sosial. Keputusan kajian ini menunjukkan pasangan pengurus-kakitangan yang mempunyai mutu komunikasi yang tinggi serta kerenggangan sosial yang kurang, mempunyai perbezaan penilaian yang kurang. Fakta-fakta komunikasi dan kerenggangan sosial pula dipengaruhi oleh jenis syarikat yang menunjukkan budaya organisasi mempunyai pengaruh yang penting dalam menentukan mutu komunikasi dan cara-cara pengurus berinteraksi dengan kakitangannya.

ABSTRACT

How superiors and subordinates attribute the subordinate's performance has long been a widely studied field. One of the basic principles of the Theory of Attribution as proposed by Heider (1958) is that there are bound to be differences between the attribution by the superior and the attribution made by the subordinate. The purpose of this study is to determine whether the quality of communication and the social distance between the superior and subordinate play an important role in determining the degree of difference in the attributions made by the superior and subordinate on the subordinate's performance. This study also determines whether the tenure of the dyad, the level of the dyad in the organization, and the type of company, are significant factors in determining the quality of communication and the social distance in the superior-subordinate dyad. Results from this study indicate that dyads with a high quality of communication and low social distance will have low degree of difference in attributions. It is also found that the quality of communication and social distance varies by the type of company. This suggests that organizational culture may be an important factor in determining the quality of communication and the intimacy of interpersonal relationship between superiors and their subordinates.

Chapter 1

INTRODUCTION

There has been some research conducted on the attribution process in organizations particularly in the area of how superiors and subordinates attribute the subordinate's performance. Studies in this area has significant practical impact on areas of Organizational Behaviour and Human Resource Management such as performance evaluations and job satisfaction. Performance evaluations as defined by Wexley and Klimoski (1990) is "The process by which employees are assessed for purposes of enhancing their development or formulating an administrative decision". Such a complex and subjective process generates more than its fair share of controversy. There is often a sense of mistrust between the superior and the subordinate. A lot of work has been done on the techniques of accurate evaluations and criterion development (Miner, 1988; Lane and Herriot, 1990; Bannister and Balkin, 1990). But performance evaluations are more than just a set of measurements and criteria. There is also a full spectrum of interpersonal relationship factors affecting the accuracy of the evaluation and also the perception of both parties involved in the performance evaluation.

One of the main areas of mistrust from a performance evaluation comes from the fact that the actor (subordinate) and the observer (superior) attribute different causes to the subordinate's performance. As long as a performance evaluation is done by a separate person, attribution differences are bound to happen. The objective of this study is to look into the effects of some of the proposed factors affecting superior-subordinate attribution differences. Research in the area of performance ratings has demonstrated that both superiors and subordinates are liable to attribution biases. It is well known that there are many biases which can be operating when attributions are made. It is believed to be so pervasive that it is termed the "fundamental attribution error" (Jones & Harris,

1967),. It is to attribute too much of the causation of behaviour to the actor's disposition and too little to the situation. When subordinates perform poorly, superiors tend to attribute this poor performance to factors internal rather than external to the subordinates; as a result, superiors direct their responses toward the subordinates rather than attempting to alter the work situation (Green & Mitchell, 1979).

1.1 Purpose Of Study

In this study, the attribution differences between the superior and subordinate refers to the degree of divergence in the attributions by superior and subordinate when referring to the subordinates general performance on his/her job. The performance that is referred to in this study is based on an overall perception of performance and not on any specific tasks.

This study attempts to identify some of the factors which may have a significant effect on the attribution differences between superior and subordinate. The factors that were investigated are quality of superior-subordinate communication, social distance between the superior and subordinate, tenure of the superior-subordinate relationship, organizational level and type of organization. Although the gender composition of the superior-subordinate dyad has been identified from a review of literature as one of the factors that has an effect on the attribution process, this factor was not included in this investigation due to difficulties in obtaining suitable samples from Malaysian organizations.

1.2 Theoretical Framework

The dependent variable in this study is 'superior-subordinate attribution differences', which is the variable of primary interest, the variance of which is attempted to be explained by the two intervening variables of social distance of the

dyad and quality of communication. This study will investigate whether the tenure of the dyadic relationship, the level of the dyad in the organization and the type of company. has any significant effects on the two intervening variables mentioned above.

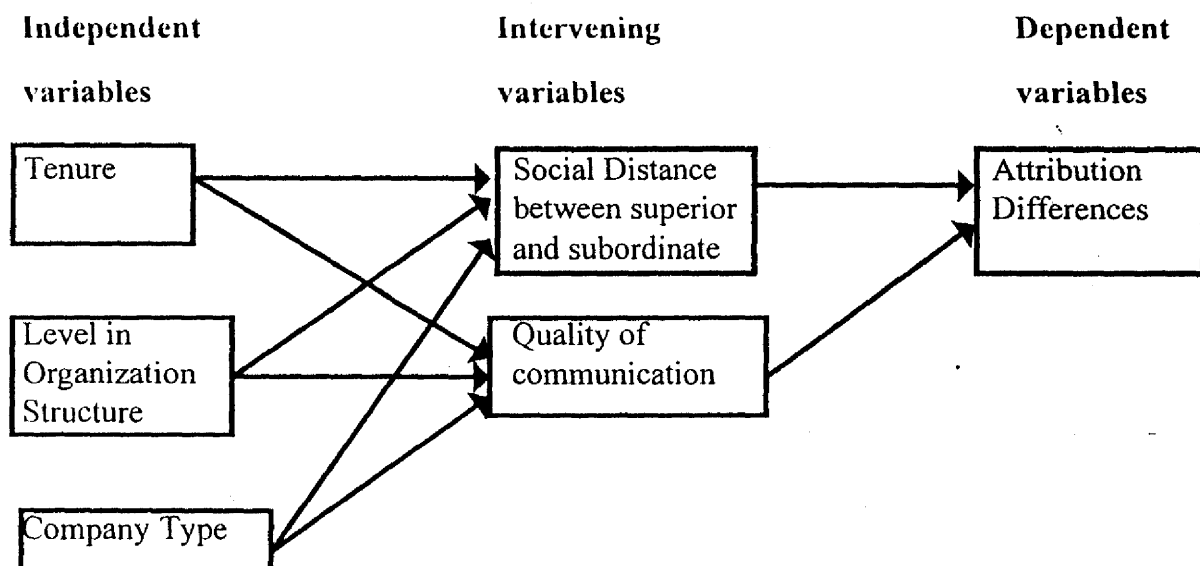


fig. 1.1: Theoretical framework

The following hypothesis is proposed :

Hypothesis 1 : The bigger the social distance between both members of superior-subordinate dyad, the greater the differences in the attribution of the subordinate’s performance. An actor (subordinate) in situations of performance failure attributes his/her failure to situational causes and de-emphasizes the personal factors to protect his or her self-image. A subordinate in a high social distance relationship will view performance failure as threatening. This basically supports the self-serving bias theory as proposed by Jones and Nisbett (1972).

Hypothesis 2: The higher the quality of communication between the superior and subordinate, the lesser the attribution differences between superior and subordinate. This is believed to be true due to the higher frequency, accuracy and effectiveness of constant performance feedback and goal setting.

Hypothesis 3 : The longer the tenure of the relationship between the superior and subordinate. the smaller the social distance between the superior and subordinate.

This is explained by the belief that as the superior-subordinate relationship becomes more established with time, the subordinate will have a better knowledge of the stated and also the implied goals set by the superior. Therefore they will begin to view causality of any performance incidents with a higher degree of similarity.

Hypothesis 4: The longer the tenure of the superior-subordinate relationship, the higher the quality of communication between the superior and subordinate. The longer the relationship between the superior and subordinate, patterns of communication and role clarity becomes more stable.

Hypothesis 5: Dyads at the higher levels of the organization will have smaller social distance. In the upper hierarchy of the organization interpersonal relationships are not actively cultivated and role ambiguity is prevalent. Interpersonal relationships in the upper hierarchy of an organization are dominated by power, coercion, dominance, leadership, authority, control and compliance gaining.

Hypothesis 6: Dyads in the lower level of the organization will have higher quality of communication. In the lower level hierarchy of the organization there is a higher level of role clarity. Past studies also indicate a lower level of openness at the upper levels of the organizational hierarchy due to a prevalence of "hidden agendas" and "office politics".

Hypothesis 7: Dyads from Western MNCs will have the lowest social distance between the superior and subordinate. Past studies indicate a widely held perception that Western Multinationals have a more open organizational culture than Eastern Multinationals. In Eastern Multinationals, rank and status are constantly enforced through the use of rituals and status symbols. The social distance in local companies will be similar to Eastern MNCs.

Hypothesis 8: Dyads from Western MNCs will have the highest quality of communication than Eastern MNCs. A more open organizational culture will cultivate a higher quality of communication, as was proposed by Williams, Whyte and Green (1966). The quality of communication in local companies will be similar to Eastern MNCs.

Hypothesis 9 : Dyads with high Social Distance Scores will have low Communication scores. Superiors and subordinates with a confrontational approach towards their working relationship will generally have lower frequency and quality of communication. There will be less feedback and seeking of opinions.

Chapter 2

LITERATURE REVIEW

2.1 Attribution Theory

Attribution theory deals with the rules the average individual uses in attempting to infer the causes of observed behaviour. Attribution theory examines the layman's analysis of behavioural causation for the purpose of understanding human behaviour. The study of attribution which originated with Heider's work (1958) is now central to much of contemporary social psychology. Heider's somewhat broad perspective is that of a social phenomenologist. His essential philosophical analysis first helped to delineate the field of "person perception" as a research area within social psychology. This broader field came alive when the focus of interest switched from the person who was the 'object' of perception to the study of the cognitive processes, whereby the perceiver infers things he cannot directly observe (e.g. motives, intentions, abilities etc.) on the basis of things he can observe (e.g. actions, the social and physical contexts in which they occur and the outcomes of these actions). The essence of "attribution theory" is the "attributions" made by the perceiver in "explaining" or "understanding" what he observes.

Actors and observers have different conceptions of personality structure. Each individual perceives every other individual to have more stable personality traits than he himself possesses. He views others as having generalized response dispositions but himself as acting in accord with the demands and opportunities inherent in each new situation. In order to test this proposition, Nisbett and Caputo (1971) constructed a variant of the standard trait description questionnaire. A list of twenty polar adjectives (e.g. "reserved - emotionally expressive; "lenient - firm") was presented to subjects along with the option, "depends on the situation." for each dimension. Each of the male

college student subjects was asked to check one of the three alternatives for each trait dimension for each of five people; himself, his best friend, an age peer whom the subject liked but did not know well, his father, and (to fill in the remaining cell of the young-old, familiar-unfamiliar matrix) the television commentator Walter Cronkite. In line with anticipation, subjects were likely to use the “depends on the situation” category for themselves but quite willing to assign traits to the other stimulus persons.

Central to the relationship between superior and subordinate is the potential for attribution biases when it comes to attributing causes to performance incidences. In their landmark study, Jones and Nisbett (1972) found that the actor and observer attributes causes for the actor's behaviour in rather divergent ways, often in ways that protect his or her self-image and ego. This is known as the self serving attribution theory. This theory makes the assumption that people seeks to identify the causes of behaviour through their own self serving interpretations. As Green and Mitchell (1979) notes after a performance incident or series of behaviours, superiors and subordinates try to figure the cause or causes of performance. This process involves the sorting through of various information cues and results in an attribution. The attribution process typically involves a judgment about whether internal factors (e.g. motivation, ability and personal character) or external factors (e.g. task difficulty, task suitability, luck, cooperation from colleagues and organizational support) cause the behaviour. Variations in attribution are known as actor-observer differences. Actor-observer differences arise because there is a pervasive tendency for actors to attribute their actions to external situational requirements whereas observers tend to attribute the same items to internal factors. This difference in attributions has been labeled the perceptual bias hypothesis.

Although the overall theory of attribution biases sounds reasonable enough, many subsequent research has yielded mixed results, Huber, Podsakoff and Todor (1986) found

that on the average, the causal attributions on the part of the subordinate shows no significant difference from the superior. The two parties seem to concur on the causes of performance when their scores are taken as an average across all dyads (superior-subordinate dyad). However there was a significant disagreement within the dyads on the causality attributions of performance. This means that there are probably some external factors which may affect the actor-observer attribution differences which were not considered in the original study. Due to the large and diverse sample, these effects average out the intra-dyad differences when the scores are taken as an average but show up in analyses within dyads.

2.2 The Dyadic Approach To The Study Of Superior-Subordinate Attribution Differences

Two distinct approaches have been used in studies of the superior-subordinate relationship. The first approach, which has been called average leadership style (ALS), assumes that leaders act in a relatively uniform way to all their subordinates. The second theoretical approach is a dyadic view that assumes that leaders do not exhibit the same behaviour to each of their subordinates. Rather, a leader's behaviour will vary from subordinate to subordinate. Proponents of this approach argue that the dyadic relationship between a leader and his/her subordinates is a more appropriate unit of analysis for conducting such studies. In a study by Katerberg and Hom (1981) comparing these two approaches, it was found that the dyadic approach gave better results and is therefore useful and important for such studies.

2.3 Attribution Differences And The Gender Factor

The work of Lawler (1967) suggests that demographic characteristics of the superior-subordinate dyad may also moderate self-superior evaluation relationships. The demographic characteristics include sex, age, race, education, tenure and pay level.

Research in this field yields mixed results. Superior-subordinate agreement on performance attributions may be associated with organizational and demographic variables. For instance, London and Wohlers (1991) found that agreement was higher for female than male managers regardless of the sex of the subordinate.

A study by Sundvik and Lindeman (1993) showed that superior-subordinate rating biases can be explained by the gender schema theory. This theory suggests that the sex of the subordinate is important for only some individuals. Thus it is possible that the effect of the ratee's sex on personnel assessment varies, among other things as a function of the rater's sex-role identity. The gender schema theory (Bem, 1981) is based on the assumption that individuals differ in gender salience in their identity. Persons who describe themselves with either masculine attributes (masculine individuals) or with feminine attributes (feminine individuals) are characterized as sex-typed, whereas persons who describe themselves with neutral attributes are characterized as non-sex typed persons. Accordingly, sex-typed individuals have a tendency to process information on the basis of gender-linked associations. In other words, sex is psychologically more important for masculine and feminine persons than for undifferentiated persons.

However studies carried out by many researchers in the rich field of sex differences in performance appraisals reveal mixed findings. Dipboye (1985) commented that it is difficult to interpret field data on sex differences in appraisals. Overall performance ratings are likely to be only a partial reflection of true performance differences because many non-performance factors have biasing effects (Landy & Farr, 1983). In a study by Williams and Walker (1985), it was found that there were few significant differences between the sexes in the overall appraisal process. In other words, the gender of the appraisee and the appraiser has no significant effect in the accuracy of

the appraisal process. In a study by Ragins and Sundstrom (1990), it was found that subordinates perceived no differences in overall power and ego between male and female managers. The researchers explained this observation on the lack of gender differences in the perceived relationship between the superior and subordinate by postulating that direct experience can override or modify sex-role stereotypes.

2.4 Attribution Differences, Quality Of Communication And The Tenure Of The Superior-Subordinate Relationship

The quality of communication between the superior and subordinate could also play a significant role in modifying superior-subordinate performance attribution differences. Superiors usually establish a special relationship with a small number of trusted subordinates (the "in" group) who are treated differently from the remaining subordinates. Therefore the quality of the communication determines whether the subordinate is considered the "in" group or the "out" group. It is not entirely clear how superiors select the "in" group members but Graen and Cashman (1975) suggested that the selection is made on personal compatibility and the subordinate's competence, dependability and also the tenure of the superior-subordinate relationship. As the quality of communication improves, the superiors are more in touch of the factors that "actually" affect the subordinate's performance. Superiors also tend to identify "in" group subordinates as a "similar to me" phenomenon and tend to be more sympathetic when making performance judgments (Byrne, 1971). Podsakoff and Farh (1989) also pointed out that subordinates find it easier to set realistic goals and achieve better performance if they consider the feedback credible. Therefore the quality of the two-way communication between superior and subordinate is an important factor in determining how the two parties view the performance evaluation. It is believed that as the quality of

communication between superior and subordinate gets better, both parties also begin to view causality of the subordinate's performance with increasing similarity.

It is also believed that the tenure of the dyadic relationship plays a part on how each party build their perceptions of each other. Huber, Podsakoff and Todor (1986) suggests that as the tenure of their relationship gets longer, superiors and subordinates view causality with increasing similarity. In a study by Brief, Aldag, and Van Sell (1977), it was found that tenure was the only significant demographic moderator in the relationship between self and superior ratings on subordinate performance. However research into the effects of the tenure of the dyad on the superior-subordinate relationship reveals mixed results. Research exploring the interpersonal communication patterns between superior-subordinate as the dyad develops over time are centered around two propositions. One is the generally held assumption that the superior-subordinate relationship follows uniform sequences of development (generally depicted as an initial orientation phase, followed by a period of evaluation and concluding with a control phase) (Bales & Strodtbeck, 1951). The other proposition by Poole (1981) suggests that over time the sequence of communication phases are not necessarily uniform which suggests a contingency theory. However which proposition holds true, most studies indicate that the quality and quantity of communication between superiors and subordinates does stabilize with time.

The quality of communication between superiors and subordinates has a significant effect on the performance evaluation process. Several authors have suggested that the gap between self and superior evaluations is a function of the lack of agreement between the subordinate and superior regarding the relative importance of various aspects of the subordinate's job (Barret, 1961; Miner 1968; Borman, 1974). This lack of agreement indicates poor quality of communication between the superior and

subordinate. Generally research concerning superior-subordinate communication has focused “on those exchanges of information and influence between organizational members, at least one of whom has formal authority to direct and evaluate the activities of other organizational members”. With respect to the types of messages that tend to be exchanged between superiors-subordinates, Katz and Kahn (1966) suggests that the superior-to-subordinate communications usually focus on information concerning organizational procedures and practices, indoctrination of goals, job instructions and rationale, or feedback about performance. Relatedly, subordinate communications to superiors tend to be concerned with the information about the subordinates themselves, their coworkers and their problems, information about tasks that need to be done, or information about organizational policies and practices.

But there is a more basic reason why tenure of relationship can have a significant effect on the quality of communication and subsequently the attribution process between the superior and subordinate. Zajonc (1968) and his colleagues have reported that repeated exposure to a stimulus leads to a more and more positive evaluation of the stimulus - as long as the initial reaction is not an extremely negative one. In other words, the greater the exposure, the more positive the response (Moreland & Zajonc, 1982).

2.5 The Social Distance Of The Superior-Subordinate Dyad

Investigations by Liden and Graen (1980) suggests that the dyadic communication exchange patterns that exist between superiors and subordinates be viewed as somewhat unique to each dyad. This exchange is mediated by several factors, one of which is the social distance between the superior and the subordinate. Social distance is the degree of subordination and superordination between two people. It is measured by the degree of intimacy and acceptance of opinions and ideas.

The mediating effects of the personal characteristics of the superior-subordinate dyad in their communicative behaviour have been of interest to researchers. Findings by Richmond, McCroskey, and Davis (1982) suggests that subordinates perceive the communication of coercive power with a "boss-centered," tell-type managerial communication style, and that subordinate satisfaction with supervision increases as managerial communication style becomes more "employee centered". In a study by Brief, Aldag, and Van Sell (1977), it was found that correlations between self and superior evaluations will be higher for subordinates reporting low levels of conflict than for subordinates reporting higher levels of conflict. In the same study, it was suggested that consideration of the match between superior and subordinate characteristics, rather than solely of those of the subordinate, may be relevant. In his study of upward communications, Read (1962) found that the degree of agreement concerning the subordinate's problems was least when the subordinate held strong upward mobility aspirations and when he lacked trust in his superior.

In a study by Wexley and Youtz (1985), it was found that rater beliefs about other people in general are important correlates in rater accuracy and leniency. Their interpretations of observed behaviours might be affected by their beliefs in such a way that their attributions regarding the causes of behaviour reflects their ego or self esteem. Research has also indicated that the observer characteristics and observer-actor attitude similarity are related to performance ratings (Landy and Farr, 1980) and may be related to judgment accuracy.

There is also believed to be an inverse relationship between social distance and quality of communication. Essentially, through participation or communication the leader seeks to minimize social distance between himself and subordinates. He attempts

to redistribute authority and power to enhance the autonomy of his subordinates. In the course of this redistribution, he gives up areas of control unique to his position.

2.6 Organizational Factors

In a study by Jablin (1982) data was collected from fifteen organizations in an attempt to determine the effects of several structural characteristics of organizations (organizational size, organizational level, and span of control) on subordinates' perceptions of openness in superior-subordinate communication. Findings of the study revealed that subordinates in the lowest levels of their organizational hierarchy perceived significantly less openness in their superior-subordinate communication than subordinates at the highest levels of their hierarchies.

Klaus and Bass (1982), exploring the effects of organizational size and technology on subordinates' perceptions of managerial communication behavior, reports results indicating that in "high-technology" (where IT is widely used as a tool) versus "traditional-technology" (where human skills are more widely used) settings, "high-tech" managers are perceived as more open communicators. They also found agreement varied between organizational levels. Specifically there was higher agreement in first line levels (lower management), perhaps due to higher role clarity and similarity for all subordinates, than in upper management levels. In the field of organizational behaviour, cultural factors play an important role and should be taken into consideration in all field studies. Williams, Whyte and Green (1966) demonstrated that Peruvian white-collar workers had quite different preferences in superior-subordinate relationships than workers from the United States. Negandhi and Prasad (1971) found that the level of trust between managers and their subordinates is significantly different between the United States subsidiaries operating in India and local Indian companies. These studies indicate

that cultural factors play an important role in the how superiors and subordinates perceive their relationships.

As the development of industries continue into the global arena, organizations still maintain their unique stereotypes and organizational culture or style. In a study by Stenning, Everett and Longton (1981) of American, British and Japanese subsidiaries in Singapore, it was found that Americans perceive themselves as much more open than the British or Japanese. They are also seen as even more open by all other groups. At the other extreme, the Japanese managers see themselves as slightly closed but are regarded as considerably more closed by all other groups.

Chapter 3

METHODOLOGY

3.1 Variables

The dependent variable in this study is the attribution differences between superior and subordinate when reviewing subordinate's general performance in an organisational setting. The concept of attribution on performance is operationalised by four dimensions - ability and motivation (internal causal items) , and luck and organisational support (external causal items). Items 1 to 10 in the questionnaire measure the internal causal items whereas items 11 to 15 measure the external causal items.

The intervening variables in this study are (1) the social distance between the superior and the subordinate, and (2) the quality of communication between superior and subordinate. The concept of social distance is operationalised by using McClelland's "needs for dominance" as measured by items 32 to 39 as taken from the Manifest Needs Questionnaire developed by Steers and Braunstein (1976), as well as Fiedler's Least Preferred Co-Worker Scale (LPC) - (the last 18 items of the questionnaire). The Manifest Needs Questionnaire is a behaviorally based measure of manifest needs in work settings. The dominating behavior has been identified with win-lose or with a forcing behavior to win one's own position. Dominance has also been defined as the need to command other's behavior and control one's environment (Murray, 1938). Persons with a strong need for dominance coupled with a low LPC score have greater desire to convince others of the rightness of their opinions, and were more likely to force others to accept their solutions. Steers and Braunstein (1976) reported test-retest reliabilities of 0.86. The scores from these two measures would be added to give a Social Distance score. A high Need for Dominance score and a low LPC score would give a high Social Distance score and vice versa. The scores for the LPC measure would be reversed before addition.

Quality of communication is operationalised by the following dimensions; adequacy, quantity, frequency, informality, retention and direction (Price, 1972), measured by items 16 to 31 in the questionnaire. The superiors were also asked to indicate the number of years the subordinate has reported to them. This value would be taken as the Tenure of the superior-subordinate relationship. The first page of the questionnaire obtains information about the respondents such as age, gender, marital status, highest education level, number of children, number of years worked in current company, number of other companies worked before joining this company, job status, current salary. Data for the variable management level is obtained from the data for Job Status provided by the superior.

3.2 Sampling

The research was carried out based on a sampling population of manufacturing companies in Penang, Malaysia. A population frame of employees from these companies was derived from a listing of all manufacturing companies in Penang obtained from the Penang Development Corporation. The list of companies were then segregated into three categories of company type :

Company Type :

1. Western Multinational (Based in US)
2. Eastern Multinational (Japanese and Taiwanese)
3. Local (Malaysian majority ownership)

A random sample of 5 companies were then picked from each group. The questionnaires were administered on-site to all the companies through the Human Resource Departments of each company and collected within a two week period. Twenty pairs of questionnaires were given to each company to be given to pairs of superior-

subordinate dyads from the upper management and lower management ranks. Upper management was defined as managers reporting to the Managing Director or Plant Manager whereas the lower management was defined as managers in the front line or middle management positions. The response rate was generally good with a total of 171 pairs of valid responses. The superior and subordinate dyad were given questionnaires in pairs. The respondents bio-data and other information relating to their work were obtained in the questionnaire (Refer to Appendix A and B for the questionnaire).

3.3 Data Analysis

The reliability of the measures used in this study was tested using Cronbach's alpha. Based on the inter-item correlation analysis, items # 2, 7 and 15 were deleted from the measure for variable Attribution Difference. The correlation between the variables Tenure, Communication, Social Distance and the Attribution Difference (Hypotheses 1, 2, 3, 4 and 9) were tested using Pearson's and Spearman's correlation. Statistical t-test and Mann-Whitney test were used to test whether there are significant differences between the Upper and Lower Management in terms of Social Distance and Quality of Communication (hypotheses 5 and 6). One-way ANOVA and Kruskal-Wallis test were used to test whether there is a significant difference between the three company types in terms of Social Distance and Communication (hypotheses 7 and 8). Finally, multiple regression was used to prove the model that the variables Social Distance and Quality of Communication affect the dependent variable Attribution Difference in the direction predicted by hypotheses 1 and 2.

Chapter 4

RESULTS

4.1 Respondents Profile

Out of the 300 pairs of questionnaires distributed to 300 dyads from 15 companies, a total of 171 paired responses were obtained which amounts to a 57% response rate. The breakdown of the valid respondents is as follows :

Company Type	Number of lower management dyads	Number of upper management dyads	Total
1. Local	51	21	72
2. Eastern Multinational	35	19	54
3. Western Multinational	31	13 (1 missing)	45
		Total	171

Table 4.1.1 : Distribution of management level by company type

	Sex of			
	Superior		Subordinate	
	Male	Female	Male	Female
1. Western MNC	42.1%	0%	21.6%	19.9%
2. Eastern MNC	30.4%	1.2%	19.3%	11.7%
3. Local	25.7%	0.6%	15.2%	12.3%

Table 4.1.2 : Breakdown of gender by company type.

Superiors :

	Secondary School	Diploma	Degree	Post Graduate Degree
Western MNC	0%	0%	36.8%	4.7%
Eastern MNC	0%	5.5%	21.1%	4.6%
Local	0.6%	5.8%	17.0%	2.9%

Table 4.1.3 : Distribution of education level by company type for superiors

Subordinates :

	Secondary School	Diploma	Degree	Post Graduate Degree
Western MNC	1.2%	4.7%	35.7%	0%
Eastern MNC	0%	11.7%	18.1%	0%
Local	0.6%	9.4%	15.8%	0%

Table 4.1.4 : Distribution of education level by company type for subordinates

While the distribution of gender in the subordinate set shows a more even balance between the two sexes, the distribution in the superior set is heavily biased towards the male gender. This is due to the dominance of male superiors/managers in the manufacturing sector in this region. The education level of all the respondents indicates that comprehension of the questionnaire should not pose any problems. Breakdown of respondents by age group shows that a high majority (83.6%) of respondents from the subordinate set is in the 20 - 30 years age group whereas 71.9% of respondents from the superior set is from the 31 - 40 age group.

Age Group	Superior		Subordinate	
	Frequency	Percent	Frequency	Percent
20 - 30	23	13.5	143	83.6
31 - 40	123	71.9	16	9.4
41- 50	22	12.9	10	5.8
Missing cases	3	1.7	2	1.2

Table 4.1.5 : Age group distribution of superiors and subordinates

In terms of monthly salary, 57.3% of the respondents from the superior set draw between RM3,001 - RM5,000 while 39.2% draw a monthly salary between RM5,001 - RM10,000. From the subordinates set, the distribution is skewed towards the lower end of the salary scale with 31.6% receiving a monthly salary between RM1,001 - RM2,000 and 51.5% receiving a monthly salary between RM2,001 - RM3,000. The distribution of salary by company type shows no particular bias to either end of the salary scale.

	Superior		Subordinate	
	Frequency	Percent	Frequency	Percent
Less than RM1,000	0	0	9	5.3
RM1,001 - RM2,000	0	0	54	31.6
RM2,001 - RM3,000	1	0.6	88	51.5
RM3,001 - RM5,000	98	57.3	15	8.8
RM5,001 - RM10,000	67	39.2	0	0

Table 4.1.6 : Distribution of monthly salary for superiors and subordinates

The superiors in this study have worked in the current company a lot longer than the subordinates with 90.6% of them having worked 6 years or more in the current company. In contrast, only 10.5% of the subordinates have worked more than 6 years in the current company.

No. of years in the current company	Superior		Subordinate	
	Frequency	Percent	Frequency	Percent
Less than 1	0	0	35	20.5
1 - 2	7	4.1	20	11.7
3 - 5	4	2.3	98	57.3
6 - 10	83	48.5	5	2.9
Over 10	72	42.1	13	7.6
Missing cases	5	3	0	0

Table 4.1.7 : Distribution of experience in current company for superiors and subordinates.

The dyads in this study have a mean tenure of 2.911 years with a median tenure of 3 years. The distribution of tenure is as follows :

Tenure (years)	Frequency	Percent	Cum Percent
1	9	5.3	5.4
2	67	39.2	45.2
3	55	32.2	78.0
4	14	8.2	86.3
5	16	9.4	95.3
6	4	2.3	98.2
7	3	1.8	100
Missing	3	1.8	

Table 4.1.8 : Distribution of tenure of the dyads.

4.2 Reliability Of Measures (Attribution Difference, Communication And Social Distance)

The following table is the Cronbach's Alpha scores for all measures in the questionnaire in this study. After inter-item correlation analysis, items # 2, 7 and 15 were deleted from the measure of Attribution Difference.

<u>Variable</u>	<u>Cronbach's Alpha</u>
Attribution Difference	0.6748
Communication	0.7501
Social Distance	0.8774

Table 4.2.1 Cronbach's Alpha for the measures.

The high value of the Cronbach's Alpha (above 0.6) indicates a reasonable internal consistency reliability of the items measuring the variables in this study.

4.3 Description Of The Main Variables

Looking at the distribution of the data of the main variables shows the following descriptive statistics:

Variable	Mean	S.D.	Minimum	Maximum
Attribution Difference	0.69	0.24	0.33	1.47
Communication	6.79	0.53	5.57	7.86
Social Distance	14.46	1.50	12	19
Tenure	2.91	1.26	1	7

Table 4.3.1 Means of the main variables

4.3.1 Attribution difference

An analysis of the mean scores of Attribution Difference by age groups of the dyads reveals an interesting result. Dyads where the superior is younger than the subordinate report a higher average Attribution Difference than dyads where there is no age difference or where the superior is older than the subordinate. Even though the number of dyads where the superior is younger is only 10 out of the 171 pairs in this study, this result suggests the age difference factor could be an important factor in the superior-subordinate relationship.

	Mean	S.D.	No. of Cases
Superior Younger	0.8917	0.0690	10
Same Age Group	0.6125	0.1889	32
Superior Older	0.6785	0.2659	123

Table 4.3.1.1 : Mean scores of attribution difference for superior-subordinate age combinations.

Looking at the mean Attribution Difference scores by the tenure of the relationship does not reveal any observable pattern.

Tenure (years)	Mean Attribution Difference	S.D.	No. of Cases
1	0.7037	0.2189	9
2	0.6828	0.2318	66
3	0.6933	0.2565	55
4	0.6667	0.2453	14
5	0.6625	0.2638	16
6	0.6500	0.1836	4
7	0.7778	0.4823	3

Table 4.3.1.2 : Mean scores of attribution difference by tenure of the dyads.