

## 5 Transactional and transformational Leadership

Leadership has been an important topic in the social sciences for many decades. Recently, renewed interest in the concept of leadership has been aroused. The resurgence of interest in studying the topic of leadership appears to be accompanied by an acceptance of the distinction between transactional and transformational leadership (Den Hartog, Van Muijen and Koopman, 1997).

Studies have been carried out, in which transactional and transformational leadership are compared with other differentiations in leadership such as relation oriented - tasks oriented leadership (Fiedler, 1967), consideration-initiating structure (Korman, 1966, cited by Molero, 1995), and directive-participative or autocratic-democratic leadership (Den Hartog, Van Muijen and Koopman 1997). Clearly, there are various approaches to leadership, and therefore, various different types of leadership. The studies of the Ohio group, whose leader was Hemphill, claimed that types of conduct that best characterize leaders can be grouped around two broad categories: “consideration” and “initiation of structure”. The first refers to the leader’s interest in the well-being of the members of the team, including forms of conduct like giving help, being accessible, opening the channels of communication and representing the interests of the members of the team before higher level staff of the organization. The second concerns the leader’s readiness to explain his function and the information about what is expected from each team member.

The “initiation of structure”, embraces clarification of roles, establishing objectives, planning, coordination, solutions to problems and maintaining control.

According to Molero (1995), the Ohio perspective, as well as other perspectives of the same theoretical tradition, is the maximum exponent of “instrumental leadership,” since this perspective deals exclusively with the technical and practical consequences of the leadership actions. That is to say, that if great importance is attached to leadership and the actions of leadership, they believe that these decisively influence the efficacy of the work units and the satisfaction of its members. It has been proven that in a general manner, with greater initiation of structure made by the leader, a higher performance is achieved in the corresponding work unit. In a similar manner, if much consideration is shown by the leader, there is more satisfaction within the members of the team.

From another perspective, instrumental leadership is treated as transactional, when it sees the reason for the positive relationship between the initiation of structure and performance, and between consideration and satisfaction, in the delivery of valuable resources to the group by the leader. It is understood, that the leader obtained such a position because he/she is essential for the group. The members of the group accept such leadership, because it benefits them in a way that is hard to replaced. It looks as if, a transaction is established between the leader and the members in which the first provides certain highly valuable services and the second accepts his/her authority in return demonstrating in public a greater affection for that person than for any other member of the group (Molero, 1995).

The instrumental or transactional leadership can be beneficial for many organizations. It cannot be useful for the organizations however in a period of accelerated change. Given that in those periods production is achieved sooner or later, the instrumental or transactional leadership seems to be incomplete and insufficient since it does not give necessary attention to the expressive aspects of the organization, such as change and the innovation of culture.

One thing that has gone unnoticed in the perspectives of instrumental leadership is the vision and missions that certain leaders contribute to the idea of changing the organization. In this sense, the expressive leadership, from another point of view, is interpreted as being equal to transformational leadership.

A satisfactory understanding of transformational leadership can arise by simply contrasting it with transactional leadership. Using ideas originally proposed by Burns (1978), Bass (1985) applied the concepts of transactional and transformational leadership to business organizations. Burns differentiated transactional and transformational leadership in the field of politics. "Burns argues that transactional leadership entails an exchange between leader and follower. Followers receive certain valued outcomes (e.g. wages, prestige) when they act according to the leader's wishes" (Den Hartog et al., 1997).

The transformational leader reaches a higher level of motivation and work moral cooperatively, and thus brings about a change of goals, needs and pretensions of the subordinates. According to Burns (1978), these two forms of leadership are on two opposite poles, which means that they exclude each other. A leader therefore, either

leads in a transactional or in a transformational way. Burns regards the two types of leadership as being at opposite ends of a continuum. In contrast to this approach, Bass (1985) views them as separate dimensions, thus a leader can be both transactional and transformational (Bryman, 1992). He also argues that transformational leadership hinges on transactional leadership but not vice versa. Transformational leadership can be considered as a special case of transactional leadership because both approaches are linked to the achievement of determinate goals (Den Hartog et al., 1997). Many authors described concepts similar to transformational leadership as charismatic, inspirational or visionary leadership (Bryman, 1992). Bass defines it as the leadership that increases the performance of the followers. In addition, it promotes the development of the individual members of the group and the organization in general. It establishes greater confidence in the members of the group and emphasizes attention to the key issues of the organization.

One of the more important elements of transformational leadership is the charisma called idealized influence according to the new versions of the Multifactor Leadership Questionnaire. Inspiration (high expectative communication), intellectual stimulation (promoting intelligence and rationality in solving problems) and individualized consideration (to treat each person within the group as an individual), must be included alongside charisma.

Since 1985, when Bass presented a formal theory of transformational leadership as well as models and measurements of its factors of leadership behavior, he has become the major contributor to this approach that belongs to the “new leadership” (Den Hartog et. al.,1997).

According to Bass (1985), the concepts of transactional and transformational leadership tend more towards theoretical approaches of behavior. In the following pages the central points of transactional leadership are described.

### **5.1 The transactional dimension**

Bass (1985) argues that leadership in research has generally been conceptualized as a transactional or cost-benefit exchange process. Transactional leadership theories are founded on the idea that leader-follower relations are based on a series of exchanges or implicit bargains between leaders and followers. Transactional leadership is characterized by behavior and attitudes that emphasize the quality of exchange between

superiors and followers. The leader clarifies the performance criteria, what is expected from subordinates, and what they receive in return (Den Hartog et al., 1997). According to Bass & Avolio (1994), “Transactional leadership emphasizes the transaction or exchange that takes place among leaders, colleagues and followers. This exchange is based on the leader discussing with others what is required and specifying the conditions and rewards these others will receive if they fulfill those requirements”. Leaders who behave accordingly can compensate deficits of motivation, direction and satisfaction of the workers or organization if demands and rewards are based on a mutual agreement. That is to say, the leader and followers discuss what is a requisite and what resources are necessary to reach given the aims. The model of transactional leadership implies a process of social exchange where leaders and followers influence each other. In this sense, executives and subordinates are business partners in a deal in which the followers accept obedience, give support and recognition to the executives as a counterpart for their productive dispense of coordination, respect for the norms and necessities of the group, as well as their competition for the achievement of the followers’ tasks. In this “give and take”, the executive gains the power to impose, if necessary, unpopular decisions, on the strength of his/her performance (Felfe, 2002). In general, transactional executives emphasize goal setting and give instructions that clarify structures, conditions and control. In this area, their strategy is, positive or negative contingent reinforcement depending on performance which executives achieve through the components of transactional leadership: contingent reward (CR) and management by exception (MBE-A or MBE-P).

Bass, 1998 explains, “contingent reward has been found to be reasonably effective to achieve higher levels of development and performance. With this method, the leader assigns or gets agreement on what needs to be done and promises rewards or actually rewards others in exchange for satisfactorily carrying out the assignment”.

Management-by-Exception (MBE) tends to be less effective than contingent reward. The corrective transaction may be active (MBE-A) or passive (MBE-P). In active MBE-A, the leader arranges to actively monitor deviances, mistakes, and errors in the followers’ assignments and to take corrective action as necessary.

MBE-P implies waiting passively for deviances, mistakes, and errors to occur and then taking corrective action. Active MBE-P may be required and effective in some situations such as when safety is paramount in importance. Leaders sometimes must

practice passive MBE-P when it is necessary to supervise a large number of subordinates who report directly to the leaders.

#### Laissez-Faire Leadership (LF)

This is the avoidance or absence of leadership and is most inactive, as well as most ineffective according to almost all research on the style. Laissez-faire represents a non-transaction. Necessary decisions are not made. Actions are delayed. Responsibilities of leadership are ignored. Authority remains unused (Bass, 1998).

Several transactional theories have been tested extensively and some of them have received considerable empirical support. Examples are path-goal theory from House and Mitchell, 1974 and vertical dyad theory from Graen & Scandura, 1987 (Felfe, 2002).

In summary, we can say that the concepts of leadership centered on the quality of the relationship of exchange between executives and subordinates can be taken to be transactional. Here are included the objects of exchange, from concrete tasks and material rewards to the guarantee of having room for action and resources, and even non-material rewards like confidence and loyalty.

## **5.2 The transformational dimension**

While the notion of transactional leadership refers to situations of balance or equilibrium directing special attention to stable exchange, transformational leadership is based on the idea that it is preferable and promising in an environment of great and transformational changes. From this we can conclude that in the absence of stability and balance in situations of insecurity transformational leadership is better armed to lead out of a crisis. It is more important then to be able to develop visions and motivate the subordinates. In Burns' theory (1978), and in Bass' (1985) conception, transformational leadership usually leads to a change of goals and needs. In contrast with transactional leadership, transformational leadership moves beyond transactions increasing the level of followers' awareness of valued outcomes, by expanding and elevating their needs and encouraging them to transcend their self-interests (Bass, 1985). Leaders motivate the personnel to achieve higher performance and cope with their self-interest by modifying their interests and self-esteem. Usual values will transform into superior ones. From this point of view, transformations occur only when the personal standards and the value system of the leader have turned into or-

ganizing processes for subordinates (Bycio & Hackett, 1995). Quoting Yammarino & Bass (1990): “The transformational leader articulates a realistic vision of the future that can be shared, stimulates subordinates intellectually, and pays attention to the differences among the subordinates”. Leaders can achieve transformations in organizations and in individuals. By defining the need for change, creating new visions, and mobilizing commitment to these visions, leaders are capable of achieving changes in the whole organization (Den Hartog, 1997).

According to Bass and Avolio (1994), transformational leaders do more with colleagues and followers than set up simple exchanges and agreements. They endeavor to achieve superior results by employing one or more of the “Four I’s”:

#### *Idealized Influence (II)*

In the past it was called charismatic leadership. Transformational leaders behave in ways that result in embodying role models for their followers. The leaders are admired, respected and trusted. Followers feel identification with the leaders and want to emulate them. The leaders are willing to take risks and are consistent rather than arbitrary. They can be relied on to do the right thing, demonstrating high standards of ethical and moral conduct.

#### *Inspirational Motivation (IM)*

Transformational leaders motivate and inspire their followers by providing meaning and challenge to them and their work. Team spirit is aroused. Enthusiasm and optimism are displayed. Leaders get followers involved in envisioning attractive future states; they create clearly communicated expectations that followers want to meet and also demonstrate commitment to goals and the shared vision. Charismatic leadership and inspirational motivation usually form a combined single factor of charismatic-inspirational leadership, Bass (1998).

#### *Intellectual Stimulation (IS)*

Transformational leaders stimulate their followers’ efforts to be innovative and creative by questioning assumptions, reframing problems, and approaching old situations in new ways. Creativity is encouraged. There is no public criticism of individual members’ mistakes.

New ideas and creative problem solutions are solicited from followers, who are included in the process of addressing problems and finding solutions. Followers are

encouraged to try new approaches, and their ideas are not criticized simply because they differ from the leaders' ideas.

#### *Individualized Consideration (IC)*

Transformational leaders pay special attention to each individual follower's needs for achievement and growth by acting as coaches or mentors. Followers and colleagues develop successively higher levels of potential. Individualized consideration is practiced when new learning opportunities are created along with a supportive climate. Individual differences in terms of needs and desires are recognized. The leader's behavior demonstrates acceptance of individual differences (e.g., some employees receive more encouragement, some more autonomy, others firmer standards, and still others more task structure). A two-way exchange in communication is encouraged, and "management by walking around" workspaces is practiced. Interactions with followers are personalized (e.g., the leader remembers previous conversations, is aware of individual concerns, and sees the individual as a whole person rather than as just an employee). The considerate leader listens to the individual in an effective manner. The leader delegates tasks as a means of developing followers.

Each of these components can be measured with the Multifactor Leadership Questionnaire (MLQ).

### **5.3 The augmentation hypothesis and the Full Range of Leadership**

The central postulate of the concept is that the transformational leadership offers its own contribution towards the answer concerning the leader's success, therewith going beyond the contribution, which the components of transactional leadership have to offer. This additional contribution is defined as an 'effect of increase' and could, till now, be shown in most studies. This effect is interpreted as proof that the transformational leadership, respecting the high correlation with transactional scales, (which themselves are correlated with indicators of success, such as effectiveness, extra-effort and satisfaction), has an additional, independent influence on the success of the leadership.

As mentioned before, Bass (1985) regards transformational and transactional leadership as forms of leadership which do not exclude each other. The transformational leadership is based upon the transactional leadership.

Based on this assumption, Bass and his colleagues developed a training program of transformational leadership, the ‘*full range of leadership program*’ (Bass and Avolio, 1990, cited in Bass and Avolio, 1994). The authors believe that each form of leadership should be practiced to a certain extent.

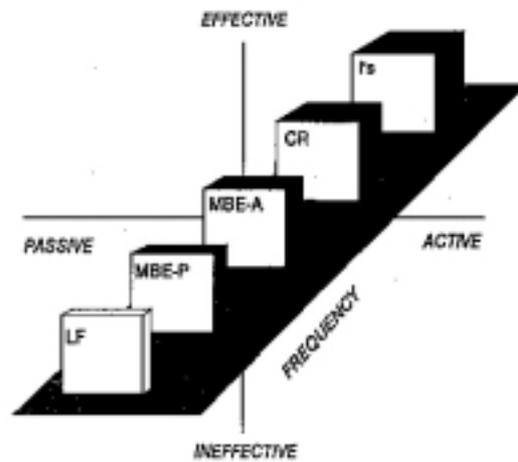


Figure 1.1 Optimal Profile

*Fig. 1: Optimal profile of the forms of leadership after Bass and Avolio (1994)*

In the optimal case the four I's should all be used, the transformational leadership mostly and the transactional behaviors being reduced from the active to the passive in a digressive manner, as well as the “laissez-faire”. In picture 1 such a profile is illustrated. The intensity of the black coloring of the individual boxes indicates the frequency of the respective behaviors.

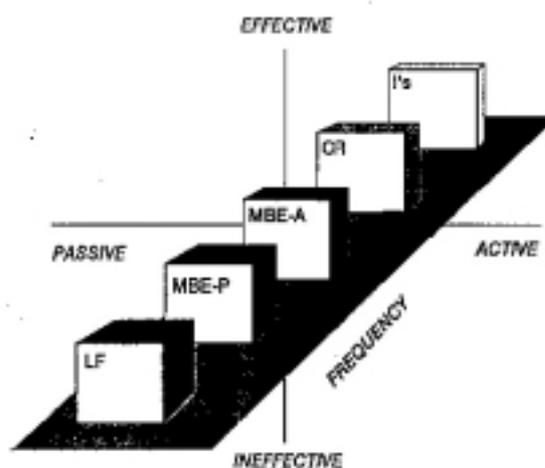


Figure 1.2 Suboptimal Profile

*Fig. 2: Sub-optimal profile of the forms of leadership after Bass and Avolio (1994)*

According to the authors' opinions, this profile representing the individual forms of leadership is optimal. Any other constellation of the different forms, like the extreme example given in picture 2, is only sub-optimal (Bass and Avolio, 1994). With the help of a measuring device, the MLQ (Multifactor Leadership Questionnaire), leadership behavior can be evaluated and trained accordingly. The range of leadership forms, which occur in the questionnaire, are referred to by Bass and Avolio (1994) as the 'Full Range of Leadership Model'.

#### 5.4 The Multifactor Leadership Questionnaire (MLQ)

The MLQ has been the primary and most applied measurement tool used in research on Multifactor Leadership Theory.

The development of the MLQ has been achieved in various steps. In this path, the factorial structure and the number of the scales has been differentiating progressively (see Tab. 2)

Tab. 2: Versions of the MLQ

MLQ version			Transformational					Transactional			
Author	Year	Version	Charisma					MbE			LF
			Ila	Ilb	IM	IS	IC	CR	MbA	MbP	
Bass	1985	1	x			x	x	x	x		
Bass & Avolio	1990	5R	x		x	x	x	x	x		x
Bass & Avolio	1993b	5X	x	x	x	x	x	x	x	x	x
Bass & Avolio	1995	5X short	x	x	x	x	x	x	x	x	x
Bass & Avolio		6 short	x		x	x	x	x	x		x
Tejeda et al.	2001		x	x	x	x	x	x	x	x	x

Source: Felfe 2002

Note: Ila Idealized Influence attributed, Ilb Idealized Influence behavior, IM Inspirational Motivation, IS Intellectual Stimulation, IC Individual Consideration, CR Contingent Reward, MbA Management by Exception active, MbP Management by Exception passive.

The MLQ originated in the 80's, when a sample group was asked if they were able to identify somebody in their lives who expanded their consciousness, raised their motivation through the hierarchy of need of Maslow or made them place their individual needs in the background for the wellbeing of a working group, an organization or society (ways of behavior according to Burns' definition of a transformative leader) (Bass, 1997). Additionally they were told to state *how*, in their opinion the best leaders manage to convince colleagues to place their own interest in the background for

the wellbeing of the group. These results show that leaders manage to convince staff members to be willing to develop and to become more innovative.

Eventually in a multi-step procedure 73 items were chosen and displayed in a random sample to 104 officers in order for them to describe their seniors.

At first, an exemplary factor analysis resulted in a conclusion with five transformational factors: 1) charisma, 2) individualized consideration, 3) intellectual stimulation and two transactional factors: 4) contingent reward and 5) management by exception. Later studies from Hater and Bass (1988) confirmed these factorial structures using a random sample of a service organization consisting of 362 colleagues and 56 senior men. The connections between satisfaction and conscious efficiency were rated highest for charisma by .91 and management by exception was rated lowest with .29.

The original version was already supplemented with the MLQ-5R- version (Bass & Avolio, 1990) and with the laissez-faire scale to show the full range of the leader's behavior (Full Range of Leadership), which allows the integration of inefficient or passive behavior (see Fig. 1). Additionally, the items concerned with the mediation of an inspirational vision were taken from the charisma scale, and a further scale "Inspirational Motivation" was added. The charisma scale was renamed as 'Idealized Influence'. Therefore the instrument exemplified the following structures with all in all 7 factors: four transformational scales 1) idealized influence, 2) individualized consideration, 3) intellectual stimulation, 4) inspirational motivation, two transactional factors 5) contingency reward and 6) management by exception and the scale 7) laissez-faire as "non-leadership". The four transformational scales are considered the four I's.

Bass and Avolio (1993b) in their version of MLQ 5X, responded to several critics which, among other issues, concern the high correlation of the scales among each other, the blending of behavior, assignment and effect, as well as the problem replication problem (Conger & Kanungo, 1987; House, Spangler & Woycke, 1991; Hunt, 1991 cited by Felfe, 2002).

Therefore the updated version MLQ 5X (Bass & Avolio, 1995) additionally differs from the scales of idealized influence and management by exception, and now consists of the following 9 scales: "1) idealized influence attributed, 2) idealized influence behavior, 3) inspirational motivation, 4) intellectual stimulation, 5) individual consideration, 6) contingency reward, 7) management by exception active, 8) management by exception passive and 9) laissez-faire". While the first four scales belong

to transformational leadership, the scales contingency reward and management by exception encompass transactional leadership. Beyond that the scales 10) effectiveness, 11) satisfaction, 12) extra effort are included as indicators of success. Meanwhile, another reduced version of MLQ Form 6S with 21 Items was developed (cited in Felfe, 2002). Tejada, Scandura and Pillai (2001) just recently have also suggested a reduced version with 27 items.

Bass and Avolio (1995 cited in Felfe, 2002) have carefully examined the reliability and validity of the MLQ 5X based on the data from several examinations. They report on satisfying reliability of .74 - .94. Besides, the factor structures of the MLQ 5X were carefully examined by confirmatory factor analysis and optimized with the help of an item reduction. Thereby different models were tested (1) a complete factor: "leadership", (2) two factors: active and passive leadership, (3) three factors: transactional, transformational and non-leadership, (4) nine factors understood as a complete module. In comparison the complete model illustrates the best results (GFI: 0.91 and RMSR 0.04), which can generally be perceived as good. The extension of the original scales with six factors is not in contrast of the concept behind it, but marks the attempt, in view of the already mentioned criticism, to polish up the measuring device and the factors. The items used in MLQ 5X are collected from former items, chosen on behalf of factor analyses and suggestions of scholars who Bass selected. Besides, new items, were gained from more recent literature about the differentiation of charisma and transformational leadership (Felfe, 2002).

The MLQ 5X version includes 81 items for the nine scales of the MLQ. Bass and Avolio (1995) use modification indices post hoc to exclude items, which do not serve the purpose of understanding the latent constructs, and in order to reduce the item pool altogether. These analyses resulted in a shortened version of MLQ 5X, the MLQ 5X Short. The shortened version consists of 45 items, whereby each leadership scale comprehends four items, the outside criteria *'Extra Effort'* three items, *'Satisfaction'* two items and *'Effectiveness'* four Items. The items are enclosed in a 5-step Likert-scale, whereby *'0'* equals *'not at all'* and *'4'* equals *'frequently if not always'*.

*Tab. 3: Scales of transactional and transformational leadership*

<b>Transactional leadership</b>	<b>Transformational leadership</b>
Contingent Reward <ul style="list-style-type: none"> <li>▪ Clearly formulates expectations</li> <li>▪ Shows satisfaction if expectations were realized</li> <li>▪ As a counter-move for achievement offers support</li> </ul>	Charisma/ Idealized Influence attributed <ul style="list-style-type: none"> <li>▪ Mediates pride, respect and trust</li> <li>▪ Places own interests for those of the group in the background</li> </ul>
	Charisma/ Idealized influence behavior <ul style="list-style-type: none"> <li>▪ Has ethnic and moral principles</li> <li>▪ Demands and promotes high engagement</li> <li>▪ Communicates convincing values and goals</li> </ul>
Management by exception active <ul style="list-style-type: none"> <li>▪ Pays special attention to the breaking of rules and deviation of set standards</li> <li>▪ Draws attention to mistakes</li> <li>▪ Consistently persecutes mistakes</li> </ul>	Inspirational motivation <ul style="list-style-type: none"> <li>▪ Sees the future optimistically</li> <li>▪ Radiates enthusiasm</li> <li>▪ Offers attractive visions for the future</li> <li>▪ Mediates trust and confidence that the goals can be reached</li> </ul>
Management by exception passive <ul style="list-style-type: none"> <li>▪ Only intervenes when problems have arisen</li> <li>▪ Only reacts to problems if it is absolutely necessary</li> </ul>	Intellectual stimulation <ul style="list-style-type: none"> <li>▪ Promotes an intelligent, rational and carefully thought through resolution of problems</li> <li>▪ Recurringly puts 'things' into question</li> <li>▪ Makes innovative suggestions</li> </ul>
	Individual consideration <ul style="list-style-type: none"> <li>▪ Takes his/her time for each colleague</li> <li>▪ Promotes individual development</li> <li>▪ Treats every colleague as an individual</li> <li>▪ Is a coach and directs</li> </ul>
<b>Laissez-faire</b>	
Laissez-faire <ul style="list-style-type: none"> <li>▪ Rejects taking on responsibility</li> <li>▪ Delays resolution of important questions</li> <li>▪ Avoids decisions</li> <li>▪ Renounces to have influence</li> </ul>	

*Source: Felfe (2002)*

Concerning the construct validity Bass and Avolio emphasize the independence of transformational leadership in comparison to alternative concepts. Correspondingly, in a comparative study has been shown that a higher correlation ( $r = .50$ ) could be found between the transformational leadership and effectiveness than between the latter and competing (transactional) leadership dimension, for example the orientation of colleagues and tasks (Consideration = .44; Initiation Structure = .37)' which were raised by the LDDQ (Seltzer & Bass, 1990 cited by Felfe, 2002).

Also the correlation of the scales of transformational leadership still results in a high outcome with  $r = .76$  to  $r = .86$ . Likewise there are many connections ( $r = .68 - .75$ ) to the transactional scales contingency reward, which can be interpreted as a sign of lack of discriminative validity. Bass and Avolio (1995 cited in Felfe, 2002)) see here an explanation that transformational as well as transactional leadership are active, positive forms of leadership. In addition leaders would normally practice both forms, which are compatible with each other. They even rely on either leadership so that continuous transactional leadership with fair agreements could be rewarded with trust. This is an important basis for transformational leadership.

### **5.5 Reply Studies**

There are many other authors that have completed successful studies using the MLQ as an instrument. Bycio, Hackett and Allen (1995) make reference to the MLQ Version 1 of 5 factors with 73 items, in their replication study. They found a factor structure of 5 factors in one sample of 1376 nurses. They also report on a reasonable fit for a model of two factors, one active and one passive. The expected relationships with the external criteria of success, such as the "augmentation effect," have been confirmed. The factor of charisma has been shown to be the strongest in the prediction of the measures of success. Nonetheless, the elevated correlations between the transformational scales indicate a scarce discriminative validity.

The MLQ was reanalyzed in a sample from The Netherlands (Den Hartog, Van Muijen & Koopman, 1997). In this study an intermediate version of eight factors (MLQ 8Y) with four transformational scales, three transactional and one of laissez-faire, was used. The three types of leadership, transformational, transactional and laissez-faire could be reproduced in a partial manner only. It could be observed, that the transformational subscales could not be separated empirically. At the same time, high correlations were found between the subscales of transactional leadership and laissez

faire. As a consequence the removal of the MbP scale of transactional leadership and its union with the scale of Laissez-faire was suggested. On the basis of reliability analysis and factor analysis, a modified form with three factors is proposed: inspirational, rational-objective and passive leadership. In particular modifications of assignment of the MbE scale to the different types of leadership have been demonstrated in other empirical studies (Hater & Bass, 1988; den Hartog et al., 1997). In this sense we can see, with relative certainty, that the MbE is a passive variable of leadership that empirically corresponds more with the scale of laissez-faire than with the scale of transactional leadership. Yukl (1999) also represents the idea that the transactional character of the MbE is hard to justify from a conceptual perspective. Molero (1994), in one of his studies with groups of primary attention, uses the version of the MLQ 5R. Based on factor analysis, he concludes that his results coincide substantially with those obtained by Bass and Avolio, 1990. At the same time he believes they differ from them in some points. Among the coincidences, he focuses and maintains the fundamental distinction, the separation between transformational and transactional leadership. In second place, save scarce exceptions, the items are grouped with the factor that corresponds to them. Among the differences, Molero (1994) emphasizes that the number of factors of transformational versus transactional leadership varies. In Molero's study, all the items of transformational leadership are subsumed under only one factor and those of transactional leadership under another. The MbE scale refers more to the passive direction by exception, and the items of laissez faire have negative factorial charges, which means that a high grade would indicate directive conduct.

Geyer and Steyrer (1998) have developed a factor structure of four factors when the reliability of the original structure failed to work. They used a 5R version in their study. The analysis of reliability of the scales obtained a satisfactory value in the beginning (from .71 for laissez-faire to .93 for Charisma and Intellectual stimulation). Nonetheless, the testing of the theoretical model through the confirmatory factor analysis showed an unsatisfying degree of adjustment. A possible explanation given by the authors is that the factor structure of the MLQ was principally achieved using exploratory factor analyses that imply less severe restrictions than confirmatory factor analysis. Either way, the question of whether the obtained results are due to the data, the translation or the weakness of the factorial structure of the MLQ, remains unanswered.

Based on this, Geyer and Steyrer (1998) develop a modified factorial structure (four factors with 35 items) through an exploratory factorial analysis. The factors they propose are the following:

- a) Core transformational leadership: Includes items of the original scales of Charisma, Inspirational motivation, and Intellectual stimulation.
- b) Individual consideration: based principally on the original scale and additionally contains items of the original charisma scale.
- c) Core transactional leadership: corresponds to the completed original scale of Contingent reward completed with some items of the Individual consideration scale.
- d) Management by Exception passive/laissez faire: represents a reduced combination of both original scales.

The correlations between the modified scales are notably lower than in the original version, an aspect that Geyer & Steyrer (1998) consider as an improvement in the discriminant validity. In addition, an improvement of the fit-indexes was achieved. In general, the authors consider the modified MLQ to be an improved instrument of research. Nonetheless, we have to critically note that the interrelations found in the scales do not unlimitedly support this vision, since the second transformational factor of “individual consideration” is more strongly correlated to the third factor “core transactional” than with the first factor “core transformational”. In addition, a slight positive relationship between the second and the fourth factor can be observed, even though a negative correlation would be expected (Felfe, 2002).

Tejeda, Scandura and Pillai's (2001), intent to reproduce the factorial structure of the MLQ 5X via confirmatory analysis, did not succeed. The reported Fit indexes for different samples were not satisfactory (CFI: .59 - .73 and RMR: .12 - .17). The fit indexes improved when factors of second order (CFI: .75 - .95 and RMR: .04 - .15) were introduced. In the same way, satisfactory fit indexes still were not found for the MLQ 5X Short version with four items per scale. As a result of an analysis of the items, a reduced version with three items per scale was proposed and partially satisfactory fit indexes were obtained (CFI: .86 - .92 and RMR: .05 - .07) (CFI: .94 - .96 and RMR: .05 - .08).

In earlier versions, charisma explained most of variance of the transformational scales (Bass, 1988a, cited in Lowe, Kroeck and Sivasubramaniam, 1996). This leads to the question if the division of the transformational behaviors into five scales is

appropriate. Although in most studies the Nine-Factor-model creates the best Model-Fit, the question which one is the best Factor-Model still remains. In spite of this criticism Bass and Avolio (1993) point out that the differentiation of the transformational scales is conceptually crucial, since for example, a leader can be intellectually stimulating without being charismatic. At this point the question is raised if the differentiation may be conceptually important, but the difference between the transformational behaviors is not noticed even by the people tested.

We can see that all the solutions proposed until now have been achieved through exploratory paths. It is probable that in future studies the problem of the replicability of the factors will always be present.

With respect to the ongoing criticism concerning the replicability of the scales-structure, Avolio, Bass and Jung (1999) have demonstrated the results of their own validity studies. This time their point of departure was the version 5X Short. Integrated were the estimates of 3786 people from 14 independent random cases. In a series of confirmative factor analysis, and with the help of  $\chi^2$  Tests, different models were compared in respect of their adaptation. The six-factorial model with three transformational factors served as reference: Ch (II and IM), IS, IC, the two transactional factors MbA and CR as well as the passive components MbP and LF. The step-by-step reduction of the factor-figures resulted in a significant reduction of the  $\chi^2$ -Value. However, a seven-factorial model did not show a significant increase. Additionally, as a two-factorial model, an active-passive variation was compared with a transformational-transactional variation. Thereby a better Fit for the active-passive model could be registered. All in all, the six-factorial model with acceptable Fit-Indices (GFI: 0.91, AGFI: 0.90 and RMSR: 0.04) is favored. Further, on account of the high correlations as well as conceptual contemplation, Bass (1999) proposes that the scales „individualized consideration” and „idealized influence“ should be summarized within one factor. He declines, though, further summarizations, pointing out the practical relevance of the constructs for the area of training.

Contemporary studies are made on account of the empirically unsatisfying results. Vandenberghe, Stordeur and D'hoore (2002) (quoted in Felfe 2002) were able to assert, by a French speaking random case of 1059 Belgian nurses and by confirmative factor analysis, six factors (MbA, MbP, CR, II, IS und IC) for the MLQ 5X ( $\chi^2$ : 1013,23 (120), GFI: .90; RMR: .04). However, at this point, high correlations

among the transformational scales ( $r = .84 - .93$ ) as well as with the transactional scale Contingent Reward (CR) ( $r = .70 - .84$ ) appeared. It is proposed that in view of the discriminating validity these dimensions should be illustrated as second rate factors. Then again, the three-factor model shows clearly a worse adaptability ( $\chi^2: 2204,19$  (132), GFI: .78; RMR: .07).

Felfe (2002) also reports on another contemporary study of Goodwin, Wofford and Whittington (2001). They have taken interest in the theoretical and empirical position of the scale Contingency Reward. Empirically, these high correlations or loading of the according items point out high similarities to the transformational areas, while Contingency Reward conceptually lies at the heart of the transactional leadership. Thereby the correlations are less than the other transactional scales (Podsakoff et al. 1990; Bycio et al. 1995) On the basis of a differentiated analysis of the CR item, Goodwin et al. (2001) propose to divide the scale in two. Items which aim more towards questioning how agreements and settlements are agreed upon (makes clear..., works out agreements, negotiates...) must be differentiated from items which concern expectations of how these agreements and settlements are met and put into practice (gives me..., makes sure that we receive..., I can earn...). The first is named an "explicit contract" and is connected to transactional leadership. The second is perceived as "implicit contract" which is based upon the weight of communal trust. Explicit agreement do not seem to be a necessity. This is connected with transformational leadership. Actually, were able to illustrate, with the help of two case studies from 154 and 208 employees, that the EPC (explicit psychological contract) with  $r = .26 - .50$  is clearly less than the IPC (implicit psychological contract) with  $r = .58 - .77$  and closely correlates with transformational scales. The original, undivided CR scale shows similar high connections to the transformational scales ( $r = .54 - .73$ ). After the elimination of an item the two sub-scales could be confirmed with the help of confirmative factor analysis. But MbA and MbP still correlate in a negative way with EPC.