

THE RELATIONSHIPS BETWEEN SELF-EFFICACY,  
EFFECTIVE LEADERSHIP/SUPERVISION AND WORK PERFORMANCE

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A Dissertation submitted to the Faculty of Science,  
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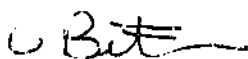
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## ABSTRACT

The present study was conducted within the area of leadership research and examined aspects of management-subordinate dyads in the insurance industry. The aim of the study was to explore the proportion of variance of three dependent variables explained by the dimensions of the quality of Leader-Member Exchange between managers and subordinates, subordinate's perceived self-efficacy, and an interaction term comprising these two dimensions. The three dependent variables comprised subordinate job satisfaction, and two measures of subordinate performance, namely the employee rating scale and a work output measure which overcame previous research's limitations. Research was conducted on a sample of broker-consultants ( $N=130$ ). Results suggested that the leadership variable (leader-member exchange) explained a significant proportion of the variance of job satisfaction but not in terms of job performance measures. Contrary to expectations, the addition of a self-efficacy variable and the interaction term did not explain additional variance within the leadership model in terms of work performance and job satisfaction, with respect to self-efficacy and the interaction term. The limitations of the study in terms of leadership research will be considered. Theoretical and practical implications of the study will also be considered.

## DECLARATION

I hereby declare that this dissertation is my own, unaided work. It is being submitted for the degree of Master of Science, University of the Witwatersrand, Johannesburg. It has not been submitted for any degree or examination at any other University.



DAVID BERNARD BECKER

31 day of January, 1992

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## LEADERSHIP

Research suggests that effective leadership impacts positively on both work performance and job satisfaction (Bass, 1990; Blake & Mouton, 1964; Fiedler, 1967; Gibbons, 1992; Hersey & Blanchard, 1977; Katz & Kahn, 1978; Lawless & Finch, 1989; Novak, 1984; Schein, 1980; Yukl, 1989). The effect of leadership on the organisation is apparent in a number of areas, such as group attitudes (Jones, Gergen, Gumpert & Thibaut, 1965), group behaviour (Dawson, Messe & Phillips, 1972), leader effectiveness (Fiedler, 1967; Gibbons, 1992), quality of decision making (Vroom & Yetton, 1973), subordinate performance (Lawless & Finch, 1989; Greene, 1975) and follower satisfaction (House, 1977; Yukl, 1989). Cogill (1986) suggests that the outcomes of leadership behaviour affect goal attainment, motivation, productivity, job satisfaction, performance, morale, turnover and subordinates behaviour within the setting of the organisation. From this it is apparent that leadership is a central concept within organisations, as it can affect a number of different areas (Schein, 1980; 1984). Most contemporary models of leadership are still in a primitive stage of development, as these models (e.g., managerial grid, situational leadership & leader-match approach) don't consider the reciprocal relationship between managers and subordinates fully, and the developmental processes of management are ignored (Dansereau, Graen & Haga, 1975; Yukl, 1989).

In the past, traditional leadership approaches (such as the managerial grid and

situational leadership) mainly focused on the impact of leader behaviour on subordinate outcomes, such as performance and job satisfaction (Dienesch & Liden, 1986; Hollander, 1985). These leadership approaches have ignored the reciprocal impact of subordinate performance on the leader and have also ignored the effect of leader behaviour on job satisfaction (Bass, 1980; Blake & Mouton, 1964; Fiedler, 1967; Gist, 1987; Hersey & Blanchard, 1977). Thus traditional leadership research has mostly considered leader behaviour, and how it has impacted on subordinates, whilst not considering how subordinate behaviour impacts on the leadership process (Hollander & Offermann, 1990). More recently leadership has been explained as a transactional or social exchange whereby both managers and subordinates contribute to the relationship (Bass, 1990; Kuhnert & Lewis, 1987). An exemplar of this approach is the Leader-Member Exchange (Graen, 1976) approach where emphasis is placed on the dyadic relationship between managers and subordinates (Novak, 1984). In terms of this approach, the reciprocal relationship between managers and subordinates is a central concept, as the quality of the leader-subordinate dyad determines the job satisfaction and work performance achieved (Dienesch & Liden, 1986; Hollander & Offermann, 1990).

According to Dienesch and Liden (1986), research on the effectiveness of leader-member exchange as a leadership approach has generally been more favourable than the more traditional leadership approaches (e.g. Blake & Moutons' (1964) Managerial Grid, Hersey & Blanchards' (1977) Situational Leadership and Fiedlers'

(1967) Leader - Match Theory), in areas such as the prediction of employee performance, job satisfaction and turnover (Dienesch & Liden, 1986; Graen, Liden & Hoel, 1982; Dockery & Steiner, 1990; Novak, 1984). Furthermore, the quality of the leader-member exchange between manager and subordinate determines both leaders' and subordinates' job performance and job satisfaction. (Graen & Cashman, 1975; Novak, 1984; Serey, 1981).

The effectiveness of an organisation is dependent largely on the quality of its managers and leadership (Feldberg, 1981). Organisational leadership is defined as "the exercise of interpersonal influence or formal authority through the communication process in order to achieve specified goals or objectives" (Feldberg, 1981, p.99). According to Malherbe (1986), the objectives of effective leadership behaviour are to maximise productivity, to stimulate creative problem solving, to promote morale and satisfaction and to improve interpersonal relationships. Goldstein and Sorcher (1977) contend that organisational leaders have three overlapping roles. Firstly, there is a technical role, including knowledge about methods, processes and procedures within the organisation. Second, an interpersonal role which includes skills in communication and interpersonal processes. The leader's ability to influence their subordinates is dependent on the leaders' perceived trustworthiness and perceived expertise by the subordinates (Goldstein & Sorcher, 1977). The maintenance and growth of interpersonal relationships within the group is a critical function of leaders in organisations (Hollander & Omermann, 1990). According to Goldstein and Sorcher (1977), the third

role of organisational leaders relates to the administrative function. Here, the leader is involved in the administration of their department or organisation by planning the work, determining policy, providing expertise and initiating rewards and punishment.

According to Schein (1984), there are a great number of variables which can affect organisational leadership. Such variables include the personality of the leader, the characteristics of the subordinate, organisational level, cultural, political and socio-economic conditions within the organisation and situational constraints. Malherbe (1986) suggests that the stage of development of the subordinates, the leader-subordinate relationship and organisational climate are also important influences on effective leadership. Moreover, McCormick and Tiffin (1979) state that differences in leadership styles can occur due to the nature of the job, the subordinates' perceptions about the leader and the personal, technical, and administrative support provided to the subordinate.

There have been a large number of different approaches to the study of leadership (Hollander, 1985). A short critical review of some of the leadership theories will follow (see Figure 1), focusing on the Great Man Approaches, Trait Theory, The Managerial Grid, Situational Leadership, Leader-Match Theory and Leader-Member Exchange.

## Leadership Approaches

Five major leadership areas will be considered, and are outlined in Figure 1. According to Hollander (1985), the five major leadership approaches constitute the most important leadership approaches. Each will be briefly appraised in the following section. Thereafter it will be argued that the leader-member exchange approach provides the most appropriate description of the leadership process for the present research.

Figure 1. Leadership approaches considered in present study.

<u>Focus</u>	<u>Theory</u>
1. Traits	1. Great Man Theory Trait Approach
2. Concern for people and production	2. The Managerial Grid
3. Groups	3. Leader-Match Theory
4. Situations	4. Situational Leadership
5. Manager - subordinate dyads	5. Leader-Member Exchange

(Hollander, 1985)

### The Great Man Approach and Trait Theories

One of the earliest approaches to leadership was the "Great Man" theory, where leaders were seen as people with unique qualities or traits necessary for leadership (Bass, 1990; Stogdill, 1948). These unique qualities include intelligence and character. The Great

Man approach did not persist due to the underlying assumption that genetic transmission of behaviour is the sole determinant of behaviour, which ignored environmental factors impacting on behaviour (Cogill, 1986). This is a simplistic approach that does not consider the dynamic nature of leadership (Hollander, 1985). An extension of the Great Man theory is the Trait Approach, which is also based on the assumption of an hereditary basis of leadership qualities (Hollander & Offermann, 1990). The Trait Approach highlighted specific personal qualities or traits (e.g. intelligence, extroversion) that those people in leadership roles should possess (Hollander, 1985). Cogill (1986) stresses that this approach focused only on the traits of the leader, and did not consider that leaders may require different abilities and traits in different situations. Stogdill's (1950) trait approach, classifies leadership into the following six categories, namely, physical, intelligence, personality, social, task related, and social background. These six categories highlighted different traits that leaders might exhibit. Cogill (1986) dismisses Stogdill's approach on the basis that leaders who are successful in one situation are not necessarily successful in others. In a review of 125 leadership studies, Mann (1959) found that the effectiveness of a leader depends as much on the traits of the leader, as on the prevalent situation. Also, the great man approach and trait approaches can be criticised as they do not take account of the unique personality and ability of the subordinate. Hollander and Offermann (1990) suggest that the manager-subordinate relationship was not properly considered in any of the trait approaches.

## Leadership Style Theories

The criticism of traits and personal characteristics in leadership theory led to the study of the overt behaviour of organisational leaders (Hollander & Offermann, 1990). This resulted in an emphasis on both the situations and tasks that leaders and subordinates were mutually involved in (Hollander, 1985). Leadership style theories originated in the Ohio State University studies in the 1940's (Schein, 1980). Researchers attempted to define precisely what kind of behaviour leaders performed (Schein, 1984). The Ohio State University research resulted in behaviour being described in terms of two independent dimensions called "initiating structure" and "consideration". Initiating structure concerns the degree to which leaders define and organise tasks, establish communication networks and evaluate group performance. Consideration refers to trust, mutual respect and concern for the welfare of employees (Cogill, 1986).

In support of this approach, Balas (1958) showed that for groups to work effectively, they have to be concerned with both task accomplishment and the building and maintaining of group relationships. According to Hollander (1985), research on leadership style theories up to 1974 showed that fifty-four out of seventy-seven studies supported the two dimensions, namely, initiating structure and consideration. Initiating structure and consideration were found to be positively related to productivity and job satisfaction (Argyris, 1971; Argyris, 1976; Bass, 1990; Blake & Mouton, 1980; Blake & Mouton, 1982; Farris, 1969; Goodson, McGee & Cashman, 1989; Hall, 1976; Hersey &

Blanchard, 1975; Hersey & Blanchard, 1977; Kreinik & Colarelli, 1971; Likert, 1967; Lowin & Craig, 1968; Schein, 1980; Taylor & Lippitt, 1975). According to Blake and Mouton (1980), initiating structure and consideration are constructs that are key elements within the leadership domain. The approaches that use initiating structure and consideration as basic constructs are termed leadership style theories and include Blake and Mouton's (1964) Managerial Grid and Hersey and Blanchard's (1977) Situational Leadership Theory (Cogill, 1986). These approaches will be discussed briefly.

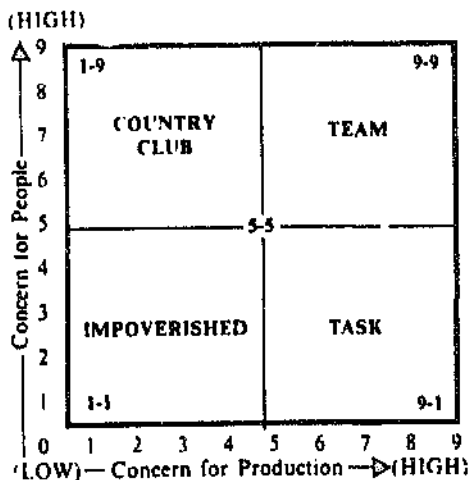
### The Managerial Grid

In 1964, Blake and Mouton extended the Ohio State University constructs of initiating structure and consideration, into a two-dimensional grid (see Figure 2). The dimensions were known as a Concern for Production (concern for producing goods and providing services) and a Concern for People (concern for people includes superiors, subordinates, colleagues or customers) (Blake & Mouton, 1964). The grid is two-dimensional with the horizontal dimension representing a concern for production, and the vertical dimension representing a concern for people (Bass, 1990).

According to Blake and Mouton (1964), these two dimensions yield five generalised managerial styles in the grid ranging from the 1,1 "impoverished" management style through to the 9,9 "team management" style. Some research has accrued for the 9,9

management style as being most effective (Argyris, 1971; Blake & Mouton, 1980; Blake & Mouton, 1985; Hall, 1976; Kreinik & Colarelli, 1971; Likert, 1967; McGregor, 1960). For example, Kreinik and Colarelli (1971) found that management development through the utilisation of the managerial grid programme, improved the leadership style effectiveness in a hospital. According to Blake and Mouton (1964) the 9,9 or "Team Leadership" approach can be applied across different managerial situations.

Figure 2. The Managerial Grid



(Blake & Mouton, 1980)

Furthermore, Blake and Mouton (1980) contend that the 9,9 approach is dynamic and versatile in its applications to improve supervisory performance. Argyris (1976)

supported this contention in research on company presidents. Blake and Mouton (1980) contend that the 9,9 principles can be applied to any managerial situation which will result in effective leadership.

Deluga (1987), Hersey and Blanchard (1977), Bernardin and Alvares (1976) and Keller (1978) criticise Blake and Mouton's (1964) managerial grid due to the lack of satisfactory empirical support. The grid has been questioned methodologically and conceptually in previous research (e.g. Argyris, 1976; Hall, 1976; Kreinik & Colarelli, 1971; Reiner & Morris, 1987). For example, research on the grid has lacked appropriate controls as a means of controlling for rival hypotheses. In addition, Blum and Naylor (1968) suggested, that change could be due to environmental (economic upswings) or technological (change to automation) variables, as much as due to the grid. Bernardin and Alvares (1976) suggest that the grid's measuring instruments provide a questionable method of determining leadership effectiveness. The theory, which has only two dimensions, was criticised as simplistic (Hollander, 1985). The managerial grid does not take into account situational variables, while assuming that the 9,9 style fits all situations (Cogill, 1986; Hollander, 1985; McCormick & Tiffin, 1979). Another criticism of Blake and Mouton's (1964) managerial grid is that the reciprocal relationship between managers and subordinates is not considered, as no subordinate characteristics are seen to impact on managers performance, behaviour/style and activities (Dienesch & Liden, 1986). Thus according to Bernardin and Alvares (1976), Deluga (1987) and Keller (1978), research has not been able to

demonstrate conclusively that the managerial grid is a satisfactory model of leadership as it has both theoretical and empirical limitations.

Due to the theoretical and empirical limitations of the managerial grid, a new direction in leadership research resulted in the development of the Contingency Approaches (Fiedler, 1967). According to Hollander and Offermann (1990), the Contingency Approaches were more dynamic than the previous leadership style theories in that subordinates' characteristics were more fully considered. Schein (1980) proposes that one of the more effective and contemporary contingency theories is Fiedler's Leader-Match theory.

### The Leader-Match Theory

Fiedler's (1967,1971) Leader-Match Theory focuses on leaders of task-oriented groups (Hollander, 1985). The theoretical basis of the Leader-Match Approach is group theory, where both the leader and subordinate are important elements within leadership (Schein, 1980). Fiedler's (1967) major contribution was to shift the emphasis in leadership research from traits and behaviours to the leader and the context within which the process of leadership occurs (Cogill, 1986; Hollander & Offermann, 1990). According to Fiedler (1967), leader group relations (how well leader and member of group get along), task structure (clarity of steps needed to complete a task) and position power (amount of legitimate authority available to the leader) describe the

situational favourableness for the leader (Schein, 1980). Fiedler (1967) developed a measure of the leader's basic managerial orientation or approach called the Least Preferred Co-worker measure. The least preferred co-worker measure allows leaders to consider all the individuals they have worked with, and then specifically determine the characteristics of the people with whom they worked with least effectively (Ayman & Chemers, 1983). If the leader's least preferred co-worker score is low, then the leader considers the subordinates in relatively unfavourable terms, and the leader is thus primarily interested in effective performance, and is task oriented (Robbins, 1988). A relationship - oriented leader (a high least preferred co-worker score) is interested in fostering good personal relationships with his/her co-worker. Each co - worker, even their least preferred co-worker, is seen as a worthwhile person (Fiedler, 1967). Leader-match theory is a style approach to leadership, which incorporates personality factors within the least preferred co-worker concept (Offermann, 1984). The approach takes into account influence (position power), and it emphasises the importance of followership (leader-group relations) (Robbins, 1988).

Muchinsky (1983) reports that research on Fiedler's leader match approach has highlighted various weaknesses in the theory, such as devoting little attention to subordinate characteristics (Robbins, 1988; Rice & Kastenbaum, 1983). No attention is given to the varying technical competencies of either the leader or the subordinates. According to Robbins (1988), the statistics that Fiedler presents in defense of the model are relatively weak. Both Hollander (1985) and Dienesch and Liden (1986) suggest

that Fiedlers' (1967) Leader-Match Theory is not acceptable as a leadership approach, as it does not consider the dyadic reciprocal relationship that should exist between leaders and subordinates. Furthermore, the least preferred co worker instrument is open to question, as longitudinal studies have shown that respondents' least preferred co-worker scores are not stable over time (Robbins, 1988).

### The Situational Leadership Theory

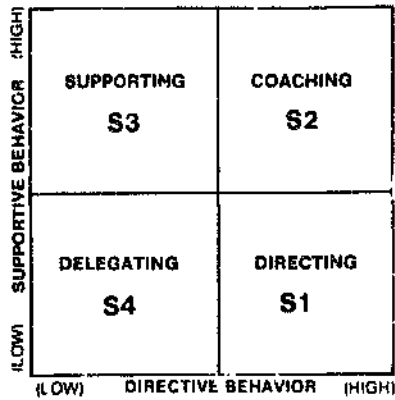
Hersey and Blanchard (1977) formulated their Situational Leadership Theory in response to the perceived inadequacy of Blake and Mouton's (1964) Managerial Grid and Fiedler's Leader Match Theory (1967). Situational leadership is based on the two Ohio State University dimensions, namely concern for people and concern for production (Goodson, McGee & Cashman, 1989). Hersey and Blanchard (1977) reject Blake and Mouton's (1964) assertion of an ideal managerial style (i.e., the 9,9 managerial style). In contrast, Hersey and Blanchard (1977) maintain that managers will be more effective in attaining personal and organisational goals if they adapt their leadership styles to meet the needs of the particular situation and the needs of their subordinates (Bass, 1990).

Hersey and Blanchard's (1977) approach incorporates the two Ohio State University study's dimensions, namely, consideration (supportive behaviour) and initiating structure (directive behaviour). An additional variable that is included in Situational

Leadership is the "Task Maturity" level of the subordinates. Task maturity is defined as the ability, technical knowledge, self confidence and self respect to do the job (Hersey & Blanchard, 1977). Later, task maturity was redefined by Blanchard (1985) as "Developmental Level", which is "the competence and commitment of your follower(s) to perform a particular task without supervision" (Blanchard, 1985, p.16).

There are four basic leadership styles (see Figure 3) in Situational Leadership namely, "Directing" (S1), "Coaching" (S2), "Supporting" (S3) and "Delegating" (S4) in terms of quadrants 1 - 4 respectively (Blanchard, 1985). In Style 1, a leader is high on direction and is low on support. The leader defines roles and goals, provides specific instructions to the follower and closely supervises task accomplishment (Blanchard, 1985). The developmental level of the subordinate is low. In Style 2, the leader is high on both direction and support. The leader explains decisions and encourages suggestions from followers, but continues to direct task accomplishment (Blanchard, 1985). Style 3 leaders show low direction and highly supportive behaviour. The leaders and followers make joint decisions resulting in the leader supporting the followers efforts towards task accomplishment (Blanchard, 1985). In Style 2 and Style 3, the developmental level of the subordinate is moderate. Finally, in Style 4, low support and low direction is provided, as decisions and responsibility for implementation now fall in the hands of the subordinates (Blanchard, 1985). With Style 4 subordinates, the development level is high as the subordinates have optimal competence and commitment to the different tasks.

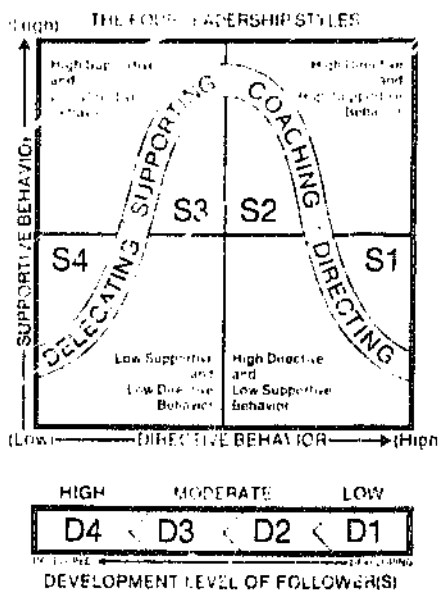
Figure 3. Hersey and Blanchard's Basic Leadership Behaviour Styles



(Blanchard, 1985, p.14)

According to Blanchard (1985), each leadership style is dependent on the developmental level of the follower and is related to a specific development level (see Fig. 4). When integrating leadership styles and development levels, different approaches to decision making and problem solving result (e.g. directing, coaching, supporting and delegating) (Blanchard, 1985).

Figure 4. Leader's behaviour in terms of development level



(Blanchard, 1985, p.15)

According to Schein (1980), the lack of independent research on Hersey and Blanchard's (1977) model has limited its generalisability (Schein, 1980). Schein (1980) suggests that situational leadership assumes that leadership behaviour can be improved simply by properly diagnosing one's own style, the characteristics of one's task and the characteristics of the subordinates. This results in the leader responding to these

characteristics. The Hersey and Blanchard (1977) approach does not consider the behavioural flexibility of both the leaders and subordinates, and does not consider the reciprocal relationship that exists between leaders and subordinates (Blank, Weitzel & Green, 1990; Dienesch & Liden, 1986; Schein, 1980).

### Criticism of the early Leadership Approaches

Five major leadership theories have been considered (i.e. Great Man Theory, Trait Approach, Managerial Grid, Situational Leadership, and Leader-Match Theory). In summary, the "great man" approach only regarded certain qualities or traits as a cause of behaviour with no recognition of the organisational/industrial environment (Cogill, 1986). The subsequent trait approach proposed by Stogdill (1948) was dismissed as leaders who were successful in certain situations were not necessarily successful in others (Bass, 1990; Hollander, 1985). Also, in terms of this approach, a leader did not necessarily exhibit all the same traits as another leader (Cogill, 1986).

The Blake and Mouton (1964) Managerial Grid is a two dimensional grid (concern for production and concern for people) that determines five generalised managerial styles (Bass, 1990). Each manager uses a specific managerial style when managing subordinates, regardless of the situation (Hollander, 1985). Deluga (1988), Hersey and Blanchard (1977), Bernardin and Alvares (1976) and Keller (1978) criticise the Blake and Mouton (1964) managerial grid as the grid was questionable methodologically and

theoretically. The grid considered leadership from the leaders' perspective only whilst being based on only two dimensions. The leader-match theory formulated by Fiedler (1967) has devoted little attention to the diagnosis of subordinate characteristics. In terms of this approach, the technical competence of the leader or subordinate is assumed, thus ignoring a possible key area in poor leader-subordinate relationships (Schein, 1980). Hersey and Blanchard's (1977) Situational Leadership approach incorporated the two Ohio State University dimensions (consideration and initiating structure) whilst including an additional variable, namely, subordinate maturity (Schein, 1980). Hersey and Blanchard's (1977) situational approach has not been subjected to satisfactory independent research thus limiting its generalisability (Bass, 1990). Situational leadership does not consider the reciprocal relationship between managers and subordinates, as it considers leadership from solely the leaders perspective (Schein, 1980).

Most leadership approaches are considered within the "Average Leadership Style" approaches (Dienesch & Liden, 1986). The "Average Leadership Style" approaches are the most widely used in contemporary organisational leadership and include the Blake and Mouton (1964) manageria' grid, Fiedler's (1967) leader-match approach and Hersey and Blanchard's (1977) situational leadership model (Graen & Cashman, 1975; Graen, Dansereau & Minami, 1972; Hollander, 1985). Dienesch and Liden (1986) claim that average leadership style model leaders should act in a relatively uniform manner towards all subordinates and that leaders' behaviour can be described as varying over a

number of dimensions, such as initiating structure and consideration (Graen & Cashman, 1975). Research on initiating structure and consideration take into account the average leadership style (Graen, Dansereau & Minami, 1972).

According to Dienesch and Liden (1986), research on average leadership style has focused almost exclusively on a leader's typical behaviour towards subordinates. In the average leadership approach, any deviations from the norm in the perceptions of the 'average' subordinates by leaders is treated as a statistical error and is ignored (Dienesch & Liden, 1986). Dansereau, Graen and Haga (1975) contend that the use of the 'average leadership style' approach is the reason for the slow progress of leadership research in the last twenty years. Graen, Dansereau and Minami (1972) suggest that research on the two dimensions of leadership style proposed and operationalised by the Ohio State researchers, only considers the point of view of the leader. According to Bass (1990), previous research on leadership theories (e.g. Blake & Mouton, 1964; Fiedler, 1967; Hersey & Blanchard, 1977) has not been satisfactory or sufficiently extensive. Traditional leadership research has also overlooked the dyadic relationships between leaders and subordinates in an organisation (Dienesch & Liden, 1986).

According to Novak (1984), the quality of the dyadic relationship that exists between manager and subordinate must be central in leadership research. This is because previous approaches have tended to ignore this reciprocal relationship, and examine leadership solely from the leader's perspective (Gist, 1987). Each member of the dyad

can affect the other member of the dyad's performance and job satisfaction (Graen, 1978). An approach that addresses this issue is Leader-Member Exchange. Leader-member exchange is a leadership approach that focuses on the reciprocal relationship between managers and subordinates (Dienesch & Liden, 1986). Research on leader-member exchange as a viable leadership approach has been satisfactory (Dienesch & Liden, 1986; Dockery & Steiner, 1990; Graen, 1978; Graen, Liden & Hoel, 1982; Novak, 1984), as opposed to the research on the traditional leadership approaches (Dienesch & Liden, 1986; Hollander, 1985; Reiner & Morris, 1987; Schein, 1980). Thus it is contended that leader-member exchange is a more appropriate leadership approach and is therefore used in the present study.

#### The Leader-Member Exchange Model

Bass (1990) suggests that a high quality leader-member exchange dyad has a positive effect on job performance, job satisfaction, prediction of employee turnover and attitudes each member brings to the job. Leader-member exchange emphasises the interaction of managers and subordinates in a reciprocal relationship (Scandura & Graen, 1984). The dynamics of processes, such as reciprocal relationships, producing social structures between people in hierarchical organisations has been termed "role making" (Graen, 1983). The leader-member exchange approach to leadership is grounded in the domain of role theory (Dienesch & Liden, 1986).

## Role Theory



In role theory, roles are often ambiguously and incompletely specified and need to be clearly defined by the organisation's participants (Graen, Orris and Johnson, 1973).

Within organisations, employees accomplish their work through roles, which are sets of behaviours that are expected of people occupying certain positions (Graen, 1983). In organisations, there are many sets of behaviours which impact on different tasks.

Complex tasks are typically divided within organisations into specialised activities whereby certain activities become assigned to particular roles. In organisations, people are involved in a range of different roles, which when integrated with each other, result in the product or service provided (Graen, 1983).

Graen (1983) proposes that the determinants of role making are threefold, namely, physical/technological systems, social/cultural systems and the people involved in the role making (constraints and demands imposed by the accepted beliefs of the leader and subordinate). Organisational survival is dependent on the ability of leaders and subordinates to cope and adapt to the changing demands of the environment (Hollander, 1985). Katz and Kahn (1978) proposed that the behaviour of a person in their organisational role is a function of role pressures, intrinsic satisfactions and occupational identity (Graen, 1983).

Research on role making in leader - member dyads has indicated a consistent pattern of

positive leader - member transactions (Scandura & Graen, 1984). Role making can involve the functional interdependence between a person in a management position and one in a follower's position and thus be described as a dyadic process (Graen & Cashman, 1975). Leaders often communicate expectations to the member of appropriate role behaviour. These are known as role expectations, which can influence the members' behaviour. The consistency of the interpretation of roles by both the managers and subordinates may impact on the role expectations and determine the quality of the leader-member dyad (Graen, 1983).

#### The Leader-Member Exchange Dyad

The leader-member exchange leadership approach is an operationalisation of Graen's (1983) role making process and an extension of Vertical Dyad Linkage Theory (Bass, 1990; Dansereau, Cashman & Graen, 1973; Dienesch & Liden, 1986). In previous leadership research, little emphasis was placed on the dyadic relationship between managers and subordinates (Novak, 1984), whilst a transactional approach such as leader-member exchange gives special emphasis to the significance of followers perceptions of the leader (Hollander & Offermann, 1990). Vertical dyad exchange research initially used the term "negotiating latitude" to describe the quality of dyadic relationships between managers and subordinates. The term "Negotiating Latitude" is defined as the subordinate's perceptions of the job and the manager's willingness (regardless of formal authority) to personally assist in solving subordinates' job

problems (Novak, 1984). The effectiveness of the dyadic relationship depends on the quality of the exchange between the leader (supervisor) and the member (subordinate) (Dansereau, Graen & Haga, 1975; Hollander & Offermann, 1990; Novak, 1984; Vecchio & Gobdel, 1984). The quality of the dyadic exchange between leader and subordinate has been found to be an effective predictor of increased employee performance, decision influence, loyalty and job satisfaction and decreased turnover (Cashman, Dansereau, Graen & Haga, 1976; Dockery & Steiner, 1990; Graen, Liden, & Hoel, 1982; Dienesch & Liden, 1986; Novak, 1984).

According to Dienesch and Liden (1986), leader-member exchange provides a more complete picture (conceptually and empirically) than other leadership processes, such as the managerial grid and situational leadership. Leader-member exchange emphasises the relationship between the leaders and the subordinates as well as their interactions which should result in a positive impact on job performance and job satisfaction (Novak, 1984). A manager can have different quality relationships with different subordinates, in terms of leader-member exchange (Dienesch & Liden, 1986).

Leader-member exchange consists of the combination of the characteristics of the actors (leader and subordinates - e.g., attitudes, abilities, background, appearance, experience), their behaviours, and their social context (Graen, 1978). The supervisors and subordinates must perceive each others' resources as necessary and beneficial for reciprocal influence to occur.

The theoretical basis of leader-member exchange theory comprises the concept of a negotiated organisational role (Dienesch & Liden, 1986). The leader - member interpersonal exchange relationship determines the type of role the subordinate will play within a particular dyad in regard to his/her leader and contemporaries (Dienesch & Liden, 1986). A series of role - making episodes with different organisational elements allows individuals to define what their role behaviours will be (Graen, 1978; Graen, Orris & Johnson, 1973).

The leader-member exchange process involves three general components, namely, the actor parameters, the behavioural parameters and the contextual parameters (Graen, 1978; Novak, 1984). The first component (i.e., actor parameters) includes personal characteristics of the leader and the member (e.g., trustworthiness and expertise). The second component concerns the behavioral parameters of the leader and the member. These parameters may relate specifically to coping with uncertainty when, for example, a manager deals with unanticipated problems such as breakdowns, shortages and slowdowns (Novak, 1984). The third component relates to the contextual parameters which refer to the context of the behaviours in which the leader-member exchange occurs (Novak, 1984). These components will be discussed later.

In terms of the leader-member exchange model, each leader establishes dyadic relationships with each subordinate, ranging from a low quality to high quality relationship (Hollander & Offermann, 1990). Novak (1984) describes a high quality

relationship as one in which more than the basic requirements of the formal contract are offered by both parties (e.g., high trust, high support, formal rewards). The low type of exchange (i.e. less supervision) is strongly dependent on the formal contract, from both the leader's and subordinates' points of view and includes low trust and low support (Novak, 1987). For a high quality relationship to exist, the leader must determine who, among his/her subordinates, are capable of entering such a relationship and the possible strength of the relationship that can be entered into with each subordinate (Graen, 1976). Both the leaders and subordinates need to get to know more about the resources the other party has to offer (e.g., benefits that can be given to subordinates; and loyalty and skills available to the leader) (Dansereau, Graen & Haga, 1975).

Dienesch and Liden (1986) assert that the quality of leader-member exchanges can be divided into two basic categories, the in-group and the out-group. The in-group category is characterised by high trust, interaction, support, and both formal and informal rewards (Bass, 1990). In organisations a reward system is crucial, as rewards linked to job performance can impact positively on job satisfaction (Dienesch & Liden, 1986). The out-group is characterised by low trust, interaction, support and rewards (Bass, 1990). According to Liden and Graen (1980), membership in these groups form soon after the initial interaction and generally remain stable after formation (Liden & Graen, 1980). Vecchio and Gobdel (1984) have noted that the in-group and out-group approach has treated leader-member exchange as a dichotomous variable. Rather,

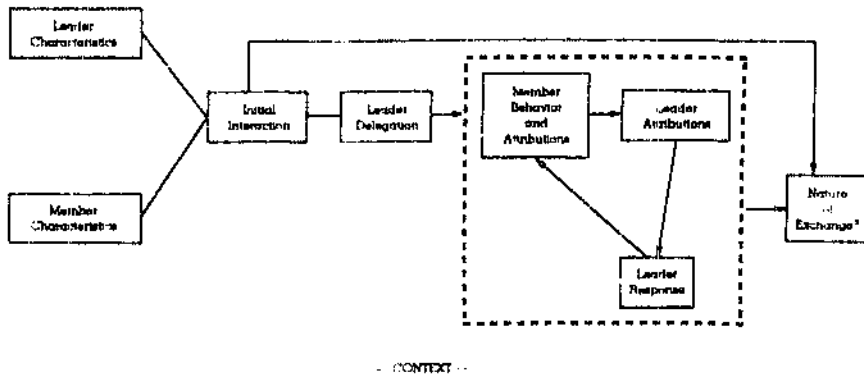
Dienesch and Liden (1986) contend that leader-member exchange should be treated as a continuous variable, as exchanges between leaders and subordinates do not fit into a single dimension and may vary between the extremes of 'good' and 'bad' exchanges on the dyadic continuum.

The existence of unique relationships between leaders and each subordinate has been supported in the literature (Bass, 1990; Dienesch & Liden, 1986; Dockery & Steiner, 1990; Graen, Liden & Hoel, 1982; Graen, Novak & Sommerkamp, 1982; Graen & Schiemann, 1978; Scandura & Graen, 1984; Vecchio, 1982)). However, little is known of the process that occurs between leaders and subordinates that results in a particular type or quality of exchange. Most leader-member exchange models (e.g. Danserau et al, 1975; Graen, 1976; Liden & Graen, 1980; Novak, 1984) are structural models that are static. These models do not reflect the dynamic nature that leader - member relationships follow. They do not show the development that occurs in the forging of effective leader - member dyads. Structural models identify parameters that influence behaviour, whilst specifying the form (or structure) of that influence within organisations, and are useful for suggesting systemic changes (Thomas, 1976). A process oriented model examines internal dynamics, whereby events must be identified, and the effects of each event on subsequent events must be considered. Dienesch and Liden (1986) present a process-oriented model of the development of leader-member exchange.

### The Dienesch and Liden Leader-Member Exchange Model

A contemporary exemplar of a leader-member exchange model was developed by Dienesch and Liden (1986) using a reciprocal causation framework from literature of attribution theory, role theory, leadership theory and social exchange theory (see Figure 5). The Dienesch and Liden (1986) model of leader-member exchange consists of a number of developmental stages. In the interaction stage, the first leader - member interaction, which is dependent on the leaders' and subordinates' current roles takes place (Dockery & Steiner, 1990). According to Dienesch and Liden (1986), this initial interaction brings together the unique attitudes, abilities, personality, experience, age and background of the subordinate and leader, as well as initial feelings of trustworthiness and expertise of each member. Trustworthiness, when developed, is a major factor in interpersonal relationships (McCormick & Tiffin, 1979). The subordinate will only accept managers' offers (e.g. benefits such as time off), if the subordinate perceives that the leader can be trusted to produce the offered resources (Dienesch & Liden, 1986).

Figure 5. Model of the leader-member exchange developmental process



(Dienesch & Liden, 1986, p. 627)

According to Dienesch and Liden (1986), the initial interaction stage of leader-member exchange may be of even more importance to the organisation. This is in the case of a new manager or subordinate to the organisation as opposed to longer serving managers or subordinates (Dienesch & Liden, 1986). New members to the organisation (as opposed to members with long service tenure in the organisation) need more support and information about the organisation. Furthermore, new members to the organisation would rely on the leader as a major source of support and information (Louis, Posner & Powell, 1983). The socialisation into the organisation and the development of a leader-member exchange relationship, with either a new superior or

new subordinate (or both), occur as two concurrent and interrelated processes (Dienesch & Liden, 1986).

Dienesch and Liden (1986) contend that a direct relationship can exist between the initial interaction of the manager and subordinate, and the nature of the exchange (the final stage of the model). This direct relationship can occur when the leader is impressed with the individual's characteristics, abilities, background or experience. The leader-member exchange relationship results from the initial interaction where the supervisor and subordinate have built up a healthy and respectful regard for each other (Dockery & Steiner, 1990).

The second major variable in the model is leader delegation (Dienesch & Liden, 1986). The leader delegates either a trial assignment or an initial set of duties to the subordinate. These duties are chosen by the manager, taking into account the leader's perception of the role definition of the member's in the organisation (Dienesch & Liden, 1986). The duties serve as a test of the leader's perceptions in regard to the member, based on the perceptions developed in the initial interaction. The leader, at this stage, is essentially delegating tasks, duties and responsibilities to the member/subordinate, as a means of testing the subordinate's knowledge, skills and personality. This assists in the development of the leader - member dyad.

The third stage in the model is the member's behaviour in response to the leader's

delegation of task, duty and responsibility. This is the major input of the member into the leader-member exchange relationship. A major determinant of the member's behaviour involves the perceived equity in the exchange with their leader (Dienesch & Liden, 1986). A member's perception of the leader as a source of individualised assistance is a sign of positive exchange occurring. When a positive exchange occurs, influence is established over and above the leader's formal authority, thus eliciting extra-contractual behaviour from the subordinate such as increased loyalty and increased effort (Novak, 1984). Extra-contractual behaviours include coping with unanticipated problems, availability (i.e., providing immediate assistance) and irreplaceability (the leader's comparative value to the subordinate as compared to other leaders). In extra-contractual behaviour, the leader can provide greater job latitude (e.g., increased responsibility) to the subordinate in exchange for high levels of effort, commitment and performance from the subordinate/s (Graen & Schiemann, 1978). The competency of the subordinate is important in terms of the individual's output or performance, as this may positively or negatively affect the leader-member exchange relationship (Novak, 1984).

Leaders' attributions of members' behaviour is the next developmental process in the model. This involves a leader's attempt to interpret, understand or explain a member's behaviour (Dienesch & Liden, 1986). Leaders' responses may be affected by attributions such as distortions and biases provided by the subordinate. Members have many possible actions that may influence either their leaders or subordinates. Kipnis,

Schmidt & Wilkinson (1980) report that subjects used three hundred and seventy influence tactics, such as praising the superior and comparing the superior to others, of which 62% were directed at superiors as a means of getting their superior to do something the subordinates wanted.

Dienesch and Liden's (1986) model indicates that contextual influences on leader-member exchange, are important organisational factors or constraints affecting managers' interaction, and the exchange of resources, with subordinates. Contextual factors relevant to leader-member exchange development are formal task discretion, control over organisational resources, work group composition, a leaders power, centrality and organisational policies and culture (Dienesch & Liden, 1986). There is a limit to the number of subordinates that a leader can manage effectively. This impacts on the quality of the leader-member exchange relationship as the leader will not be able to give each relationship an equal and fair amount of time (Dienesch & Liden, 1986). Graen, Cashman, Ginsburgh and Schiemann (1977) found that leaders with poor relationships with their superiors had less to offer their subordinates in terms of direction, resources and autonomy than those with good relationships with their superiors. Leaders with poor relationships with their subordinates have little resources to offer their subordinates, which will cause a decrease in subordinate job satisfaction (Dienesch & Liden, 1986). Organisational policies might also influence the context of leader-member exchange behaviours, as regards appropriate responses for given behaviours, as managers might have to follow certain guidelines in managing their

subordinates (Graen & Liden, 1980). An example is where policies might prohibit managers from providing certain benefits to all subordinates such as travel allowances.

The Dienesch and Liden (1986) model suggests that there are a number of outcomes for the managers, subordinates and organisations, that can result from high quality leader-member exchanges. These include increased leader and subordinate performance, increased decision influence, increased satisfaction, fewer job problems, organisational commitment, increased responsiveness by both exchange members and increased contributions by both the leader and the subordinate (Dienesch & Liden, 1986; Dockery & Steiner, 1990; Graen et al, 1977; Graen & Liden, 1980; Graen & Schiemann, 1978; Novak, 1984). The Dienesch and Liden (1986) approach provides no explanation of what results in the nature of the exchange, and how a high or low quality dyadic exchange results. But Dienesch and Liden (1986) do suggest that after the quality of exchange has been determined, the reciprocal process between leader and member will continue when a positive dyadic relationship exists between the leader and subordinate. When the leader has negative perceptions of the subordinate however, the subordinate will have little confidence or faith in the leader if awareness of such perceptions occur (Baron, 1988). Research has typically supported the effectiveness of the leader-member exchange leadership approach in industry (Cashman, Dansereau, Graen & Haga, 1976; Dansereau, Graen & Haga, 1975; Dockery & Steiner, 1990; Graen & Cashman, 1975; Graen, Novak & Sommerkamp, 1982; Graen & Schiemann, 1978; Liden & Graen, 1980; Novak, 1984; Vecchio & Gobdel, 1984).

## Research on the Leader-Member Exchange Model

Research on leader - member dyads and on the outcomes of leader - member dyads has been the focus of most leader-member exchange research (Dansereau, Graen & Haga, 1975; Graen & Cashman, 1975; Graen, Novak & Sommerkamp, 1982; Graen & Schiemann, 1978; Liden & Graen, 1980). The following section will consider research on both the concept of the leader - member dyad and on the outcomes of leader - member dyads in the leader-member exchange leadership approach.

Dansereau, Graen and Haga (1975) tested the concept of the "in-group" and the "out-group" categorisation in terms of the dyadic leader-member exchange. Perceptions of the quality of the exchange were measured from both the leaders' and subordinates' points of view (Dansereau et al., 1986). In this study, the "in-group" leader-member exchange (higher negotiating latitude) reported that the leader provided more attention and decision influence to the subordinate and effective interpersonal relationships result in positive attitudes towards the leaders' technical competence and higher overall subordinate satisfaction (Dansereau et al, 1975). Graen and Schiemann (1978) found that there was greater agreement among each leader and subordinate regarding their relating to mutually experienced events for the "in-group" leader-member exchange model, as compared to "out-group" dyads, thus showing the "in-group" categorisation to be optimal.

Vecchio and Gobdel (1984) investigated the vertical dyad linkage model and found that in-group status was associated with higher work performance ratings, reduction in the desire to quit a job and increased satisfaction with supervision. Liden and Graen (1980) found that the leader and member dimensions involved in leader-member exchange could not be separated into two groups (in-group and out-group), but varied over a continuum between high quality exchanges and low quality exchanges.

Kemeigor (1982) found that subordinates had greater job satisfaction when their values were similar to their supervisors. A link between value similarity (between leader and member) and the positive development of the leader member exchange may exist, strengthening the need for people with similar value systems to work together. Steiner (1988) also found great similarity between supervisor and subordinate values in the United States and France. This was perceived in the leader-member exchange relationships which highlighted the cross cultural applications of the approach. To support their contentions that leader-member exchange is a far more effective leadership approach than the traditional leadership approaches. Graen, Liden and Hoel (1982) made comparisons in a large public organisation between a leader-member exchange model and an 'average leadership style' approach with regard to the prediction of labour turnover. The quality of the leader-member exchange relationships in organisations was a more effective predictor of employee turnover than average leadership style and thus impacted positively on job satisfaction and work performance (Graen, Liden & Hoel, 1982). Katerberg and Hom (1981) investigated within-group

and between-group variation by testing possible artificial inflation of the leader member exchange results by removing between group variation. In this process between group variance differences are included, as well as the within group differences. Results showed that the dyadic or within-group variation in the leaders behaviour continued to impact on job performance and job satisfaction, even when the between-groups effects on leadership are removed.

Liden and Graen (1980) found that the in-group members (high quality exchange) in the leader-member exchange relationship received more communication (such as encouragement) from leaders with regard to administrative decision making and support and thus showed a greater willingness to contribute to the work unit (Novak, 1984). Higher performance (in terms of achieving the departments objectives) was also found to be achieved from the in-group category (Liden & Graen, 1980).

Scandura and Graen (1984) evaluated the effects of a leadership intervention programme, based on the leader-member exchange model, whereby the effects of the intervention programme were highly related to the initial quality (i.e. high quality members) of the leader-member exchange relationship (Dockery & Steiner, 1990). Initially, Scandura and Graen (1984) found that leader-member exchange groups with moderate quality exchanges showed significant gains in productivity, job satisfaction and supervisor satisfaction, thus highlighting the benefits of an effective intervention programme.

Research has also considered the outcomes of the leader-member exchange process. Graen, Novak and Sommerkamp (1982) found that leader-member exchange impacted positively on job satisfaction and productivity. Dienesch and Liden (1986) found that the leader-member exchange and performance relationship (in a high quality exchange) was still low. This strengthened Graen's (1982) suggestion that additional research in the area is required, utilising new variables that have not previously been considered.

Dienesch and Liden (1986) argue that leader-member exchange gives a more complete picture of the range of leadership processes than the 'average leadership styles' as it considers the dyadic relationship between leaders and subordinates as well as the developmental process between the leaders and subordinates (Dienesch & Liden, 1986). Leader-member exchange should produce better results in work performance and job satisfaction in the organisational setting due to its consideration of the reciprocal relationship between the leader and the subordinate and also due to its sound theoretical base (Dienesch & Liden, 1986). The leader-member dyad can impact positively on work performance, thus resulting in improved job satisfaction (Bass, 1990; Dienesch & Liden, 1986; Dockery & Steiner, 1990; Graen, 1978; Graen & Cashman, 1975; Graen, Liden & Hoel, 1982; Novak, 1984; Serey, 1981).

Schein (1980) has suggested that because the relationship between effective leadership and job performance typically exhibits low correlations, additional variables need to be considered to explain more variance in terms of job satisfaction and work performance.

An expanded model of leadership needs to be developed which will assist in strengthening the leadership outcomes, namely job satisfaction and work performance. The present study will consider the self-efficacy variable in the leadership model, and the importance of self-efficacy will be explained.

### Leader-Member Exchange and Self-Efficacy

Leadership theory needs to consider both the leaders and subordinates individual characteristics (interests, attitudes, needs), job characteristics (intrinsic rewards, autonomy, feedback, technological determinants) and work environment characteristics (organisational climate, general rewards, peers, supervisors, subordinates) (Steers & Porter, 1987). The leader-member exchange approach considers mostly individual and work environment characteristics, as well as considering the reciprocal and dyadic relationship between leaders and subordinates (Dienesch & Liden, 1986). Additional variables need to be considered in conjunction with leadership as a means of explaining more of the variance in job performance and job satisfaction than traditional leadership approaches. A relationship exists between effective leadership and job performance (Bass, 1990; Blake & Mouton, 1964; Fiedler, 1967; Hersey & Blanchard, 1977; Hollander & Offermann, 1990; Katz & Kahn, 1978; Novak, 1984; Schein, 1980). Schein (1980) contends that the relationship between effective leadership and work performance is not satisfactory due to low correlations achieved between leadership and work performance. Such low correlations suggest a need to consider additional

variables in the leadership model that can explain the leadership - performance relationship more fully. Self-efficacy is a variable which has not been previously considered in the leadership domain, and might assist in better explaining the outcomes (performance and job satisfaction) of leader-member exchange in a new leadership model (Hollander, 1985).

One variable frequently associated with the construct of work performance is Bandura's (1977a) concept of Self-Efficacy (Bandura, 1977a; Barling & Beattie, 1983; Bouchard, 1990; Conger & Kanungo, 1988; Locke, Frederick, Lee & Bobko, 1984). Self-efficacy has also been associated with increased sales performance (Beattie, 1981; Lee & Gilien, 1989), high goal setting (Bandura & Cervone, 1983; 1984; 1986; Schunk, 1990) and optimal job satisfaction (Hackett & Betz, 1981). A central concept in Bandura's (1977a; 1986) social learning theory is self-efficacy, namely a person's belief in his/her capability to perform a task.

In terms of the leader-member exchange model, the initial interaction between the leader and subordinate in the Dienesch and Liden (1986) Leader-Member Exchange model results in the manager and subordinate each bringing their unique physical characteristics, attitudes, appearance, abilities, personality, age, and background to the meeting. This dyadic relationship may be affected in two ways. Firstly, the manager might view the subordinate's personal characteristics subjectively (either positively or negatively), resulting in an inaccurate perception of the subordinate (Dienesch & Liden,

1986). Secondly, the leader's characteristics might impact on the efficacy of a subordinate, resulting in the subordinate exhibiting low efficacy. In both cases less than optimal exchanges might occur (Dienesch & Liden, 1986).

With reference to the Dienesch and Liden (1986) model, the personal construct of the "member" or "leader" in the present study does not include the self-efficacy of the "member" or "leader". Self efficacy is a cognitive mechanism mediating behaviour change (Barling & Beattie, 1983), and, as a conceptually separate variable to the member characteristics of the leader-member exchange model (Dienesch & Liden, 1986), may assist in the leader-member exchange model becoming a more effective approach in improving job satisfaction and work performance. The personal characteristics of the leader-member exchange model that each member brings to the leader-member dyad is determined by each members perception of the other (Dienesch & Liden, 1986), rather than how each member perceives themselves. Whereas "leader" and "member" characteristics influence how the manager and subordinate perceive each other in the dyadic relationship, the construct of self-efficacy influences the perceptions that the manager and subordinate have of themselves. As self-efficacy reflects subordinates' perceptions of their own abilities to do a task, and it is conceptually independent of the personal characteristics included in the leader-member exchange model, it is argued that it is appropriate to use both self-efficacy and leader-member exchanges as separate constructs.

Thus it is argued that self-efficacy is an additional variable that might assist in better explaining the relationship between effective leadership and the leadership outcomes, such as job satisfaction and work performance. The interaction of self-efficacy with leader-member exchange may assist in leader-member exchange becoming a more effective approach in determining job satisfaction and work performance. In the following section the concept of self-efficacy theory will be discussed, followed by a review of research on self-efficacy.

#### SOCIAL LEARNING THEORY, SELF-EFFICACY AND SELF-EFFICACY RESEARCH

Social Learning Theory emphasises the prominent role played by behavioral factors, environmental factors and cognitive (vicarious, symbolic and self regulatory) processes in psychological functioning (Bandura, 1986). Within social learning theory, self-efficacy theory is a prime cognitive construct (Bandura, 1977a).

#### Social Learning Theory

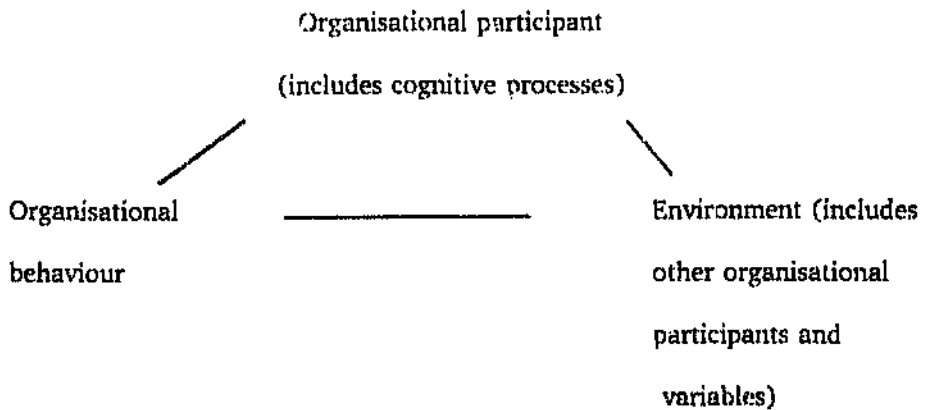
The exclusive concern in many psychological theories is that expectations influence

actions, by focusing almost entirely on outcome expectations (Bandura, 1978; 1986). This exclusive concern with outcome expectations can be traced to Tolman's theory (1932;1951) which interpreted learning as a development of expectations that behaviour would produce outcomes. In contrast, many theories (e.g. Maier & Seligman, 1976) view learning as habit acquisition (Bandura, 1978). Valence expectancy theory is similar to Tolman's (1951) approach that behaviour will produce certain outcomes. Social learning theory is concerned with both the acquisition of cognitive and behavioral competencies as well as with the knowledge of how behaviour results in certain outcomes. Social Learning Theory (Bandura, 1978) can be applied to organisational behaviour and is depicted by the model in Figure 6.

Within an organisational environment, employee behaviour affects and is affected by the individuals cognitive processes, the environment and the interaction between the person and the environment (Davis & Luthans, 1980). Mischel (1973) suggests that the focus in social learning theory has shifted from comparisons and generalisations of what individuals are like, to an evaluation of what they do, both behaviourally and cognitively, within their specific environments. Social learning theory differs from previous theories (such as multimodal behaviour therapy and behaviour modification) by explaining behaviour in terms of a reciprocal interaction between the person, the environment and the behaviour itself (Bandura, 1977b). From social learning theory, Bandura (1977a; 1977b; 1978; 1986) developed an integrative theory of behaviour, namely self-efficacy theory. The following section deals with self-efficacy theory, its

relevant criticisms and related research.

Figure 6. Model of social learning theory of organisations.



(Davis & Luthans, 1980, p. 284)

### Self-Efficacy Theory

Self-Efficacy theory has evolved as an appendage of social learning theory, whereby an integrative approach combining the cognitive loci of operations, personal factors and symbolic activity has been formulated, resulting in an integrated theory of behaviour (Bandura, 1977a; 1977b; 1986; Beattie, 1981). The concept of perceived self-efficacy was introduced by Bandura (1977) as "an integrative theoretical framework to explain and predict psychological changes achieved by different modes of treatment" (p. 191).

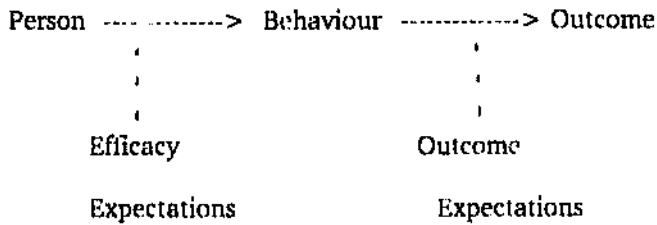
Perceived efficacy can affect behaviour by influencing a person's choice of activities, such as goal setting and by influencing environmental settings (Bandura, 1978). Self-efficacy is not the sole determinant of behaviour as cognitive processes, reinforcement and modelling also affect behaviour (Bandura, 1986).

Perceptions of self-efficacy influence choices of behaviour once people have judged their own capabilities (Bandura, 1978). People undertake and perform activities they judge themselves capable of managing, whilst avoiding tasks they believe exceed their coping capabilities (Bandura, 1986). Schunk (1979) advocates that the stronger the perceived self-efficacy, the more vigorous and persistent are the efforts to complete the activity. The more dependable the experiential sources (performance accomplishments, vicarious experience, verbal persuasion and emotional arousal) the greater are the likely changes in perceived self-efficacy (Bandura, 1978b). Bandura (1978) stresses that the greater the perceived inefficacy, the higher the self generated distress on any given task or behaviour. Self perceptions of efficacy are good predictors of how people are likely to behave and the extent of emotional arousal they will experience on specific tasks (Bandura, 1982; 1986).

Self-Efficacy theory deals in the area of expectancies in social learning theory. Self-efficacy defines two expectancies, efficacy expectancies and response-outcome expectancies. Efficacy expectancies are defined as "judgements of "how well one can execute courses of action required to deal with prospective situations" (Bandura, 1982,

p. 122). An efficacy expectation refers to an individual's conviction that he or she can execute the behaviour required to produce a certain outcome (Conger & Kanungo, 1988). Barling and Beattie (1983) propose that self-efficacy beliefs serve as cognitive mechanisms mediating behaviour change. In contrast, outcome expectancy is defined by Bandura (1977a) as "a person's estimate that a given behaviour will lead to certain outcomes" (p. 79). Bandura (1977b) states that efficacy expectancies and response-outcome expectancies differ. For example, individuals could believe that particular actions will produce certain outcomes, such as goal attainment. If they doubt their ability to perform the activities, then such information does not influence their behaviour. Conger and Kanungo (1988) stresses that an outcome is the consequence of an act and not the act itself. Individuals behaviour might determine the outcomes experienced and the outcomes people anticipate depend largely on their perceptions of their ability to perform in a given situation (Bandura, 1984; 1986). The difference between efficacy expectations and outcome expectations is presented schematically in Figure 7.

Figure 7. Diagrammatic representation of the difference between efficacy expectations and outcome expectations.



(Bandura, 1977a, p. 79)

According to Conger and Kanungo (1988), efficacy and response-outcome expectancies are separate variables, as people may believe certain actions will produce certain outcomes, but might question their ability to perform these actions (Bandura, 1978). Bandura (1984) suggests that people can assess their work capabilities without being fully cognisant of the financial benefits that might result. Self-efficacy can thus be assessed independently of behavioral consequences. As an illustration, Bandura (1984) proposes that inept drivers do not envisage themselves in a wreckage and then think that they are inefficacious, as human causal thinking places actions before the resulting outcomes.

Bandura (1982; 1986) found that self-efficacy expectations (compared to outcome expectations) are strongly related to future task performance. The reason for this is that measures of self-efficacy are mainly concerned with peoples' expressed future hopes, as opposed to peoples' sense of mastery (Beattie, 1981). Self-efficacy has three dimensions namely, magnitude, strength and generality (Bandura, 1977a; Bandura, 1978) (see Figure 8). In this instance, magnitude applies to the level of task difficulty that a person believes he or she can attain. Strength refers to whether the conviction regarding magnitude is strong or weak. Generality refers to the degree to which the expectation is generalised across all situations (Bandura, 1986). Individuals with high self-efficacy will persevere, despite possible dissuading experiences or failure, whilst people with low efficacy might discontinue behaviour when confronted with unfavourable situations or possible failure (Bandura, 1977a). According to Bandura (1978), most behavioral changes correspond very closely to the magnitude of the expectancy change. Therefore the stronger the efficacy expectations, the higher is the probability that difficult tasks will be successfully dealt with (Bandura, 1977a). The potential change in self-efficacy will also increase if the source is dependable (Bandura, 1986).

### Sources of Efficacy

Brief and Aldag (1981) define five major sources of efficacy expectations. These sources of information namely, performance accomplishments, vicarious experience,

verbal persuasion, emotional arousal and logical verification alter an individuals coping behaviour by strengthening feelings of competency (Bandura, 1982).

Figure 8. Sources and dimensions of self-efficacy expectations

SOURCES		DIMENSIONS
performance accomplishments		
vicarious experience		magnitude
verbal persuasion	→	generalisability
emotional arousal		strength
logical verification		

(Brief & Aldag, 1981, p.81)

The first source, namely performance accomplishments (or active attainment), is based on one's own personal experiences (Conger & Kanungo, 1988). Such accomplishments are the most dependable source of efficacy expectations (Gist, 1987). Efficacy expectations will most likely be strengthened if the occasional obstacle is satisfactorily and easily overcome. Conger and Kanungo (1988) suggest that when subordinates

perform complex tasks or are given more responsibility in their jobs, they have the opportunity to test their efficacy and thus feel more capable. Many different expectations are derived from the second source, namely vicarious experience (Bandura, 1977a). The intensification and persistence of effort to succeed in performing difficult activities may occur as a result of observing others successfully perform similar activities. Meichenbaum (1971) proposes that phobics, for example, can benefit when seeing fearful models overcoming their disabilities, rather than watching performances by adept models. Symbolic modelling might prove effective with subordinates, only if the subject can identify with the models used (Bandura, 1986), but is not as effective as enactive attainment experience (Conger & Kanungo, 1988). Verbal persuasion is a third source of efficacy expectations. Human behaviour may be altered, since persuasion might suggest that the person is capable of behaviours which they believed were previously beyond their ability (Bandura, 1986). Verbal persuasion results generally in weak and short-lived efficacy expectations and is a weak informational source since it is not based on the direct experience of the subordinate (Conger & Kanungo, 1988). For verbal persuasion to be effective, the source of the verbal persuasion must have credibility. Gist (1987) found that the credibility and expertise of the source and the familiarity of the source with task demands affect the effectiveness of self-efficacy. The fourth source of efficacy expectations is emotional arousal. Physiological arousal is an indicator to individuals of their anxiety, fear, depression and vulnerability to stress (Conger & Kanungo, 1988). Aversive arousal will result in poor performance, due to the expectation of poor success. A reaction to fear often results in further fear

(Bandura, 1986). The fifth source, logical verification refers to the derivation of new knowledge by individuals from things they already know or with which they are familiar (Ballantine, 1989). Brief and Aldag (1981) suggest that previously learned rules or inferences will enhance self-efficacy, if these rules or inferences are logically applicable in the mastery of a new task.

There are therefore a number of sources or information cues that influence self-efficacy (Gist, 1987). From this it becomes clear that high personal efficacy, should result in the expenditure of greater effort and the attainment of a high level of performance (Bandura, 1984; Conger & Kanungo, 1988). The next section deals with research on the self-efficacy construct.

### Self-Efficacy Research

Research conducted on self-efficacy within organisations has been positive, even though the research has been limited (Beattie, 1981; Brief & Aldag, 1981; Gist, 1987). Most self-efficacy research has been conducted in the clinical psychological domain (e.g. Bandura, 1977a; Bandura, 1986; Bandura, Jeffrey & Gajdos, 1975; Bandura & Adams, 1977; Bandura, Adams & Beyer, 1977; Bandura, Adams, Hardy & Howell, 1980; Bass, 1990; Cervone & Palmer, 1990). Research on self-efficacy has focused primarily on clinical areas relating to snake phobias (Bandura & Adams, 1977; Bandura, Adams & Beyer, 1977), agoraphobia (Bandura, Adams, Hardy & Howells, 1980); deficits in

childrens' achievement behaviour (Schunk, 1981); educational field (Taylor et al, 1984) and scholastic achievement (Barling & Bresgi, 1980). In the industrial area research has focused on insurance sales (Barling & Beattie, 1981), Type A behaviour (Lee & Gillen, 1989); empowerment (Conger & Kanungo, 1988) and goal setting (Bandura & Cervone, 1983; 1984; 1986; Schunk, 1990). Three separate studies, Bandura (1977a), Barling and Beattie (1983) and Locke, Frederick, Lee and Bobko (1984), report a relationship existing between self-efficacy beliefs and work performance. Research on self-efficacy will be considered in two sections, namely, general research and the industrial research.

### General Research

Wolpe (1974) investigated anxiety and its activating of defensive behaviour. Following desensitisation, self-efficacy was found to be a highly accurate predictor of the degree of behavioral change (Bandura & Adams, 1977). Furthermore, self-efficacy is a better predictor of subsequent performance than indices of past performance (Bandura & Adams, 1977; Bandura, Adams & Bayer, 1977; Bouchard, 1990). The essence of self-efficacy is a rational appraisal of one's likely future behaviour based upon previous knowledge (Eastman & Marzillier, 1984).

In phobic behaviour, simply verbalising an efficacy judgement may not necessarily produce bold behaviour by that person (Bandura, 1982). But making self-efficacy

judgements may contribute some motivational inducement to improve the match between judgement and performance. Bandura (1977b), and Bandura, Adams and Beyer (1977) compare participant modelling (performance based) to only modelling (vicarious technique), where it was found that personal efficacy was greater with participant modelling, which suggests that efficacy based on experience is more powerful (Conger & Kanungo, 1988).

Bandura and Schunk (1981) found perceived self-efficacy to impact on the accuracy of mathematical performance and to increase intrinsic interest in arithmetic activities. Brown and Inouze (1978) found that the stronger the perceived self-efficacy, the more vigorous and persistent ones efforts. Also, Larling and Abel (1981) extended the generalisability of self-efficacy theory to non-pathological behaviours (e.g., tennis performance), where perceived success experiences are the principal motivators of behaviour. Self-efficacy is a variable that is effective within the clinical domains (Conger & Kanungo, 1988; Shelton, 1990).

### Industrial Research

Locke, Frederick, Lee and Bobko (1984) and Schunk (1990) found that self-efficacy yielded a positive relationship with goal level, goal commitment and task performance, thus supporting Bandura's (1986) assertion that self-efficacy is a key causal variable in performance. Bandura's (1982) assertion that past performance is a key determinant of

self-efficacy, was supported by both the Locke et al (1984) study and the research by Schunk (1990). The correlations between self-efficacy and past performance are higher than the correlation between self-efficacy and future performance, thus stressing the importance of behaviour rather than outcome in the consideration of self-efficacy (Conger & Kanungo, 1988).

Bandura (1986) and Singer and Beardsley (1990) found that self-efficacy is strongly related to performance in a non-industrial setting. In an organisational setting, Barling and Beattie (1983) provides evidence that self-efficacy beliefs impact on insurance sales performance and job satisfaction. Self-efficacies theory was suggested as being generalisable to an organisational setting, as there was a relationship between self-efficacy and objective measures of sales performance (Barling & Beattie, 1983). Self-efficacy is a behavioural variable that impacts on organisations, with research suggesting a definite relationship between self-efficacy and performance and with job satisfaction (Conger & Kanungo, 1988).

#### Rationale and Aim

According to Schein (1980; 1984), certain leadership approaches, such as the Managerial Grid, Situational Leadership and the Leader-Match Theory do not adequately explain various leadership outcomes, such as job performance and job satisfaction.

Furthermore, Gist (1987) states that most leadership research has focused on the impact of leader behaviour on subordinates, while ignoring the impact subordinates might have on the leader (e.g. Blake & Mouton, 1964; Fiedler, 1967; Hersey & Blanchard, 1977), which does not fully consider the dynamic interpersonal relationship that occurs between managers and subordinates (Pass, 1990).

From leadership research, Hollander (1985) suggests that two of the more important outcomes of leadership are job satisfaction and work performance. In leadership style theories, the two dimensions, namely initiating structure and consideration were found to be positively related to work performance and job satisfaction (Argyris, 1971; Argyris, 1976; Blake & Mouton, 1980; Blake & Mouton, 1982; Farris, 1969; Hall, 1976; Hersey & Blanchard, 1975; Hersey & Blanchard, 1977; Kreinik & Colarelli, 1971; Likert, 1967; Lowin & Craig, 1968; Schein, 1980; Taylor & Lippitt, 1975). Initiating structure and consideration were seen as key constructs within the leadership domain (Blake & Mouton, 1980). Fiedler's (1967;1971) leader-match theory is a style approach which suggests that leadership is either task oriented or relationship oriented, resulting in outcomes of effective performance and good interpersonal relationships. In the situational leadership approach, behavioural flexibility depending on the situation will determine whether improved performance and increased job satisfaction will result (Blanchard, 1985; Goodson, McGee & Cashman, 1989; Hersey & Blanchard, 1977; Mullen, Symons, Hu & Salas, 1989). The leader-member exchange approach is dependent on the dyadic relationship between managers and subordinates, with the

managers and subordinates being able to impact on the leadership outcomes, work performance and job satisfaction (Bass, 1990; Dienesch & Liden, 1986; Dockery & Steiner, 1990; Graen, Liden & Hoel, 1982; Graen, Novak & Sommerkamp, 1982; Graen & Schiemann, 1978; Scandura & Graen, 1984; Vecchio, 1982).

Job satisfaction is an important construct in organisational psychology, and has been widely researched (Bass, 1990). Job satisfaction is defined as the extent to which an employee is satisfied with the extrinsic and intrinsic features of his/her job (Warr, Cook & Wall, 1979). Locke (1983) stresses that the concept of satisfaction incorporates a global impression which incorporates both present and past situations. Job satisfaction can impact both positively and negatively on work performance, as low satisfaction will result in little desire to perform optimally, and high satisfaction will motivate to perform effectively (Petty, McGee & Cavender, 1984). Job satisfaction has been positively associated with a host of variables such as skill complexity (Gerhart, 1987); self-efficacy (Bandura, 1986; Barling & Beattie, 1983); task significance (Bedeian & Armenakis, 1981); individual disposition (Staw, Bell & Clausen, 1986); race (Beatty, 1990); work goals (Roberson, 1990); general leadership (Bateman & Strasser, 1984; Hollander & Offermann, 1990) and leader-member exchange (Dienesch & Liden, 1986; Novak, 1984), and inversely related to role ambiguity (Abdel-Halim, 1981) and role conflict (Katz, 1978). Shore and Martin (1989) suggest that job satisfaction is a crucial individual outcome of leadership, as it can determine the effectiveness of the performance attained. From this, the central importance of job satisfaction as an

organisational outcome is apparent (Arvey, Bouchard, Segal & Abraham, 1989; Bass, 1990; Glisson & Durick, 1988; Roberson, 1990). Thus leadership research stresses the importance of work performance and job satisfaction as outcomes of leadership. Consequently in the present study work performance and job satisfaction are used as dependent variables.

Novak (1984) suggests that the dyadic relationship existing between managers and subordinates is central to the study of leadership. Each member of the dyad can affect the other member's work performance and job satisfaction (Bass, 1990), which in turn can positively or detrimentally affect the organisation. Research on leader-member exchange as a viable leadership approach has been extremely positive, with improved work performance and job satisfaction resulting from a high quality leader-member dyad (Dockery & Steiner, 1990; Graen, 1978; Graen, Liden & Hoel, 1982; Dienesch & Liden, 1986; Novak, 1984). Leader-member exchange is seen as the most appropriate leadership approach for the present study (Dienesch & Liden, 1986; Graen & Cashman, 1975; Novak, 1984; Serey, 1981).

Manager perceptions of the subordinate and subordinate perceptions of the manager can impact either positively or negatively on the work performance and job satisfaction of the subordinate (Dienesch & Liden, 1986). Two important subordinate outcomes of leadership processes are job satisfaction and work performance (Bass, 1990; Novak, 1984; Schein, 1980). As traditional leadership research has overlooked the dyadic

relationship between leaders and subordinates, a new approach needs to be considered which will explain more of the variance of work performance and job satisfaction. As the present research is exploratory (Reiner & Morris, 1987), it is argued that the inclusion of variables in addition to the leader-member exchange model might explain more variance in terms of job satisfaction and work performance. One such variable frequently associated with job performance is Bandura's (1977a) concept of Self-Efficacy.

Research has shown that self-efficacy and performance are significantly related (Bandura, 1977a; Bandura & Cervone, 1983; Bandura & Cervone, 1984; Bandura & Cervone, 1986; Barling & Beattie, 1981; Bouchard, 1990; Locke et al., 1984; Shelton, 1990; Taylor, 1984). Within the leadership domain the relationship between subordinate perceptions of effective leadership and work performance (Conger & Kanungo, 1988; Fiedler, 1967; Hersey & Blanchard, 1977; Katz & Kahn, 1978) and subordinate perceptions of effective leadership and job satisfaction (Dienesch & Liden, 1986; Glisson & Durick, 1988; Graen, 1978; Reiner & Morris, 1987; Roberson, 1990; Shore & Martin, 1990), has not always been significant (Schein, 1980). Singer (1989) suggests that self-efficacy could be considered within the leadership domain. The construction of a more comprehensive model of leadership, which includes the self-efficacy variable should explain more variance of the dependent variables, namely, job performance and job satisfaction. The explanation of additional variance gives a more complete explanation of the dependent variable, since few phenomena are produced by

a single independent variable. It is expected that the inclusion of two additional variables, namely, self-efficacy as well as an interaction term comprising leader-member exchange and self-efficacy would explain more variance of work performance and job satisfaction than leader-member exchange alone. The interaction effect between leader-member exchange and self-efficacy should impact on job satisfaction and work performance. It is argued that a high quality leader-member exchange dyadic relationship linked to a positive self-belief (high self-efficacy) by an employee regarding his/her sales ability, should result in enhanced work performance and more job satisfaction (Dienesch & Liden, 1986). Low efficacy beliefs can counteract effective leadership, resulting in moderate performance and job satisfaction (Conger & Kanungo, 1988). High efficacy beliefs might overcome poor leadership, which might result in moderate performance and job satisfaction. A subordinate with low efficacy beliefs and a low quality dyadic leader-member exchange relationship should result in decreased work performance and job satisfaction (Barling & Beattie, 1983; Conger & Kanungo, 1988; Dienesch & Liden, 1986).

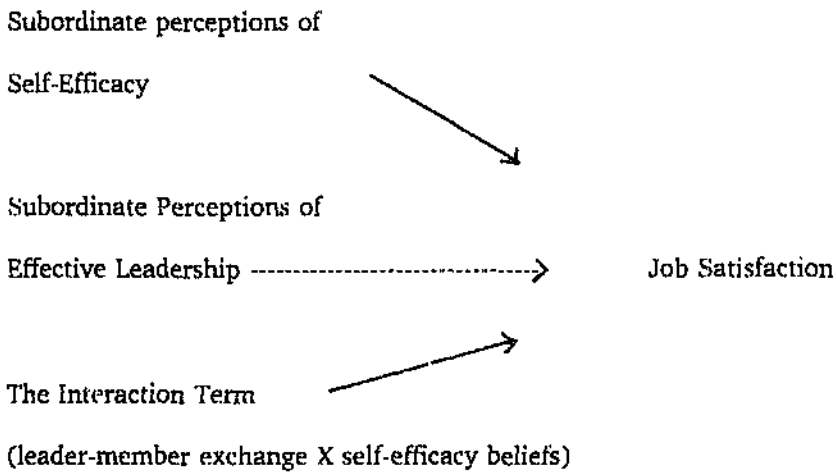
It is hypothesised that the inclusion of self-efficacy in addition to the leadership variable will explain additional variance of job performance and job satisfaction and thus strengthen the leadership-performance and leadership-job satisfaction relationships.

The aim of the present research is to explore the following three models.

Model 1



The proportion of variance of job satisfaction explained by the leader-member exchange variable alone, will be less than that explained by the additional inclusion of first, the construct self-efficacy, and second, an interaction term, comprising leader-member exchange and self-efficacy.



Model 2

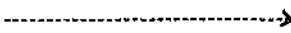
The proportion of variance of job performance (i.e., supervisor rated performance) explained by the leader-member exchange variable alone, will be less than that

explained by the additional inclusion of first, the construct self-efficacy, and second, an interaction term, comprising leader-member exchange and self-efficacy.

Subordinate Perceptions of  
Self-Efficacy



Subordinate Perception of  
Effective Leadership



Job Performance  
(supervisor evaluation)



The Interaction Term  
(leader-member exchange X self-efficacy beliefs)

### Model 3

The proportion of variance of job performance (i.e., work output measure) explained by the leader-member exchange variable alone, will be less than that explained by the additional inclusion of first, the construct self-efficacy, and second, an interaction term,

comprising leader-member exchange and self-efficacy.

Subordinate Perceptions of  
Self-Efficacy



Subordinate Perception of

Effective Leadership -----> Job Performance



The Interaction Term

(leader-member exchange X self-efficacy beliefs)

## METHOD

### Subjects

Questionnaires and prepaid return envelopes were distributed within two large insurance organisations to 197 broker-consultants. Broker-consultants are employed by life insurance companies to liaise between themselves and outside insurance

brokers and broking houses. Whereas insurance brokers sell insurance policies directly to the public, the job of the broker-consultant is to try and influence the insurance brokers to use their companies' insurance policies. Discussions with various senior managers of the insurance companies participating in the present study revealed that broker-consultants are required to work closely with their immediate managers and need to maintain this close contact. Their contact with their managers is greater than the contact insurance agents have with their managers. Life insurance companies were chosen for the research, in order to be consistent with previous research (Barling & Beattie, 1983).

Of the 197 questionnaires distributed, 152 were returned resulting in a response rate of 77.16%. Of the questionnaires returned, 130 of these were useable, resulting in a useable response rate of 65.99%. A 65.99% response rate is highly acceptable for a mail survey (Etzel & Walker, 1974). In the sample used in the present research ( $M$  age = 32.8;  $SD$  = 7.46), 67.7% were male, 100% were white, 67.4% English speaking and 90% had qualifications of matric or higher (see Table 1). Interviews with senior management in the two insurance organisations revealed that the broker consultants in the two companies had similar jobs. Macewen and Barling (1988) state that the failure to find any differences between the two samples on any of these variables, justifies the pooling of the data into one sample. T-tests were computed to evaluate possible differences between the two companies, in terms of age, length of tenure and the number of years in the insurance industry (see Table 2). The samples from the two companies did not differ in terms of age, length of tenure and the number of years in the insurance industry, which justified the pooling

of the two samples into a single data base.

Table 1

Demographic Details of the Combined Sample

(N=130)	n	%
Sex		
Male	88	67.7
Female	42	32.3
Language		
English	87	67.4
Afrikaans	43	32.6
Highest level of education attained		
Less Matric	13	10.1
Matric	104	80.6
Diploma	5	3.9
Degree	7	4.6
Post graduate	1	0.8
	<u>M</u>	<u>S.D.</u>
Age	32.8	7.4
Tenure	4.9	4.6
Years in insurance	4.4	3.9

Table 2: T-Tests between Company A and Company B

Independent Variable	Company A (N=56) <u>M</u>	Company B (N=72) <u>M</u>	t score
Age	32.30	33.20	-.70 ns
Tenure	4.65	5.09	-.53 ns
Years in Insurance	4.17	4.53	-.51 ns

\*  $p < .05$

\*\*  $p < .01$

ns = non-significant

### Experimental Design

The present study used a cross-sectional design within an applied setting (Christensen, 1980). The independent variables in the study constituted measures of leadership, and self-efficacy plus an interaction term of these two variables, (i.e., leader-member exchange times self-efficacy). The dependent variables are two measures of job performance (i.e., employee rating scale and a work output measure) and a measure of job satisfaction. Three models were tested by means of the statistical technique of Multiple Regression.

## MEASURING INSTRUMENTS

A biographical questionnaire as well as five other measures were used in the present study. The measures included were the Leader-Member Exchange (member-form) scale (Scandura & Graen, 1984); the Self-Efficacy Beliefs subscale (Beattie, 1988); the job satisfaction sub-scale of the Work and Life Attitudes survey (Warr, Cook & Wall, 1979), the Employee Rating Scale (Graen, Dansereau & Minami, 1972) and a work output measure.

### Biographical questionnaire

The biographical details (including age, experience and education) of the subjects in the sample were obtained by means of a biographical questionnaire (see Appendix A).

### The Leader-Member Exchange Scale - Member Form

The member form of the seven item Leader-Member Exchange Scale (see Appendix B) was used in the present study to assess subordinates' perceived quality of the leader-member relationship (Scandura & Graen, 1984). The scale measures the quality of the dyadic relationship from the subordinates perspective (Dieresch & Liden, 1986). The scale measures this quality by measuring the nature and quality of the negotiating latitude of the subordinate (Nunns et al., 1990). The member form of the Leader-Member Exchange Scale, which was used in the present study, has

been used in previous research, as well as in South Africa (e.g., Graen, Novak & Sommerkamp, 1982; Nunns, Ballantine, King & Burns, 1990; Scandura & Graen, 1984; Scandura, Graen & Novak, 1986). Internal consistency reliability (coefficient alpha) of the scale has proved satisfactory as coefficients range from .84 to .86 (Novak, 1984; Graen, Novak & Sommerkamp, 1982; Scandura, Graen & Novak, 1986). Furthermore, Nunns, Ballantine, King and Burns (1990), in three separate samples in South Africa, found internal consistency reliabilities of .91; .91 and .98 respectively. In the present study a reliability coefficient (coefficient alpha) of .81 was yielded, which is satisfactory (Anastasi, 1982). The test-retest reliability of .67 reported by Graen, Novak and Sommerkamp (1982) over a six month time period, and .42 over a three month period (Nunns et. al., 1990) was satisfactory.

Nunns et al. (1990) found that high quality leader-member exchange correlates with supervisory support (an element of effective leadership); goal emphasis, work facilitation, interaction facilitation and satisfaction with supervision. The research on the relationship between leader-member exchange and employee performance has been significant and positive (Graen et al, 1982; Dienesch & Liden, 1986; Dockery & Steiner, 1990; Novak, 1984). The relationship between leader-member exchange and job satisfaction has also been significant and positive (Graen et al, 1982; Dienesch & Liden, 1986; Dockery & Steiner, 1990; Novak, 1984). Since the Leader-Member Exchange scale (member-form) demonstrated acceptable psychometric properties within a South African organisational context, it was considered appropriate for the present study.

### The Self-Efficacy Beliefs Scale

The self-efficacy beliefs construct was evaluated by the Self-Efficacy sub-scale of the Self-Efficacy Beliefs questionnaire, which was constructed for insurance personnel in the South African insurance industry by Beattie (1981). The present study used the twenty-four efficacy items of the scale of which two items were reverse-scored (see Appendix C) (Barling & Beattie, 1983). These areas give an overall measure of self-efficacy within the insurance domain. (Beattie, 1981). In the present study, the efficacy sub-scale was scored on a Likert type five point scale to enhance ease of response (Morris & van der Reis, 1980), as opposed to the original scales seven point Likert type scale. According to Matell and Jacoby (1971), reliability is unaffected by the number of scale points for Likert type items.

The responses for this measure ranged from (1) 'to a very little extent' to (5) 'a very great extent'. The self-efficacy sub-scale was validated in the insurance sales domain in South Africa by Barling and Beattie (1983), with an internal consistency (coefficient alpha) of .84 being reported ( $N=97$ ). In the present study an acceptable reliability coefficient (coefficient alpha) of .87 was obtained. A test-retest reliability coefficient ( $r = .79$ ,  $p < .001$ ) was obtained over a three month period for this measure (Ballantine, 1989).

As the present study investigated broker-consultants within the insurance industry, the items required adjustment in order to facilitate the work behaviours of broker-consultants. Bandura (1982) recommends that items be modified for different

settings or relevant to different tasks. As Barling and Beattie's (1983) scale was originally developed to assess self-efficacy beliefs of life insurance agents, items were modified so as to relate more appropriately to the broker-consultants job. Two senior managers in the insurance industry examined each item in the questionnaire in terms of the appropriateness of the terminology and its relevance to broker-consultants. Then, two Industrial Psychologists familiar with the construct of self-efficacy, examined the items to ensure that the meaning of the sub-scale was not compromised.

Beattie (1981) assessed and demonstrated the construct validity of the self-efficacy questionnaire by means of factor analysis, which is an acceptable technique for the assessment of construct validity (Weiss, 1983). Furthermore, Barling and Beattie (1983) report that the efficacy sub-scale correlated significantly with successful sales performance ( $F = 7.13, p < .01$ ) and significantly with a work output measure based on broker-consultant's commission ( $F = 4.97, p < .01$ ). Since the self-efficacy subscale demonstrated acceptable psychometric properties within a South African organisational context, it was considered appropriate for the present study.

### The Job Satisfaction Scale

The Job Satisfaction sub scale (see Appendix D) of the Work and Life Attitudes Survey (Warr, Cook & Wall, 1979) is designed to measure satisfaction incorporating both intrinsic and extrinsic features of the job (Shouksmith, Pajo & Jepsen, 1990). Job Satisfaction is defined as the extent to which an individual is satisfied with the

extrinsic and intrinsic features of a job (Warr, Cook & Wall, 1979). The questionnaire consists of fifteen items with a seven point Likert type response format. Responses range from 'I'm extremely dissatisfied' through to 'I'm extremely satisfied'. There are no reverse scored items.

The Job Satisfaction scale (Warr et al, 1979) demonstrated acceptable psychometric properties when used on a South African sample (Bluen and Barling, 1987; Barling, Bluen & Fain, 1987). Bluen and Barling (1987) and Barling, Bluen & Fain (1987) report alpha coefficients (internal consistency reliability) of .86 and .81 respectively, and a test-retest reliability coefficient of  $r = .69$  ( $p < .01$ ). Warr, Cook and Wall (1979) report a test-retest reliability of .63 whilst Bluen (1986) reports a test-retest reliability of .63 and an internal consistency coefficient (alpha) of .95. Thus the questionnaire was considered appropriate for use in the present study.

### Employee Work Performance

Employee work performance was assessed by means of two measures, the Employee Rating Scale (Graen, Danserau & Minami, 1972) and a Work Output Measure.

Firstly, employee performance was assessed by means of a seven item supervisor-rated performance measure (Graen, Danserau & Minami, 1972). The employee rating scale (see Appendix E) is a supervisor-rated measure in which supervisors are required to rate the performance of their respective subordinates (Novak, 1984).

The scale assesses various aspects of subordinate performance including alertness, dependability, skill in dealing with people, planning, know how and judgement,

overall present performance, and expected future performance (Novak, 1984). A five point, Likert-type rating scale is used ranging from '1' (highly unsatisfactory) to '5' (highly satisfactory) (Graen, et al., 1972).

The internal consistency reliabilities (Cronbach alpha) for the Employee Rating scale reported in the literature have generally been satisfactory ranging from .85 to .94 (Scandura & Graen, 1984; Scandura, Graen & Novak, 1986; Vecchio, 1987; Vecchio and Gobdel, 1984). In the present research, an internal consistency coefficient (alpha) of .83 was found. A test-retest reliability of .85 over a six month period was found by Scandura and Graen (1984), whilst Ballantine (1989) reports a test-retest reliability coefficient of .86 over a three month period.

Scandura and Graen (1984) and Vecchio (1987) found the employee rating scale correlated with leader-member exchange. A correlation of .48 ( $p < .01$ ) was found between self-report measures of subordinates performance and supervisor ratings of their subordinates performance in a sample of 45 supervisor-subordinate dyads (Vecchio & Gobdel, 1984). Both Vecchio (1987) and Scandura et al. (1986) found that performance, as assessed by the employee rating scale, correlated significantly with good supervisor-subordinate relationships ( $r = .34, p < .01$  and  $r = .47, p < .01$  respectively), and was thus found satisfactory for the present study.

#### Work Output Measure

Dickinson and O'Brien (1982) suggest that direct measures of output, behavioural

measures and performance appraisal rating scales are the most common measures of performance. Measures of output are easily quantifiable as they record the products of behaviour, such as the number of insurance policies sold per month (Dickinson & O'Brien, 1982). The attainment of a specific performance standard is seen as a goal accomplishment, which can be viewed as a measure of performance attained in terms of monthly sales targets (Bandura & Cervone, 1983; 1984; 1986; Locke et al., 1984; Mento, Cartledge, & Locke, 1980). Locke and Latham (1984) suggest that outcome measures might be affected by factors outside the control of the employee (e.g. the sales area and nature of competition), and are thus not always a true reflection of the individual's work performance. To assess performance more appropriately, outcome measures must be supplemented with additional measures such as behavioural or subjective performance measures (Dickinson & O'Brien, 1982). This has been achieved by the use of the employee rating scale as an additional measure of performance. The employee rating scale determines an individual's performance from the manager's perspective, and acts as a multiple measure in conjunction with work output measures. Due to its acceptability as a measure, a work output measure which considered broker-consultant sales was considered appropriate for use in the present study.

### Procedure

Two large insurance organisations agreed to participate in the present research. Separate covering letters, in both English and Afrikaans (see Appendix F), were

compiled for both the broker consultants and their managers. In the covering letters the purpose of the study was explained. The letters stressed that participation in the study was voluntary and that confidentiality of responses would be ensured by the researcher.

An additional covering letter that was supplied by a senior manager from each of the participating organisations highlighted the benefits that both the employees and company could receive from the research. This covering letter stressed that the research was voluntary. The questionnaires were posted out using the internal mail services of the two organisations, and the questionnaires were returned via pre addressed (sealable envelopes) to protect the subjects' identity. On the supervisor-rated questionnaire, each broker-consultant's supervisor was asked to state the name of the broker-consultant whose performance was being rated. For this reason, the broker-consultants were required to supply their names, thus allowing both supervisor and subordinate questionnaires to be matched. Each organisation sent reminder letters to the sample two weeks after the questionnaires were initially sent out.

### Statistical Analysis

#### Multiple Regression

Multiple Regression is a general data analytic technique that analyses the relationship between a dependent variable and a set of independent variables (Berry

& Feldman, 1985). In the present study the association between the independent variable (effective leader-member exchange and self-efficacy) and each of the dependent variables (job performance and job satisfaction) were examined as well as the association between the interaction term (leader-member exchange times self-efficacy beliefs) and each of the dependent variables. Multiple regression has been used previously in cross sectional organisational research (Etzioni, 1984; La Rocco & Jones, 1978; Seers et al, 1983; Winnubst, Marcelissen & Kleber, 1982), with a number of studies applying multiple regression in South Africa (Ballantine, 1989; Bluen, 1986; House, 1987; Kruger, 1987).

The general form of the relationship of the linear regression model between dependent and independent variables is :

$$Y = a + b_1 x_1 + b_2 x_2 + \dots b_k x_k$$

(Pedhazur, 1982)

In this equation:

Y = predicted value of dependent variable

a = intercept of the regression line

b = regression coefficients or the slope of the regression line

x = scores of independent variable

k = number of independent variables in the equation

(Kerlinger, 1973; Pedhazur, 1982)

When the multiple regression model includes an interaction term ( Kerlinger & Pedhazur, 1973), an extension of the multiple regression equation must be used. As the present study is exploratory in nature, the inclusion of an interaction term in the multiple regression model will assist in the formation of a more complete leadership model. This occurs when interactions between the independent variables occur. Multiple regression allows for the inclusion of an interaction term (Saunders, 1956) in the equation which increases the predictive power of the technique (Zedeck, 1971).

The multiple regression equation with an interaction term is thus as follows :

$$Y = a + b_1 x_1 + b_2 z_1 + b_3 x_1 z_1$$

In this equation:

Y = predicted values of dependent variable

a = intercept of the regression line

b = slope of the regression line

x = independent variable

z = the second independent variable

xz = product of the independent variables

(Kruger, 1987)

More than one independent variable can be incorporated into the regression equation. This allows for, firstly, a fuller explanation of the dependent variable, as

most phenomena are caused by more than one factor (Lewis - Beck, 1980). In multiple regression, the hierarchical method of variable inclusion allows for the non-linear interaction terms within the multiple regression equation (Kerlinger & Pedhazur, 1973).

An F-test is used to determine the significance of variables in the multiple regression equation (McNemar, 1962). The significance of variables in the multiple regression equation is determined by comparing the derived F values with the tabled F values (Lewis-Beck, 1980). The F value must be above the critical tabled F value, determined by the degrees of freedom of the sample (Pedhazur, 1982). In assessing the goodness-of-fit of a multiple regression equation,  $R^2$  (coefficient of multiple determination known as increment in  $R^2$ ) is assessed (Bluen, 1986). The  $R^2$  reflects the proportion of variance in the dependent variable that can be explained by the independent variables in the equation (Lewis-Beck, 1980).

From this, the term  $R^2$  change is derived. The  $R^2$  change shows the contribution of each independent (predictor) variable to the dependent variable irrespective of it being a main effect or interaction effect (Bluen, 1986).

### The Interaction Term

Cohen and Cohen (1975) propose that a main effect is the effect of the independent variable which is not influenced by either the presence or absence of any other independent variables or moderating effects. Two variables interact when they

account for the variance in the dependent variable, over and above any combination of their separate effects (Cohen & Cohen, 1975).

The interaction term can contribute significantly to the variance in the dependent variable (Cohen & Cohen, 1975). The interaction term is a multiplicative product of the independent variables (Kruger, 1987). This contribution must affect the dependent variable in such a way, that its effect is greater than the major effects of the different independent-dependent variables. Cohen and Cohen (1987) propose that the unique effect of the interaction terms occur after the independent variable (x) and the second independent variable (z) are linearly partialled from the product of x and z. A hierarchical analytic strategy allows the effects of the independent variable and the interaction variable to be partialled out, since they enter the equation before the interaction term (Suchet, 1984). The contribution of the interaction term should be greater than the main effects of the independent variable, and thus account for a significant proportion of variation in the dependent variable. The main effects might occur when the effects of the independent variable are constant and not affected by other variables entering the equation (Kruger, 1987). An interaction effect occurs when independent variables have a joint effect which is independent of the additive combination of their separate effects (Cohen & Cohen, 1983).

#### Assumptions of Multiple Regression

There are three major assumptions in the application of multiple regression namely,

absence of multicollinearity, no measurement error and the presence of a linear relationship between dependent and independent variables (Kerlinger & Pedhazur, 1973; Lewis-Beck, 1980; Pedhazur, 1982).

### Multicollinearity

The first assumption is the absence of multicollinearity. Lewis-Beck (1980) states that no independent variable should be highly correlated with another independent variable. The correlation must be less than .80 (Lewis-Beck, 1980). Independent variables that are multicollinear are disregarded. Multicollinearity is assessed by means of Pearson's Product Moment Correlation (Bluen, 1986; Lewis-Beck, 1980). This method has been used in previous research (Bluen, 1986; Kruger, 1987). The correlations in the present study between leader-member exchange and self-efficacy was .06. This correlation is low and non-significant, which indicates that the assumption of multicollinearity has been satisfied.

### Measurement Error

The second assumption is the absence of measurement error. Lewis-Beck (1980) states that all variables should be measured accurately so as to reduce measurement error, even though it is impossible to eliminate all measurement error (Anastasi, 1982). However, to determine the extent of measurement error, the internal consistency reliability of questionnaires is calculated using Cronbach Alpha's (Bluen, 1986). Anastasi (1982) considers reliability coefficients of not less than .60 as

acceptable.

### Linearity Tests

The third assumption is that the relationship between the independent and dependent variables is linear. Two tests of linearity were used in the present research, namely, the F test and a scatterplot. To test for linearity, the  $R^2$  statistic (variance attributable solely to the linear component of the independent variable) as well as  $Eta^2$  (a measure of combined linear and non-linear variance, as explained by the independent variable provided) must be considered (Bluen, 1981).

The difference between  $Eta^2 - R^2$  provides a measure of the non-linear portion of the variance of the dependent variable as explained by the independent or moderator variable (Bluen, 1981). The determination of the F ratio's degrees of freedom from the moderated multiple regression, allows for the significance of the F ratio to be calculated. The significance of the linear and non-linear values can be determined by using the F test (McNemar, 1962).

According to McNemar (1962) the test of significance is based on the equation:

$$F = \frac{(E^2 - R^2) / (G-2)}{(1 - E^2) / (N-G)}$$

Degrees of Freedom =  $(G-2)/(N-G)$

G = number of groups in class variable

N = number of sample

$E^2$  = eta squared (correlation ratio)

$R^2$  = R squared

(McNemar, 1962, p277)

The significance of the difference between  $E^2$  -  $R^2$  is calculated. When the F value of the difference is significant, then the relationship is considered non-linear (McNemar, 1962). When the relationship between the variables is non-linear, the variable can be transformed to adhere to the assumption of linearity by means of Polynomial Regression (Bluen, 1986). This procedure is similar to the multiple regression analysis. However, successive powers of the independent variable are included in the regression equation. The variable must have accounted for a significant increase in the amount of variance already explained by previously entered variables, in order for the variable to be seen as significant and to qualify for a place in the final regression procedure (Pedhazur, 1982). Successive powers are added to the equation in a stepwise fashion (Kruger, 1987). The highest order term replaces the original non-linear variable in the regression equation (Kruger, 1987). Graphs of the relationships (see Appendix G) between leader-member exchange and performance and leader-member exchange and job satisfaction, as well as the relationship between self-efficacy and performance and self-efficacy and job satisfaction should be examined (Pedhazur, 1982). The graphs between leader-member exchange and performance, and between leader-member exchange and job

satisfaction confirmed linearity in both. The graphs between self-efficacy and performance, and between self-efficacy and job satisfaction confirmed linearity in both cases. The graphs thus confirmed linearity in terms of both independent variables and the dependent variables.

### Levels of Significance

In the present study, a .05 level of significance was used in all the statistical analyses to test the significance of relationships. Levels of significance are determined by the type I error that may occur (Christensen, 1980). Type I error occurs when no significant difference exists between the samples and the differences observed by the experimenter are the result of chance (Christensen, 1980). Type I error is controlled by the significance level that one sets. Another possible error in significance levels is the inverse of Type I error, namely Type II error (Christensen, 1980). Type II error occurs when non significant results are obtained between sampled groups, but in reality there are differences between the sampled groups. A balance is achieved between Type I and Type II error, by the use of the .05 significance level (Christensen, 1980), and the .05 level has been used in previous research satisfactorily (Bluen, 1986; Kruger, 1987; Nunns et al, 1990).

## RESULTS

This section firstly deals with the tests of assumption for multiple regression.

Thereafter, the results of the multiple regression analyses are presented.

### Assumption Testing

The underlying results of multiple regression were tested prior to the multiple regression being completed. These were the reliability of the measuring instruments, that there is an absence of multicollinearity between the independent variables, and that a linear relationship exists between the dependent and independent variables.

### Reliability of Measuring Instruments

Internal consistency reliability (Cronbach's alpha) for each measure was assessed to determine the reliability of the measuring instruments. The internal consistency was determined for the Efficacy subscale of the Self-Efficacy Beliefs Questionnaire, the Job Satisfaction Subscale of the Work and Life Attitude Survey, the Leader-Member Exchange Scale and the Employee Rating Scale. The internal consistency coefficients ranged from .79 to .89 (see Table 3), and were considered satisfactory (Anastasi, 1982). This fulfilled the requirements for multiple regression (Lewis-Beck, 1980).

### Multicollinearity

Multicollinearity was tested by correlating independent variables and dependent variables (see Table 3). The Pearson correlation coefficients were low ( $r < .60$ ), and did not exceed the .80 level to indicate an absence of multicollinearity (Lewis-Beck, 1980).

**Table 3: Intercorrelation matrix of the Independent Variables and Dependent Variables**

Variable	N	<u>M</u>	<u>S.D.</u>	1	2	3	4	5
1 Self-Efficacy (S.E.)	132	92	8.04	(.87)				
2 Leader-Member Exchange (LMX)	132	22.64	3.76	.06	(.81)			
3 Job Satisfaction (J.Sat)	132	83.43	10.56	.12	.55*	(.89)		
4. Employee Rating Scale (ERS)	104	26.28	4.97	-.06	.06	.16	(.83)	
5. Work Output Measure (WOM)	94	32.74	5.63	.01	.19	.16	.63*	

\* p < .05

\*\* p < .01

Note: Reliabilities (coefficient alpha) in parentheses on principal diagonal.

### Tests for Linearity

Tests for linearity were carried out to assess whether a linear relationship exists between the dependent variables (job performance & job satisfaction) and the independent variables (leader-member exchange & self-efficacy) (Lewis-Beck, 1980). The test for linearity involves the F test, which requires  $E^2$  and  $R^2$  to be computed (McNemar, 1962). The significance of the difference between  $E^2$  and  $R^2$  and the relevant F value determined that all relationships between the dependent variable and the independent variables did not deviate significantly from linearity (see Tables 4 and 5).

Table 4: Test of Linearity of Relationship between Leader-Member Exchange and Dependent Variables

Dependent Variable	$E^2$	$R^2$	$E^2 - R^2$	df	F
ERS	.044	.007	.037	1/128	1.43 ns
WOM	.059	.033	.026	1/128	.89 ns
J Sat.	.27	.3	-.03	1/128	-3.6 ns

\*  $p < .05$

\*\* $p < .01$

ns = non-significant

The difference between  $\text{Eta}^2$  and  $R^2$  for the relationship between leader-member exchange and the dependent variables was not significant thus signifying that the relationships satisfied the assumption of linearity. The relationship between leader member exchange and the three dependent variables (employee rating scale, performance and job satisfaction) is linear, and so the original variables can be included in the multiple regression computation (Lewis-Beck, 1980).

Table 5: Test of Linearity of Relationship between Self-Efficacy and Dependent Variables

Dependent Variable	$E^2$	$R^2$	$E^2 - R^2$	df	F
ERS	.005	.004	.001	1/128	.02 ns
WOM	.02	.001	.02	1/128	.63 ns
J Sat	.06	.001	.059	1/128	.51 ns

\*  $p < .05$

\*\* $p < .01$

ns = non-significant

The difference between  $\text{Eta}^2$  and  $R^2$  for the relationship between self-efficacy and the dependent variables was non-significant thus signifying that the relationships satisfied the assumptions of linearity. The relationship between self efficacy and the three dependent variables (employee rating scale, work performance and job satisfaction) is linear thus allowing for the inclusion of the above relationships in the multiple regression equation (Lewis-Beck, 1980).

Scatterplot of Linearity of Relationship between Independent Variables and Dependent Variables

Examination of the scatterplot (see Appendix G) does not indicate a curvilinear relationship between the independent variables and performance/job satisfaction. The scatterplot reinforces the  $E^2 - R^2$  findings.

Multiple Regression Analyses

Table 6: Summary of the Multiple Regression Analysis of Leader-Member Exchange, Self-Efficacy, the Interaction Term and Job Satisfaction: Model 1.

Variable	R <sup>2</sup>	R <sup>2</sup> Change	b	df	F
L.M.X.	.31	---	1.56	1/128	58.28 **
S.E.	.32	.01	.11	1/128	1.35 ns
L.M.X./ S.E.	.032	.288	.033	1/128	1.61 ns

\* p. < .05

\*\* p. < .01

ns = non-significant

Leader-member exchange ( $F(1/132) = .45$ ) evidenced a significant main effect on job satisfaction explaining 31% of the variance. In the multiple regression of

leader-member exchange onto job satisfaction, self-efficacy ( $F(1/132) = 1.35$ ) did not explain additional variance in terms of the leadership-satisfaction relationship. An interaction term was constructed between leader-member exchange and self-efficacy ( $F(1/128) = 1.61$ ;  $p > .1$ ). The interaction effect of leader-member exchange and self-efficacy ( $F(1/132) = 1.61$ ) did not contribute significantly in terms of the variance explained. The interaction was not significant.

Table 7: Summary of the Multiple Regression Analysis of Leader-Member Exchange, Self-Efficacy, the Interaction Term and the Work Output Measure: Model 2

Variable	R <sup>2</sup>	R <sup>2</sup> Change	b	df	F
L.M.X.	.036	---	.27	1/128	3.38 ns
S.E.	.038	.002	-.001	1/128	.00 ns
L.M.X./ S.E.	.008	-.03	.008	1/128	.16 ns

\*  $p < .05$

\*\* $p < .01$

ns = non-significant

Both self-efficacy ( $F(1/98) = .00$ ) and leader-member exchange ( $F(1/98) = 3.38$ ) had no significant main effect on job performance whilst explaining only a .2% difference in variance between each. An interaction term was constructed between leader-member exchange and self-efficacy ( $F(1/128) = .16$ ;  $p > .1$ ). This

interaction term ( $F(1/98) = .16$ ) did not explain a significant proportion of the explained variance.

Table 8: Summary of the Multiple Regression Analysis of Leader-Member Exchange,

Self-Efficacy, the Interaction Term and the Employee Rating Scale: Model 3

Variable	R <sup>2</sup>	R <sup>2</sup> Change	b	df	F
L.M.X.	.003	---	.085	1/128	.35 ns
S.E.	.008	.005	-.042	1/128	.45 ns
L.M.X./ S.E.	.012	.004	-.01	1/128	.40 ns

\*  $p < .05$

\*\*  $p < .01$

ns = non-significant

In the multiple regression of the leader-member exchange scale onto the employee rating scale (job performance measure), self-efficacy did not interact with the leadership-performance relationship. Both self-efficacy ( $F(1/108) = .44$ ) and leader-member exchange ( $F(1/108) = .35$ ) had no significant main effect on job performance whilst explaining 8% and 3% of the variance respectively. An interaction term was constructed between leader-member exchange and self-efficacy ( $F(1/108) = .4; p > .1$ ). An interaction term was constructed between leader-member exchange and self-efficacy ( $F(1/108) = .4; p > .1$ ). This interaction term

( $F(1/108) = .4$ ) did not explain a significant proportion of the variance in terms of performance.

## DISCUSSION

The effectiveness of an organisation is dependent largely on the quality of its managers and leadership (Bass, 1990). The objective of effective leadership is to maximise productivity, to stimulate creative problem solving, to promote subordinate morale and satisfaction and to improve organisational interpersonal relationships (Malherbe, 1986). The importance of leadership within the organisation has resulted in a large number of leadership approaches being developed over the years (Hollander, 1985; Hollander & Offermann, 1990). According to Dansereau, Graen and Haga (1975), contemporary models of leadership are still in a primitive stage of development. Furthermore, Schein (1980) suggests that most leadership approaches have not always predicted outcomes such as performance, job satisfaction, turnover and group attitudes. Most leadership approaches focus on the leader and not on the dyadic relationship existing between managerial leaders and their subordinates (Bass, 1990). Leadership theory needs to consider subordinate as well as leaders individual characteristics, job characteristics and work environment characteristics (Steers & Porter, 1987), and thus take into account both the managers and subordinates in the leader-member dyad (Bass, 1990; Dienesch & Liden, 1986). Reiner and Morris (1987) suggest that exploratory research is required in the development of a leadership model which encompasses leader-subordinate interaction, subordinate behaviours, subordinate roles and situational variables.

Schein (1980) suggests that the relationships between most leadership approaches and work performance on the one hand, and job satisfaction on the other, do not fully consider leadership outcomes, such as work performance and job satisfaction. In addition, Gist (1987) suggests that most leadership research focuses on the impact of leader behaviour on subordinates, while ignoring the impact subordinates might have on the leaders (e.g. Blake & Mouton, 1964; Fiedler, 1967; Hersey & Blanchard, 1977). Dienesch and Liden (1986) suggest that the leader-member exchange leadership approach considers both the leaders and subordinates, and the impact each has on the other.

Novak (1984) suggests that the dyadic relationship existing between managers and subordinates is central to leadership theory. The manager-subordinate dyadic relationship forms the basis of the leader-member exchange approach (Bass, 1990). Focusing on the manager-subordinate dyadic relationship suggests that leader-member exchange is a viable and effective leadership approach (Bass, 1990; Dienesch & Liden, 1986; Dockery & Steiner, 1990; Graen, 1978; Graen, Liden & Hoel, 1982; Novak, 1984). It was argued that an expanded model of leader-member exchange including additional variables, will explain more fully the variance explained by the leader-member exchange leadership model in terms of the outcomes, job satisfaction and performance. Self-efficacy is a behavioural variable that may strengthen the leader-member exchange leadership model, as self-efficacy is frequently associated with job performance (Bandura, 1986). The self-efficacy variable and the self-efficacy/leader-member exchange interaction term may assist in explaining more variance in terms of job satisfaction and work performance.

Due to the model building nature of the leader-member exchange approach, the present research was exploratory in nature. The present research attempted to explore the leadership-job satisfaction and leadership-work performance relationships through the incorporation of additional variables, namely self-efficacy and an interaction term comprising self-efficacy and leader-member exchange. The results of the present study did not however support the three models hypothesised. The leadership-job satisfaction relationship was significant, but the incorporation of self-efficacy into the model did not explain any additional variance. The leadership-work performance relationship (in the two work performance models) was not significant, and the incorporation of the self-efficacy variable into the model provided similar results.

The present study explored three models of leadership. The results of the study will be discussed separately for each model, with the limitations of the study following. Finally, implications for future research will be considered.

#### MODEL 1

Model 1 explored the addition of the self-efficacy variable into the leader-member exchange variable in order to attempt to explain additional variance in job satisfaction. Furthermore it examined the additional variance resulting from the inclusion of an interaction term comprising leader-member exchange and self-efficacy to the leader-member exchange and self-efficacy variables.

The multiple regression analysis yielded a main effect where the one independent variable, namely leader-member exchange, explained a significant proportion (31%) of the variance in the dependent variable job satisfaction ( $F(1/132) = 58.28, p, <.01$ ). The leader-member exchange - job satisfaction relationship is consistent with previous research (Dienesch & Liden, 1986; Dockery & Steiner, 1990; Graen, Liden & Hoel, 1982; Graen, Novak & Sommerkamp, 1982; Hollander & Offermann, 1990; Serey, 1981), which indicates a significant relationship between leader-member exchange and job satisfaction (Dienesch & Liden, 1986; Dockery & Steiner, 1990; Graen, 1978; Graen, Liden & Hoel, 1982; Novak, 1984). The theory and research on leader-member exchange suggests that the extent of the sharing of resources between manager and subordinate plays an important role in the prediction of job satisfaction from the subordinates perspective (Dienesch & Liden, 1986; Dockery & Steiner, 1990; Graen, 1978; Graen, Liden & Hoel, 1982; Novak, 1984). According to Novak (1984), the sharing of resources will result in increased job satisfaction, whilst decreased sharing of resources will be associated with lower job satisfaction (Novak, 1984).

In the present study, the addition of self-efficacy in the model resulted in no main effect between self-efficacy and job satisfaction being found ( $F(1,128) = .32, p > .05$ ). This finding is not consistent with previous research (Bandura, 1977a; Bandura, 1982; Bandura, 1986; Barling & Beattie, 1983; Conger & Kanungo, 1988). In terms of self-efficacy theory, Bandura (1986) states that self-efficacy plays an important role in impacting on job satisfaction. The changing socioeconomic and political environment in South Africa might account for the present studies results achieved with broker-consultants, as opposed to results achieved by Beattie (1981) with insurance agents.

Factors in the environment can impact on individual self-efficacy (Bandura, 1986) and the quality of the leader-member exchange relationship (Dienesch & Liden, 1986) in terms of the job satisfaction achieved in the sales environment. In recessionary times, sales performance might drop, even in highly efficacious people, resulting in lower job satisfaction. The present research only considered broker-consultants, thus generalisability of the leadership-job satisfaction relationship is limited.

No additional significant proportion of variance of job satisfaction was explained in terms of the interaction between leader-member exchange and self-efficacy ( $F(1,128) = .32, p > .05$ ). This may be due to the cross-sectional nature of the present research, as long term effects might be reflected in a longitudinal study. It is possible that the quality of the insurance products that the broker-consultants sell, as well as the economic climate, might minimise the impact that self-efficacy has on the leader-member exchange - job satisfaction relationship. In a recession, life insurance products provide security for ones' families. This, linked to the broker-consultant's belief that the quality of the product is enough to guarantee sales regardless of the sales skill, might lessen the impact that self-efficacy might have on the leadership-job satisfaction relationship. The marketability of the product will also be expected to impact on the leader-member exchange-job satisfaction relationship. Dienesch and Liden (1986) propose that a developmental process exists for leader-member exchange dyads, and thus, in terms of the present sample, contact occurs between the managers and the broker-consultants for an effective dyadic relationship to form (Dienesch & Liden, 1986). The dyadic relationships found between the managers and broker-consultants might have been a moderately high quality dyadic relationship in terms of job

satisfaction, as the mean scores for the job satisfaction scale in the present study ( $M = 83.43$ ) is higher than the mean scores ( $M = 74.61$ ) achieved by Warr, Cook and Wall (1979).

## MODEL 2

Model 2 explored the addition of the self-efficacy variable into the leader-member exchange variable in order to attempt to explain additional variance in subordinates' job performance. Furthermore it examined the additional variance resulting from the inclusion of an interaction term comprising leader-member exchange and self-efficacy to the leader-member exchange and self-efficacy variables. The work performance measure used was the Employee Rating Scale, (Graen, et al., 1972), which is a supervisor-rated performance measure. Supervisors are required to rate the performance of their respective subordinates, as the scale assesses various aspects of subordinate performance such as alertness, planning, present performance and future performance (Novak, 1984).

In Model 2, leader-member exchange yielded no significant main effect ( $F(1,128) = .35, p > .05$ ). These results are contrary to the previous leadership research which found that a positive relationship exists between leader-member exchange and supervisor-rated job performance (Dienesch & Liden, 1986; Dockery & Dwyer, 1990; Graen & Cashman, 1975; Novak, 1984; Nunns, et al., 1990; Serey 1981). Most previous research has used mainly performance measures such as the employee rating scale and has concentrated mainly on university personnel and jobs within more

administrative organisations e.g. United States Armed Forces, Government departments and hospitals (Cashman, Dansereau, Graen & Haga, 1976; Dockery & Steiner, 1990; Ferris, 1985; Graen & Cashman, 1975; Graen, Orris & Johnson, 1973; Katerberg & Hom, 1981; Liden & Graen, 1980; Seers & Graen, 1984; Vecchio & Gobdel, 1984; Wakabayashi & Graen, 1984). The sample used in the present research was within the life insurance sales environment, and thus extended the generalisability of the results to more diverse organisations. The present research also used multiple measures of performance, namely the employee rating scale and a work output measure, as opposed to previous research which used mainly performance questionnaires (Cashman et al., 1976; Seers & Graen, 1984; Vecchio & Gobdel, 1984). Also, the long term effect might not have been reflected by this cross-sectional study.

Schein (1980) proposes that the relationship between effective leadership and job performance in organisations requires further research, even though a large number of leadership approaches (e.g. the managerial grid, situational leadership and the leader-match theory) have claimed that the relationship exists and is fully explained. The appropriateness of previous leadership approaches (the 'average leadership approaches') such as the managerial grid and situational leadership have been questioned by Dienesch and Liden (1986), with leader-member exchange being recommended as an appropriate leadership approach. Despite this and in terms of leader-member exchange, the contact that broker consultants have with their managers might not have facilitated the formation of an effective leader-member dyad, as proposed by past leader-member exchange research (Dienesch & Liden, 1986; Graen, Liden & Hoel, 1982; Graen, Novak & Sommerkamp, 1982; Scandura & Graen, 1984; Vecchio, 1982).

The relationship between self-efficacy and job performance was non-significant in the present research ( $F(1,128) = .45, p > .05$ ), and therefore did not account for additional variance in job performance. In previous research (Bandura, 1977a; Bandura & Cervone, 1983; Bandura & Cervone, 1984; Bandura & Cervone, 1986; Barling & Beattie, 1983; Lee & Gillen, 1989; Locke et al., 1984) in which subjective performance measures were predominantly used, self-efficacy has been significantly related to job performance. A possible reason for the non-significant findings is that the present research considered efficacy expectations only, which is an individual's conviction that he or she can execute the behaviour required to produce a certain outcome (Bandura, 1977a). Beattie (1981) found that only efficacy beliefs ( $F = 7.13, p < .01$ ), and not response - outcome expectations, predicted performance. This may occur as people are able to assess their work capabilities without being fully cognisant of the benefits that might follow (Barling & Beattie, 1983). Outcome expectations differ from the efficacy expectations, as outcome expectations are defined as a person's estimate that a given behaviour will lead to certain outcomes, such as job performance (Bandura, 1977a). Performance in the present research was considered as a behaviour resulting from efficacy expectations (Bandura, 1977a). Bandura (1984) stresses however that an outcome expectation is the consequence of an act and not the act itself, which suggests that outcome expectancies might possibly have been important in the present research. The consideration of outcome expectancies might give significant findings and explain more variance in terms of work performance and should be considered in future research. The consideration of outcome expectancies and long term effects, as reflected in longitudinal studies, might occur which differ from the effects obtained in cross-sectional research (Christensen, 1980).

Contrary to expectations, the relationship between leader-member exchange, self-efficacy and the interaction term did not explain additional variance in terms of job performance. Future research should include outcome expectancies, which might assist in explaining more variance in terms of job performance.

### Model 3

The dependent variable in Model 3 represented a different aspect of job performance, namely work output. Work output was measured by taking the broker-consultant's actual performance as a percentage of projected target. Model 3 explored the addition of the self-efficacy variable to leader-member exchange in order to explain any additional variance of output, and also explain the additional variance resulting from the addition of an interaction term (leader-member exchange and self-efficacy) to the leader-member exchange and self-efficacy variables. Work output measures are the most common measure of performance and are easily quantifiable as they record the products of behaviour, such as sales (Dickinson & O'Brien, 1982). These measures have been used in similar research on insurance companies in South Africa (Barling & Beattie, 1983).

In Model 3, the independent variable, namely leader-member exchange, yielded no significant main effect ( $F(1,128) = 3.38, p > .05$ ). These results are contrary to the previous leadership research which found that a positive relationship exists between leader-member exchange and job performance (Dienesch & Liden, 1986; Dockery &

Steiner, 1990; Graen & Cashman, 1975; Novak, 1984; Nunns, et al., 1990; Serey, 1981). Previous research (Cashman, Dansereau, Graen & Haga, 1976; Dockery & Steiner, 1990; Ferris, 1985; Graen & Cashman, 1975; Graen, Orris & Johnson, 1973; Katerberg & Hom, 1981; Liden & Graen, 1980; Seers & Graen, 1984; Vecchio & Gobdel, 1984; Wakabayashi & Graen, 1984) used mainly work performance measures such as the employee rating scale (and no work output measures), and has concentrated mainly on university personnel and jobs within more administrative organisations e.g. United States Armed Forces, Government departments and hospitals.

The relationship between self-efficacy and job performance did not account for output in terms of the work output measure. In previous research, self-efficacy has been significantly related to job performance (Bandura, 1977a; Bandura & Cervone, 1983; Bandura & Cervone, 1984; Bandura & Cervone, 1986; Barling & Beattie, 1983; Bouchard, 1990; Locke et al., 1984). The interaction between leader-member exchange, self-efficacy and the interaction term (leader-member exchange and self-efficacy) did not explain additional variance in terms of the work output measure, suggesting that other variables (such as group behaviour and quality of decision making) besides self-efficacy might impact on work performance and job satisfaction (Dawson, Messe & Phillips, 1972; Hollander, 1985; Hollander & Offermann, 1990; Vroom & Yetton, 1973). In addition, multiple performance measures should always be used as in the present research, to overcome limitations in previous research (Anastasi, 1982; Dickinson & O'Brien, 1982). Perhaps a multivariate approach when used over time would yield significant results.

### Summary of Findings

Dansereau, Graen and Haga (1975) suggested that contemporary leadership models were still in a primitive stage of development. Previous leadership research (Bass, 1990; Blake & Mouton, 1964; Fiedler, 1967; Hersey & Blanchard, 1977; Novak, 1984; Schein, 1980) suggested that effective leadership impacts positively on both work performance and job satisfaction. Due to Schein's (1980) questioning of the relationship between effective leadership and the leadership outcomes work performance and job satisfaction, exploratory research considering the impact of additional variables on other leadership models, such as leader-member exchange, is necessary. The present research investigated additional variables, namely self-efficacy and an interaction term (comprising leader-member exchange times self-efficacy), in order to explain more of the variance in terms of leadership outcomes (job satisfaction and performance). The relationship between effective leadership and job satisfaction was significant. When the relationship between leader-member exchange, self-efficacy and the interaction term were considered, no additional variance was explained in terms of the leadership outcomes, job satisfaction and work performance. Exploratory research on leadership models is necessary in order to better explain leadership outcomes such as work performance and job satisfaction, and include other personal variables to enhance the leadership model.

### Limitations of the Present Study

Various limitations of the present study can be identified. The sample used in the present study was predominantly Male, White and English speaking. Most of the broker-consultants were English speaking. Afrikaans speaking respondents (32.6% of total sample) might have found difficulty in responding to the questionnaires. However, Bluen (1986) proposes that the translation of questionnaires may cause problems in regard to distorted meaning and the incorrect understanding of idiomatic expressions. Future research should widen the boundaries of the sample to include other language groups in addition to English speaking people. There were no Black, Coloured or Asian population group members, due to the nature of the sample. Results obtained in the present study cannot be generalised to any of the above population groups without further research.

The present research utilised a sample of broker-consultants and their immediate managers. Past research used insurance agents in the life insurance industry (Barling & Beattie, 1983). In order to be consistent with this research, broker-consultants were used from the same industry (i.e. life insurance industry). As other jobs might involve greater leader-member interaction, the results of the present research should be generalised with caution.

Participation was voluntary even though volunteer samples may bias the responses obtained (Rosnow & Rosenthal, 1976). While the sample was made up of volunteers, reminder letters were sent out by the organisations. Reminder letters tend to increase

the response rate and reduce the bias encountered in volunteer samples (Francel, 1966). From an ethical point of view, only reminder letters were sent out, as stronger reminder techniques might have influenced the sample negatively (Rosnow & Rosenthal, 1976).

Lastly, the present study was cross-sectional. The exploratory nature of the present research allowed for a cross-sectional design. Christensen (1980) proposes that cross-sectional and longitudinal studies may produce totally different results. The interaction terms in the present research might not have had the necessary time to impact on job satisfaction and performance thus suggesting that future research might encompass a longitudinal design.

#### Implications for Future Research

The present study was an exploratory investigation of a variation of the leader-member exchange leadership model. The inclusion of the self-efficacy variable and an interaction term, did not explain additional variance between leadership and job performance, and leadership and job satisfaction for the present sample. It is possible that self-efficacy and the interaction between self-efficacy and leader-member exchange might prove significant for other samples investigating leadership models, due to the relationship that self-efficacy and leadership have with work performance and job satisfaction. The inclusion of other samples (e.g., different work types) might provide a better explanation for the present research, as the samples might have closer contact with their superiors and subordinates.

There are theoretical implications for future research in terms of personal competencies (Gist, 1987), as perceptions of others' competencies is as important as perceptions of our own competency. Future research needs to explore a manager's feelings of competence, as both members of the dyad require positive perceptions of their own competence. In terms of personal perceptions of competence, internal locus of control (Rotter, 1966) might be a potentially more useful measure than self-efficacy. Internal locus of control refers to the perception that rewards are contingent on individual behaviour, while external locus of control is the perception that rewards are determined by external forces, such as luck and the environment (Spector, 1988). According to Spector (1988), locus of control might be a more appropriate measure than self-efficacy, as it is a construct pertaining to a number of situations and it is concerned with causal beliefs about response-outcome contingencies (Gist, 1987). Locus of control has been shown to relate to a number of organisationally relevant variables, and has related to a number of different organisational settings (Ballantine, 1989; Spector, 1988). Both Ballantine (1989) and Spector (1988) suggest that locus of control is worth considering in organisations, and might assist in explaining more variance within leadership in terms of work performance and job satisfaction.

The inclusion of work locus of control will according to Dickinson and O'Brien (1982) assist in the development of a multivariate approach of leadership, which is required to understand performance as managers, subordinates, peers, the organisation and the external environment affect performance. Future research could consider variables such as leadership, self-efficacy, job involvement and other outcomes of the leadership process. Additional factors that are worth considering within a leadership framework

are commitment, reward systems, incentive schemes, goal setting and attitudes (Hollander, 1985; Hollander & Offermann, 1985). It is argued that within an Open Systems Approach, the situational specificity of leadership variables must also be considered which includes socio-economic conditions: the market, marketability of product, organisational structure and organisational culture (Hollander, 1985). In addition to these variables behavioural measures could also be considered when determining performance (Bass, 1990). The present study used both supervisor and subordinate ratings. Results would be potentially less biased if more extensive measures of performance were used.

Future research should consider the concept of self-efficacy within the leadership-performance domain with other samples. Multiracial, multilingual and differing educational levels might result in self-efficacy still becoming an essential element in the leadership - performance domain. Research within industries besides the insurance industry must be carried out. Testing of the measuring instruments of self-efficacy is required for industry.

Self-efficacy is one of a host of personal, personality, attitudinal and behavioural factors (such as job involvement, labour turnover, absenteeism and commitment) that may affect the leadership-performance relationship (Bass, 1990; Bandura, 1986; Dienesch & Liden, 1986; Yukl, 1987). Research on self-efficacy within the leadership domain should continue, as past research tends to favour self-efficacy's acceptability within the industrial domain (Barling & Beattie, 1983; Conger & Kanungo, 1988; Lee & Gillen, 1990; Shelton, 1990).

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## APPENDICES

### APPENDIX A

This Questionnaire forms part of an independent research project being conducted by the Division of Industrial Psychology of the School of Psychology at the University of the Witwatersrand. As this is an independent research project your CONFIDENTIALITY is ensured. No persons in your organisation will have access to your responses and options, so please answer each item as accurately as possible. Please state your NAME, since additional follow-up questionnaires will be circulated in a few months' time.

Please provide the following information:

Name: \_\_\_\_\_

Name of the Company: \_\_\_\_\_

Name of the Branch: \_\_\_\_\_

Age (in years): \_\_\_\_\_

Sex: Male / Female

Race: White / Asian /

Home language: English / Afrikaans / Other

Education (highest level passed): \_\_\_\_\_

How long have you been employed by your present company?

\_\_\_\_\_ Years \_\_\_\_\_ Months

How long have you been employed in a consulting position?

\_\_\_\_\_ Years \_\_\_\_\_ Months

## APPENDIX B

This is a questionnaire about your job. Please answer the following questions openly and honestly. Indicate your answer by marking only one of the four possible responses to each question with a cross (X). Remember that your answers will remain STRICTLY CONFIDENTIAL.

1. Do you usually feel that you know where you stand ... do you usually know how satisfied your immediate supervisor is with what you do?
  - always know where I stand
  - usually know where I stand
  - seldom know where I stand
  - never know where I stand
  
2. How well do you feel that your immediate supervisor understands your problems and needs?
  - completely
  - well enough
  - some but not enough
  - not at all
  
3. How well do you feel that your immediate supervisor recognises your potential?
  - fully
  - as much as the next person
  - some but not enough
  - not at all

4. Regardless of how much authority your immediate supervisor has built into his or her position, what are the chances that he or she would be personally inclined to use power to help you solve problems in your work?
- certainly would
  - probably would
  - might or might not
  - no chance
5. Again, regardless of the amount of formal authority your immediate supervisor has, to what extent can you count on him or her to help you out at his or her expense when you really need it?
- certainly would
  - probably would
  - might or might not
  - no chance
6. I have enough confidence in my immediate supervisor that I would defend or justify his or her decisions if he or she were not present to do so.
- certainly would
  - probably would
  - maybe
  - probably not

7. How would you characterise your working relationship with your supervisor?

- extremely effective

- better than average

- about average

- less than average

APPENDIX C

To what extent do the following statements reflect your ability? Place a cross (X) over the appropriate box. Your responses will remain STRICTLY CONFIDENTIAL.

1. I am good at sport and / or outdoor activities.

TO A VERY LITTLE EXTENT	TO A LITTLE EXTENT	SOME	TO A GREAT EXTENT	TO A VERY GREAT EXTENT
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2. I believe I can succeed in any career.

TO A VERY LITTLE EXTENT	TO A LITTLE EXTENT	SOME	TO A GREAT EXTENT	TO A VERY GREAT EXTENT
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3. I can sort out faults in my sales presentations.

TO A VERY LITTLE EXTENT	TO A LITTLE EXTENT	SOME	TO A GREAT EXTENT	TO A VERY GREAT EXTENT
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4. I can get my broker to influence other brokers.

TO A VERY LITTLE EXTENT	TO A LITTLE EXTENT	SOME	TO A GREAT EXTENT	TO A VERY GREAT EXTENT
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5. I have the ability to ask questions skillfully.

TO A VERY LITTLE EXTENT	TO A LITTLE EXTENT	SOME	TO A GREAT EXTENT	TO A VERY GREAT EXTENT
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6. I believe I can tell the difference between "easy" and "difficult" brokers.

TO A VERY LITTLE EXTENT	TO A LITTLE EXTENT	SOME	TO A GREAT EXTENT	TO A VERY GREAT EXTENT
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7. I am capable of sorting out faults in my solution.

TO A VERY LITTLE EXTENT	TO A LITTLE EXTENT	SOME	TO A GREAT EXTENT	TO A VERY GREAT EXTENT
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8. I believe I am outgoing in my behaviour.

TO A VERY LITTLE EXTENT	TO A LITTLE EXTENT	SOME	TO A GREAT EXTENT	TO A VERY GREAT EXTENT
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9. I believe I can prepare a good presentation.

TO A VERY LITTLE EXTENT	TO A LITTLE EXTENT	SOME	TO A GREAT EXTENT	TO A VERY GREAT EXTENT
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10. I believe I can provide constant contact with my clients.

TO A VERY LITTLE EXTENT	TO A LITTLE EXTENT	SOME	TO A GREAT EXTENT	TO A VERY GREAT EXTENT
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11. I believe I can control difficult interviews.

TO A VERY LITTLE EXTENT	TO A LITTLE EXTENT	SOME	TO A GREAT EXTENT	TO A VERY GREAT EXTENT
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12. I can get an appointment but not sell my ideas on the phone.

TO A VERY LITTLE EXTENT	TO A LITTLE EXTENT	SOME	TO A GREAT EXTENT	TO A VERY GREAT EXTENT
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13. I am good in relationships.

TO A VERY LITTLE EXTENT	TO A LITTLE EXTENT	SOME	TO A GREAT EXTENT	TO A VERY GREAT EXTENT
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14. I can commit myself to periodic service calls.

TO A VERY LITTLE EXTENT	TO A LITTLE EXTENT	SOME	TO A GREAT EXTENT	TO A VERY GREAT EXTENT
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15. I am not able to obtain a broker's affirmation of his problem.

TO A VERY LITTLE EXTENT	TO A LITTLE EXTENT	SOME	TO A GREAT EXTENT	TO A VERY GREAT EXTENT
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16. I am not sure of myself.

TO A VERY LITTLE EXTENT	TO A LITTLE EXTENT	SOME	TO A GREAT EXTENT	TO A VERY GREAT EXTENT
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17. I believe that I can demonstrate a knowledge of company policy.

TO A VERY LITTLE EXTENT	TO A LITTLE EXTENT	SOME	TO A GREAT EXTENT	TO A VERY GREAT EXTENT
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18. I have the ability to determine whether or not I can do business with a broker.

TO A VERY LITTLE EXTENT	TO A LITTLE EXTENT	SOME	TO A GREAT EXTENT	TO A VERY GREAT EXTENT
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19. I can calm tensions in my home environment.

TO A VERY LITTLE EXTENT	TO A LITTLE EXTENT	SOME	TO A GREAT EXTENT	TO A VERY GREAT EXTENT
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20. I excel at outdoor sporting activities.

TO A VERY LITTLE EXTENT	TO A LITTLE EXTENT	SOME	TO A GREAT EXTENT	TO A VERY GREAT EXTENT
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21. I can project my service as unique.

TO A VERY LITTLE EXTENT	TO A LITTLE EXTENT	SOME	TO A GREAT EXTENT	TO A VERY GREAT EXTENT
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22. I am a good mixer in social situations.

TO A VERY LITTLE EXTENT	TO A LITTLE EXTENT	SOME	TO A GREAT EXTENT	TO A VERY GREAT EXTENT
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23. I believe I can listen attentively.

TO A VERY LITTLE EXTENT	TO A LITTLE EXTENT	SOME	TO A GREAT EXTENT	TO A VERY GREAT EXTENT
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24. I can resell the need to the client having met his requirements.

TO A VERY LITTLE EXTENT	TO A LITILE EXTENT	SOME	TO A GREAT EXTENT	TO A VERY GREAT EXTENT
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## APPENDIX D

The following items deal with various aspects of your job. Please indicate how satisfied or dissatisfied you are with respect to each of the following aspects of your job by marking a cross (X) over the relevant box. Remember all answers will remain STRICTLY CONFIDENTIAL.

A EXTREMELY DISSATISFIED    E MODERATELY SATISFIED

B VERY DISSATISFIED            F VERY SATISFIED

C MODERATELY DISSATISFIED    G EXTREMELY SATISFIED

1.    The physical work conditions.

A   B   C   D   E   F   G

2.    The freedom to choose your own method of working.

A   B   C   D   E   F   G

3.    Your fellow workers.

A   B   C   D   E   F   G

4.    The recognition you get for good work.

A   B   C   D   E   F   G

5.    Your immediate boss.

A   B   C   D   E   F   G

6.    The amount of responsibility you are given.

A   B   C   D   E   F   G

7.    Your rate of pay.

A   B   C   D   E   F   G

8. Your opportunity to use your abilities.

A B C D E F G

9. Industrial relations between management and workers in your firm.

A B C D E F G

10. Your chance of promotion.

A B C D E F G

11. The way your firm is managed.

A B C D E F G

12. The attention paid to suggestions you make.

A B C D E F G

13. Your hours of work.

A B C D E F G

14. The amount of variety in your job.

A B C D E F G

15. Your job security.

A B C D E F G

## APPENDIX E

Please indicate appropriate number for each question, in respect to \_\_\_\_\_  
Note, that all answers given will remain STRICTLY CONFIDENTIAL.

- A. DEPENDABILITY: this subordinate maintains high standards of work and performs all needed work.
1. Always cuts corners; must be watched closely to make sure work is done right.
  2. Better than 1 but not fully 3.
  3. Can be counted on to perform assigned jobs without being watched.
  4. Better than 3 but not fully 5.
  5. Always can be counted on not only to perform assigned jobs without being watched but also to perform, without being told, other jobs that should be done.
- B. ALERTNESS: this subordinate sees actions and changes which might affect his/her work.
1. Always fails to see even the big changes in his/her work surroundings until they are almost out of control.
  2. Better than 1 but not fully 3.
  3. Usually sees only the big changes in his/her work and surroundings.
  4. Better than 3 but not fully 5.
  5. Always sees the little as well as the big changes in his/her work and surroundings.
- C. SKILL IN DEALING WITH PEOPLE: this subordinate does and says the right things at the right time.
1. In "hot" situations with other people, this person always does and says things that make the problem worse.
  2. Better than 1 but not fully 3.
  3. In "hot" situations with other people, usually does and says things that do not make the problems worse.
  4. Better than 3 but not fully 5.
  5. Even in "hot" situations with other people, this person always says the right things to cool the people down.

D. PLANNING: this subordinate makes good use of time, equipment and people.

1. Even on daily routine work, this person hardly ever picks out the more important job to do first, and usually makes poor use of time, equipment, and people to get the job done.
2. Better than 1 but not fully 3.
3. Usually can pick out the most important job to do first and usually makes good use of time, equipment and people to get the job done.
4. Better than 3 but not fully 5.
5. Even when overloaded with work, this person almost always picks out the most important job to do first, and almost always makes the best use of time, equipment and people to get the job done.

E. KNOW-HOW AND JUDGEMENT: this subordinate has the know-how and judgement needed to do the job right.

1. His/her work shows that she/he does not have enough know-how and judgement needed to do the basic job.
2. Better than 1 but not fully 3.
3. His/her work shows that she/he has adequate or average know-how and judgement needed to do the basic job.
4. Better than 3 but not fully 5.
5. His/her work shows that she/he has outstanding know-how and judgement needed not only to do the basic job, but to foresee and handle unusual job problems as well.

F. EXPECTED LEVEL OF FUTURE PERFORMANCE: in meeting work standards.

1. This employee will be a clearly unsatisfactory performer.
2. Better than 1 but not fully 3.
3. This employee will be a satisfactory performer.
4. Better than 3 but not fully 5.
5. This employee will be a clearly outstanding performer.

G. PRESENT LEVEL OF PERFORMANCE: in meeting work standards.

1. This employee is clearly an unsatisfactory performer.
2. Better than 1 but not fully 3.
3. This employee is a satisfactory performer.
4. Better than 3 but not fully 5.
5. This employee is clearly an outstanding performer.

APPENDIX F

TO THE MANAGER

Dear \_\_\_\_\_

I am presently studying for my Masters degree in Industrial Psychology at the University of the Witwatersrand. My area of study focuses on the relationship between management effectiveness and organisational outcomes including job satisfaction and job performance. Following discussions with various senior managers, they have kindly granted me access to your organisation to conduct the research. Results of these studies could be of benefit to the organisation.

In order to facilitate this research, I would greatly appreciate your cooperation by completing the attached questionnaires with respect to your broker consultant, which should not take longer than 15 minutes. Please note that the name of your broker consultant appears on each questionnaire. Please complete the questionnaire with specific reference to that broker consultant.

Although I have agreed to provide your organisation with a summary of the research findings, all individual responses will be treated with the strictest confidentiality. It will not be possible to identify any broker consultant or managers responses, or information pertaining to any single manager. To facilitate this, I have enclosed a self-addressed envelope. Please put your completed questionnaire in the envelope and return it to me at the University.

Thank you very much for your assistance in this research.

Yours sincerely

DAVID BECKER

## DIE BESTUURDER

Geagte \_\_\_\_\_

Ek studeer tans vir 'n Meestersgraad in Bedryfsielkunde aan die Universiteit van die Witwatersrand. My studieveld is toegespits op die verhouding tussen die bestuurstyl wat toegepas word in die organisasie en organisatoriese resultate, wat insluit beroepstevredenheid en werkverrigting. Na sameprekings met verskeie senior bestuurders, is aan my toegang verleen tot u organisasie om die navorsing uit te voer. Uiteraard sal die resultate van die navorsing tot voordeel van die organisasie strek.

Ten einde die navorsing te vergemaklik, sal ek dit waardeer indien u so vriendelik sal wees om u samewerking te verleen deur die ingeslote vraelys ten aansien van u makelaar konsultant te voltooi, wat nie langer as hoogstens 15 minute sal duur nie. Let asseblief daarop dat die naam van een van u makelaar konsultante op elke vraelys verskyn. Elke vraelys moet voltooi word met spesifieke verwysing na hierdie makelaar konsultant.

Die vraelys is oorspronklik in Engels opgestel en om die geldigheid en betroubaarheid daarvan te verseker, het ek besluit om dit nie verder te vertaal nie. Ek hoop dat dit u nie ongerief sal veroorsaak nie.

Alhoewel ek ooreengekom het om aan u organisasie 'n opsomming van die bevindings van die navorsing te verskaf, onderneem ek om alle individuele vraelyste streng vertroulik te behandel. Dit sal nie moontlik wees om enige inligting met betrekking tot enige makelaar konsultant of bestuurder te identifiseer nie. Ten einde u saak te vergemaklik, word 'n gefrankeerde koevert hiermee ingesluit. Sal 'n asseblief u voltooide vraelys hierby insluit en aan die Universiteit stuur.

U samewerking en bydrae ten einde die navorsing te vergemaklik, word opreg waardeer.

Die uwe

DAVID BECKER

TO THE BROKER CONSULTANT

Dear \_\_\_\_\_

I am presently studying for my Master degree in Industrial Psychology at the University of the Witwatersrand. My area of study focuses on the relationship between managerial effectiveness and organisational outcomes including job satisfaction and job performance. Following discussions with various senior managers, they have kindly granted me access to your company to conduct the present research. Results of the studies could be of benefit to the organisation. In order to facilitate this research, I would greatly appreciate your cooperation by completing the attached questionnaire which should not take longer than 45 to 50 minutes.

Although I have agreed to provide your company with a summary of the research findings, all individual responses will be treated with the strictest confidentiality. It will not be possible to identify an individual's responses. To facilitate this, I have enclosed a self-addressed envelope. Please put your completed questionnaire in the envelope and return it to me at the University.

Thank you very much for your assistance in this research.

Yours sincerely

DAVID BECKER

## DIE MAKELAAR KONSULTANT

Geagte \_\_\_\_\_

Ek studeer tans vir 'n Meestersgraad in Bedryfsielkunde aan die Universiteit van die Witwatersrand. My studieveld is toegespits op die verhouding tussen die bestuurstyl wat toegepas word in die organisasie en organisatoriese resultate, wat insluit beroepstevredenheid en werkverrigting. Na samesprekings met verskeie senior bestuurders, is aan my toegang verleen tot u organisasie om die navorsing uit te voer. Uiteraard sal die resultate van die navorsing tot voordeel van die organisasie strek.

Ten einde die navorsing te vergemaklik, sal ek dit waardeer indien u so vriendelik sal wees om u samewerking te verleen deur die ingeslote vraelys te voltooi, wat nie langer as hoogstens 45 tot 50 minute sal duur nie.

Die vraelys is oorspronklik in Engels opgestel en om die geldigheid en betroubaarheid daarvan te verseker, het ek besluit om dit nie verder te vertaal nie. Ek hoop dat dit u nie ongerief sal veroorsaak nie.

Alhoewel ek ooreengekom het om aan u organisasie 'n opsomming van die bevindings van die navorsing te verskaf, onderneem ek om alle individuele vraelyste streng vertroulik te behandel. Dit sal nie moontlik wees om enige inligting met betrekking tot enige makelaar konsultant of bestuurder te identifiseer nie. Ten einde u saak te vergemaklik, word 'n gefrankeerde koevert hiermee ingesluit. Sal u asseblief u voltooide vraelys hierby insluit en aan die Universiteit stuur.

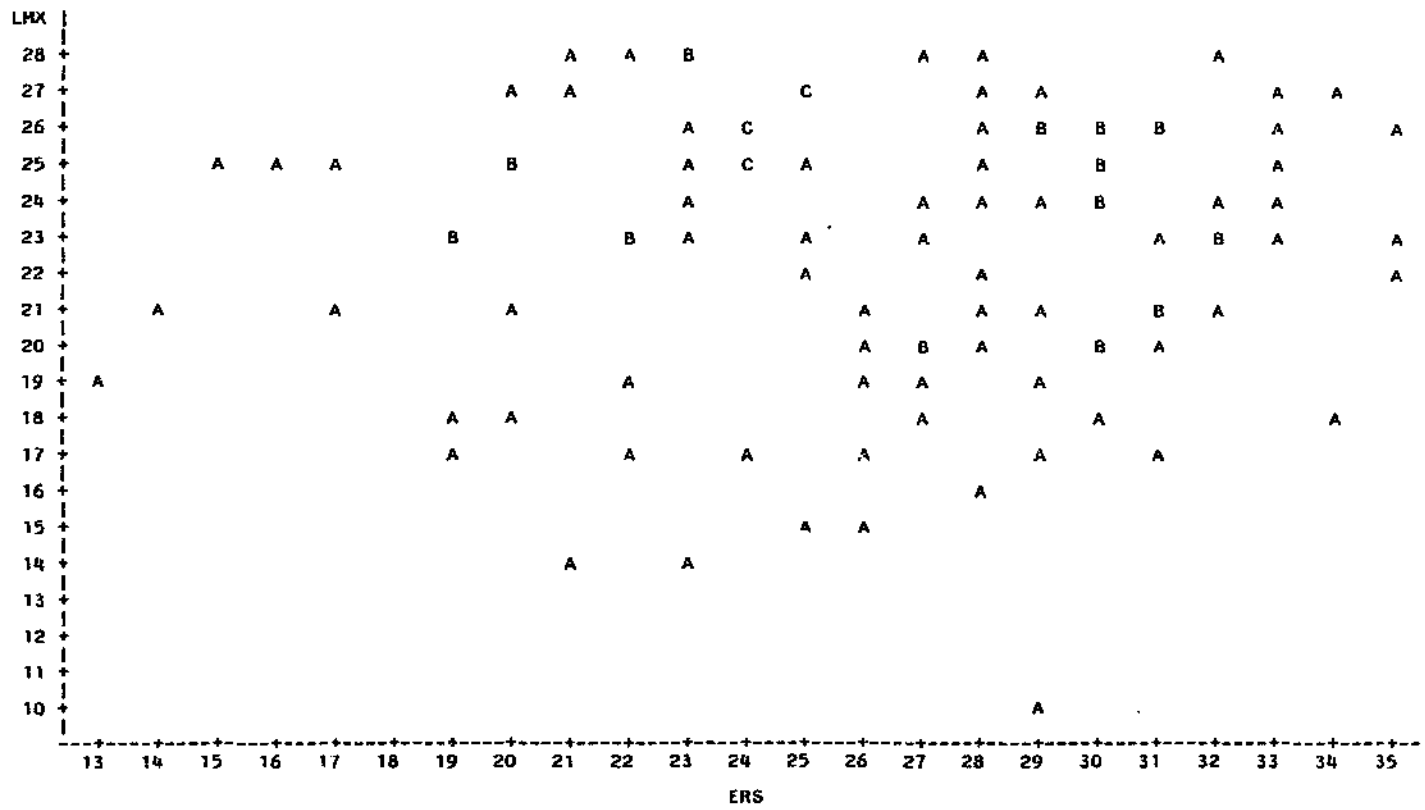
U samewerking en bydrae ten einde die navorsing te vergemaklik, word opreg waardeer.

Die uwe

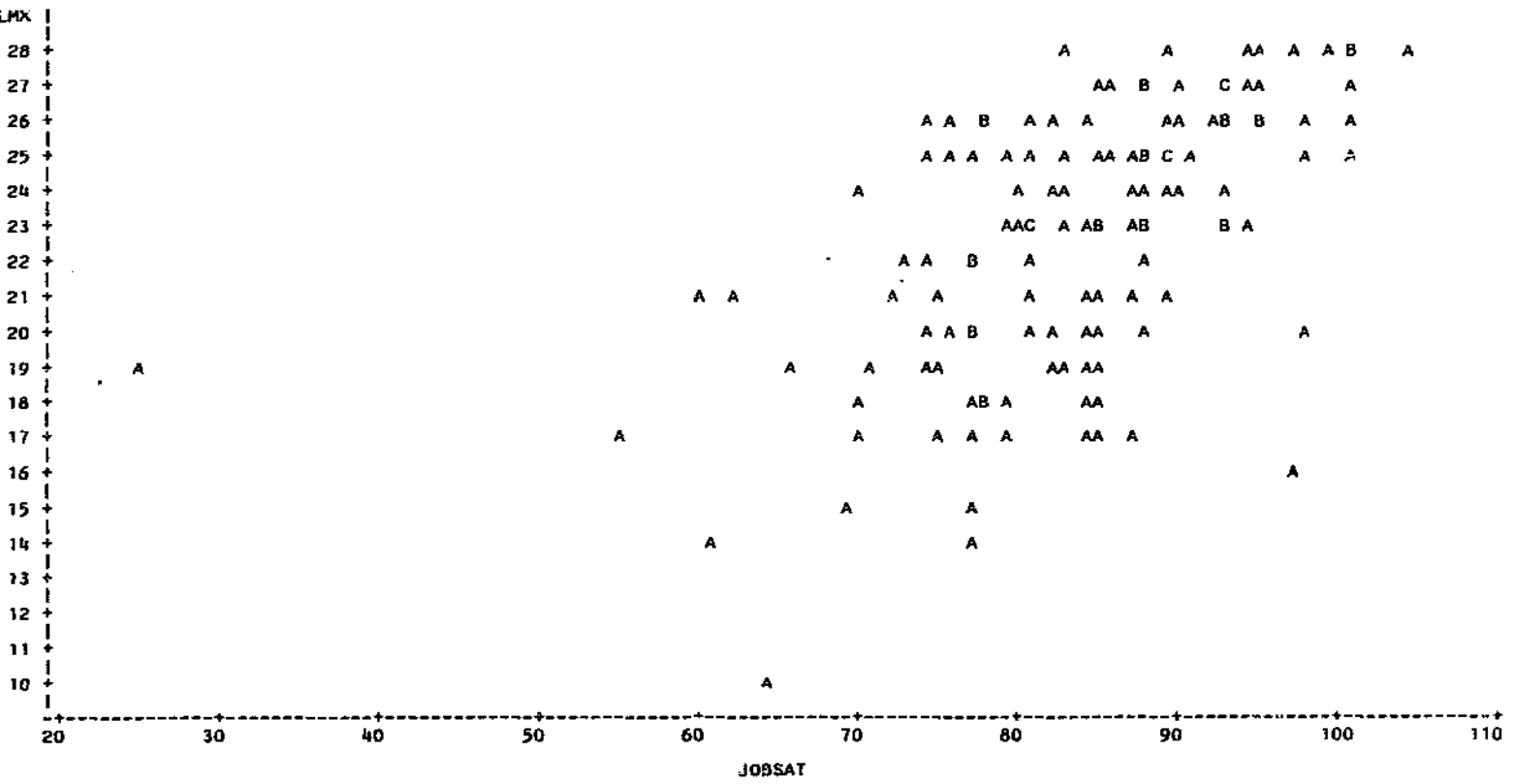
DAVID BECKER

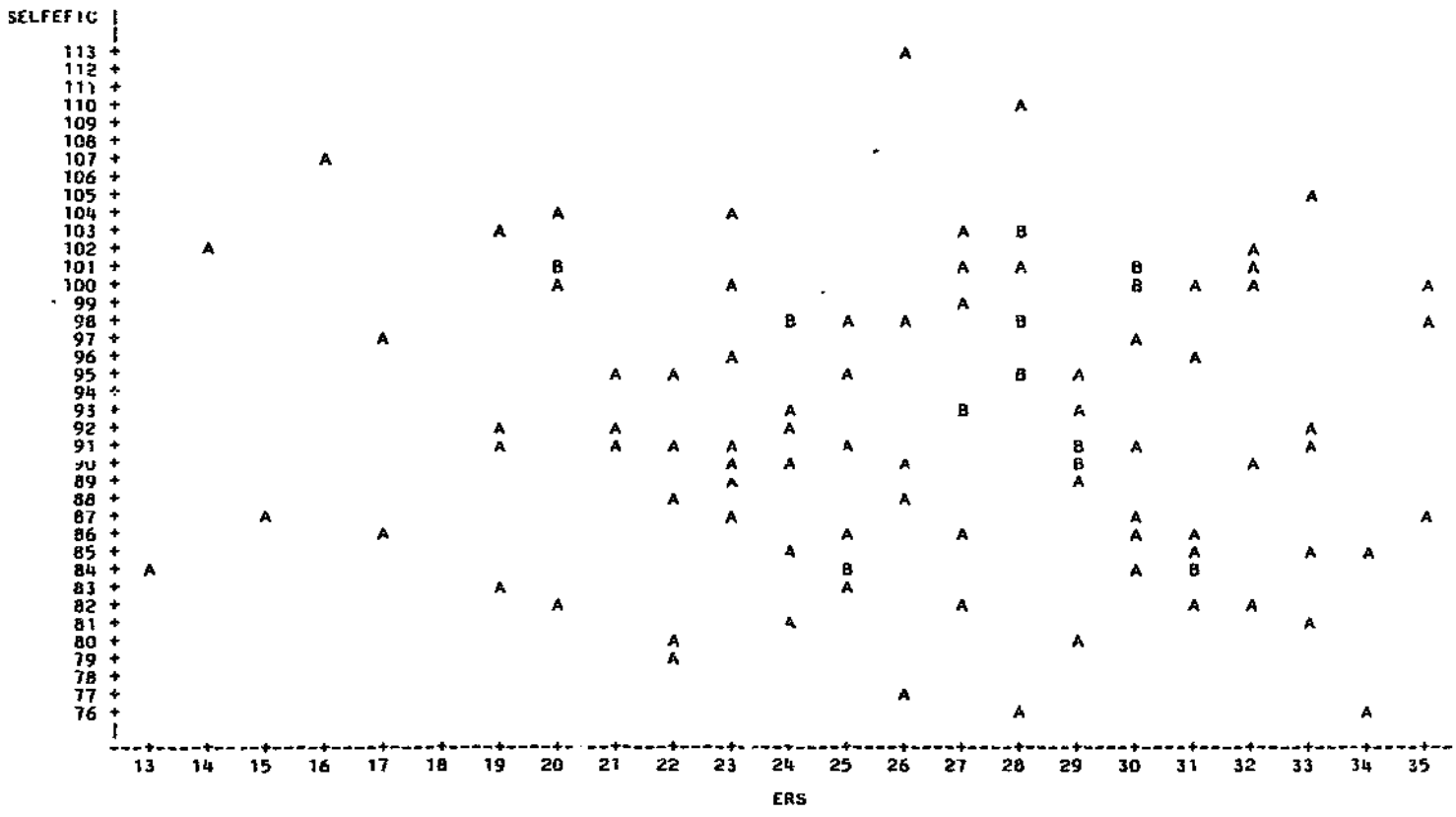
APPENDIX G

Linearity between leader-member exchange and work performance



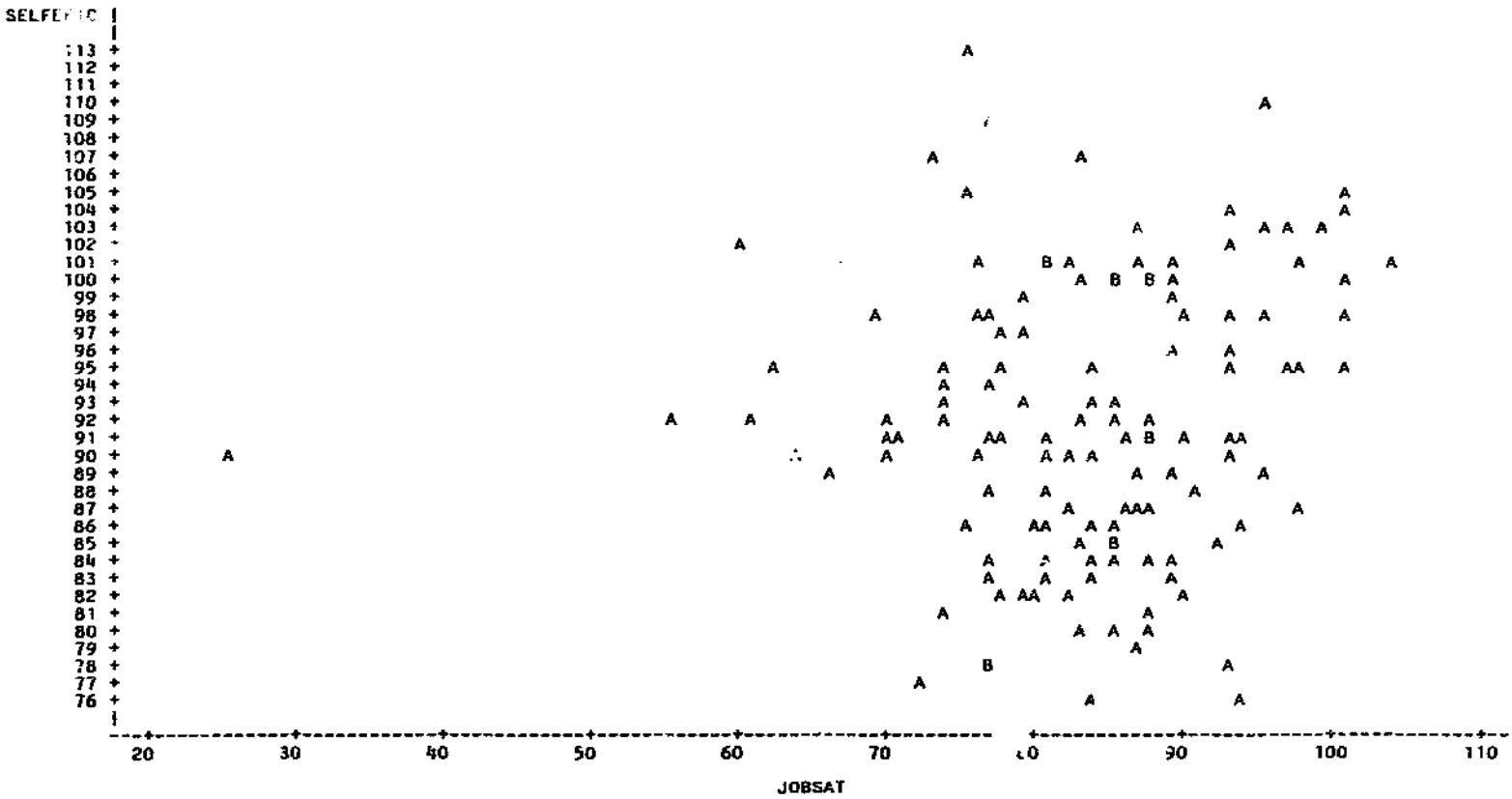
Linearity between leader-member exchange and job satisfaction





Linearity between self-efficacy and work performance

Linearity between self-efficacy and job satisfaction











**Author: Becker David Bernard.**

**Name of thesis: The relationship between self-efficacy, effective leadership-supervision and work performance.**

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