Transformational leadership in schools
Panacea, placebo or problem?
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Abstract Describes a study, which investigated the relationship between the transformational and transactional leadership behaviours of school principals in selected New South Wales state secondary schools with some teacher outcomes and aspects of school learning culture. Analysis suggested that there were two factors which were transformational, two factors which were transactional and one teacher outcome factor. Five school learning culture factors were identified. Furthermore, the transformational leadership behaviour (individual concern) was associated with the teacher outcomes – satisfaction, extra effort and perception of leader effectiveness. Contrary to what might be expected, transformational leadership behaviour (vision/inspiration) had a significant negative association with student learning culture. Significant interactions suggested that this relationship may be more complex than might be expected.

Introduction
Schools continue to be challenged, in the name of restructuring, to change governance structures, open themselves up to community influence, become more accountable, clarify standards for content and performance and introduce related changes in their approaches to teaching and learning (Leithwood et al., 1999).

As with most complex reforms, it is difficult to decipher exactly what advocates of school restructuring want by way of school reform. Ideally, one would like to assume that at some basic level they believe that restructuring schools will make them more effective, will cause teachers to teach differently and therefore, this will make a difference to the learning and motivation of students (Elmore et al., 1996).

The challenges brought to schools by restructuring have been cited as reasons for advocating transformational leadership in schools. It is argued that transformational leadership is well suited to the challenges of current school restructuring. It has the potential for building high levels of commitment (in teachers) to the complex and uncertain nature of the school reform agenda and for fostering growth in the capacities teachers must develop to respond positively to this agenda (Leithwood and Jantzi, 1997). Transformational leadership is seen to be sensitive to organisation building, developing shared vision, distributing leadership and building school culture necessary to current restructuring efforts in schools (Leithwood et al., 1999).

Recent studies about the effects of transformational leadership (Leithwood et al., 1993; Leithwood, 1994; Silins, 1994) suggest it contributes to restructuring initiatives and “teacher perceived” student outcomes. However, this
contribution is mediated by other people, events and organisational factors, such as teacher commitment, teacher job satisfaction, instructional practices or school culture (Hallinger and Heck, 1998).

At the same time, other researchers (Maehr and Midgeley, 1991; 1996; Maehr and Anderman, 1993; Maehr and Fyans, 1989) have developed impressive empirical evidence to suggest that the mediating variable school culture can make a school a place in which teachers feel positive about their work and students are motivated to learn. A positive school culture is associated with higher student motivation and achievement, improved teacher collaboration and improved attitudes among teachers toward their jobs (Stolp and Smith, 1995). Research (Sashkin and Sashkin, 1990; Sashkin and Walberg, 1993; Ogawa and Bossert, 1995; Leithwood, 1994) suggests that school culture does not operate in a vacuum and crucial to its creation and maintenance are the leadership practices of the school principal. Further, evidence from several studies (Leithwood and Jantzi, 1990; Sashkin and Sashkin, 1990) provides strong support for the claim that transformational leadership contributes to more desirable school cultures.

In summary, it seems that there are compelling theoretical and other reasons for advocating transformational leadership in schools at the current time, but there is still considerable work to be done in clarifying empirically the effects of this form of leadership on students (Leithwood et al., 1999). One area needing further investigation is the nature of the relationship between transformational leadership through the mediating variables of teacher satisfaction, teacher commitment, and school culture with student learning outcomes.

Transformational leadership

Transformational leadership was first distinguished from transactional leadership by Downton (1973), in accounting for differences among revolutionary, rebellious, reform-oriented and ordinary leaders. However, Downton’s conceptualisation did not take hold until Burns’ seminal work on political leaders appeared in 1978 (Bass and Avolio, 1990).

Burns (1978) conceptualised two factors to differentiate “ordinary” from “extraordinary” leadership – transactional from transformational leadership:

1. Transactional (ordinary) leadership is based on an exchange relationship in which follower compliance (effort, productivity, loyalty) is exchanged for expected rewards.

2. Transformational (extraordinary) leaders raise followers’ consciousness levels about the importance and value of designated outcomes and ways of achieving them.

They also motivate followers to transcend their own immediate self-interest for the sake of the mission and vision of the organisation. Followers’ confidence levels are raised and their needs broadened by the leader to support development to higher potential. Such total engagement (emotional, intellectual
and moral) encourages followers to develop and perform beyond expectations (Bass, 1985; Burns, 1978).

Burns’ seminal work provided a solid conceptual footing for the work of Bass (1985), who investigated the key behaviours of leaders in public and private organisations and developed a model of transformational and transactional leadership. Bass (1985) drew support for his model from the work of Zaleznik (1977) and from the empirical evidence collected, using the multifactor leadership questionnaire (MLQ). Among the most important features of this model are the dimensions of leadership practice it includes and the proposed relationships among these dimensions (Leithwood et al., 1996).

Referred to in more recent publications as the “full range leadership model” (Bass and Avolio, 1995, 1997) Bass and his colleagues identified five factors which represent the behavioural components of transformational leadership:

1. idealised influence (attributes);
2. idealised influence (behaviour);
3. inspirational motivation;
4. intellectual stimulation; and
5. individualised consideration.

Idealised influence (attributes) occurs when followers identify with and emulate those leaders who are trusted and seen as having an attainable mission and vision. Idealised influence (behaviour) refers to leader behaviour that results in followers identifying with leaders and wanting to emulate them. Inspirational motivation is closely related to idealised influence. Leaders behave in ways that motivate and inspire those around them by providing meaning and challenge to their followers’ work. Intellectual stimulation occurs when leaders encourage their followers to be innovative and creative by questioning assumptions, reframing problems, and approaching old situations in new ways. Individual consideration occurs when leaders relate to followers on a one-to-one basis in order to elevate goals and develop skills.

Three factors defined and identified the behavioural components of transactional leadership:

1. contingent reward;
2. management by exception (active); and
3. management by exception (passive).

Contingent reward is the exchange of rewards for meeting agreed-on objectives. Transactional leaders may also rely on management by exception (active) which occurs when the leader monitors followers to ensure mistakes are not made, but otherwise, allows the status quo to exist without being addressed. In management by exception (passive) the leader intervenes only when things go wrong. In addition to the dimensions of transformational and
transactional leadership, the model identified a non-leadership factor which indicated the absence of leadership and which is named *laissez-faire*.

Bass (1985) contended that most leaders display transformational and transactional leadership in varying degrees. Transformational leadership augments transactional leadership by focusing on the development of followers as well as pursuing the goals of the leader, follower, group and organisation (Bass and Avolio, 1990).

Bass’s model of transformational and transactional leadership has a number of important implications for the current reform movement in education. According to Bass and Avolio (1997), the transformational/transactional approach builds trust, respect, and a wish on the part of followers to work collectively toward the same desired future goals. This not only allows the transformational leader to operate effectively within the available context, but to change it, to make it more receptive to her or his own leadership orientation. Therefore, an argument exists that transformational leadership is more facilitative of educational change and contributes to organisational improvement, effectiveness and school culture.

**School learning culture**

The view that schools have, reflect, or are a “culture” is common (Deal and Peterson, 1990; 1999; Segiovanni, 1996). The concept of school culture probably derives most immediately and directly from the oft-repeated observation; schools differ one from the other in the way they work as well as in the “effects” that they have on the lives of children (Deal and Peterson, 1990; 1999; Sashkin and Walberg, 1993).

The concept of school culture embraces a wide variety of beliefs, goals, purposes, thoughts, knowledge and expectations (Deal and Peterson, 1990; 1999). However, the focus of this study is on a particular set of perceptions, thoughts and beliefs that have been found to be critical in determining motivation and student learning. A decade of research in the framework of what is called “goal theory” (Ames, 1990; Ames and Ames, 1989; Dweck and Leggett, 1988; Nicholls, 1989) has underscored the importance of perceptions of purpose in the determination of the nature and quality of investment in a task. Simply put, it is possible for schools to define teaching, schooling and learning in different ways and the choice of definitions has profound effects on motivation and student learning (Maehr, 1991).

For example, while all schools purport to have teaching and learning as primary goals, some may define learning in such a way that students are likely to see the whole enterprise as a contest to see who is best. Other schools may place stress on student growth and worry considerably less about who wins the academic contests. Still others may focus on social goals, making friends, conforming to expectations and getting along with others (Sashkin and Walberg, 1993). While it is acknowledged that schools have multiple goals, recent research (Ames and Ames, 1989; Deal and Peterson, 1990; Maehr and Midgley, 1996; Maehr et al., 1996) suggests that schools differ in the emphasis...
they place on certain goals, purposes and values – what is worth doing and why.

Two goals have emerged as being pre-eminent in expressing the character of the school so far as student motivation and learning is concerned, these are task-focused goals and performance-focused goals (Ames and Ames, 1989; Elliott and Dweck, 1988; Maehr and Anderman, 1993). Central to the task-focused goal is the belief that effort leads to success and that the focus of attention is on the intrinsic value of learning. With task goals, the individual is oriented toward developing new skills, trying to understand his or her work, improving the level of competence or achieving a sense of mastery. With a performance-focused goal, the goal of learning is to do better than others, by surpassing norms or by achieving success with little effort. Central to a performance goal is the focus on one’s ability. Ability is shown by doing better than others through grades, rewards and approval from others or by achieving success with little effort (Maehr and Anderman, 1993; Midgley et al., 1995; Midgley, 1993).

Not surprisingly, this research suggests that the adoption of one rather than the other of the two goals types of schooling (task-focused or performance-focused) has important consequences for behaviour generally, but for student motivation and learning in particular (Maehr, 1991). If students adopt a task-focused goal in learning it orients them toward the intrinsic value of the task itself. What follows is likely to be a qualitatively different approach to learning tasks. Task-focused students are more likely to be positive toward a task, showing continuing interest even after instruction is completed (Meece et al., 1988). They are more likely to exhibit “academic venturesomeness”, choosing to pursue challenging activities (Ames, 1990; Elliott and Dweck, 1988). Students are likely to resist learned helplessness, try harder and persist longer when faced with a challenging and difficult task. Additionally, research has clearly and consistently demonstrated that children who adopt a task orientation use “deep” processing strategies, such as relating newly-learned material with previously learned material and trying to understand conceptual and abstract relationships (Sashkin and Walberg, 1993). In contrast, students who adopt performance-focused goals will characteristically strive to do things designed to make them look more able compared to other students. They are likely to avoid challenging tasks on which they might make mistakes, fail or appear less able than other students and to use surface level strategies such as memorisation and rehearsal (Meece et al., 1988).

In sum, a school’s definition of the purpose of schooling as primarily task or performance-focused may be exhibited in a number of ways that can be, and are, regularly understood by students. Students will perceive that the school tends to value learning (task goals) or classification and sorting (performance goals) and this will affect the goals that the students adopt for learning and, in turn, the quality of their personal motivation in learning.
Purpose of study
A recent review of research on transformational leadership in schools suggests that there are few studies that have investigated the relationship of transformational leadership with student learning outcomes in the context of the secondary school (Leithwood et al., 1996). The study reported here took the important step of examining the relationship of Bass’s conception of transformational and transactional leadership with teacher outcomes, and with teacher perceptions of school-learning culture within the Australian school setting. Specifically, the purposes of the study were to investigate:

- The relationships of transformational, transactional and non-leadership style of the school principal with some teacher outcomes; specifically, extra effort, effectiveness and satisfaction.
- The relationships between transformational, transactional and non-leadership style of school principals with aspects of school-learning culture.

Method
The sample
A total of 12 secondary schools were randomly selected from the population of secondary schools located in the Sydney Metropolitan area in New South Wales, Australia, and 15 randomly selected teachers from each school were requested to complete questionnaires. Of the 12 schools, 124 teachers returned completed questionnaires representing a 68 percent response rate.

The sample comprised 54 percent female and 46 percent male teachers and 75 percent were aged 30-59 years. The teachers in the sample held various positions in the school, including full-time classroom teachers (57 percent), head teachers (23 percent), deputy principals (5 percent) and others, such as librarians, careers advisers, part-time teachers, support teachers (15 percent). A total of 64 percent of the sample had more than 11 years of teaching experience and 60 percent had three to ten years of this experience at their current school.

Measure of leadership style
The multifactor leadership questionnaire (MLQ 5X) developed by Bass and Avolio (1997) was selected to measure leadership style. This instrument is based on three defining constructs:

1. transformational leadership;
2. transactional leadership; and
3. laissez-faire (non-leadership).
These form a model for comprehending the effects of leadership. In addition to determining the transformational, transactional and non-leadership dimensions of the leaders, several items in the questionnaire measure organisational outcomes – specifically, the extent to which followers put in extra effort, and perceive organisational effectiveness and satisfaction as a consequence of leadership.

Measure of school learning culture
The patterns of adaptive learning survey (PALS) developed by Maehr et al. (1996) was used to measure the dimensions of school-learning culture. This instrument consists of 42 items, which assess teachers’ perceptions of school emphasis on task, ability and extrinsic goals for students (at school level and within the classroom), accomplishment and power for teachers, personal teaching efficacy and teacher use of instructional strategies which are task-focused or performance-focused for students. Accomplishment refers to teachers’ perceptions that the school has an emphasis on innovation, excellence and hard work for teachers. Power refers to teachers’ perceptions that the school emphasises competition among teachers and, provides more opportunities and resources to some teachers than to others. Personal teaching efficacy refers to teachers’ beliefs that they are contributing significantly to the academic progress of their students, and can effectively teach all students. The focus of instructional strategies refers to teacher strategies, which may be task or performance-focused and convey to students the purpose of learning.

Results and discussion
Factor analysis with principal axis factoring using SPSS determined the validity of the leadership model proposed by Bass and Avolio (1997) and the school-learning culture model proposed by Maehr et al. (1996). Factor extraction criteria included eigenvalues greater than one, scree test and, most important, interpretation. An oblique rotation was used because conceptually one could expect the factors to be interrelated.

Principal axis factoring produced four interpretable factors from the leadership items with eigenvalues of 10.57, 2.24, 1.81 and 1.16, accounting for 31.1 percent, 6.6 percent, 5.3 percent and 3.4 percent of the variance, respectively. The items, factor loadings and the reliability coefficients are shown in Table I. Two factors were transformational – individual concern and vision/inspiration.

(1) Individual concern consists of items that reflect the leader’s focus on the needs of the teacher.

(2) Vision/inspiration consists of items that indicate the leader is perceived to provide a clear sense of purpose that is energising and builds staff identification with the leader’s vision.
The transactional factors were active management by exception and passive management by exception. Active management by exception consists of items that indicate the leader focuses on monitoring task execution for any mistakes or complaints that are likely to occur, before problems arise. Passive management by exception consists of items which show the extent to which the leader only intervenes after problems arise. The difference between active and passive management by exception is that active management by exception involves proactive leadership, whereas, passive management by exception involves reactive leadership.

The factor analysis supports a leadership model, which is consistent with the theoretical framework, in that, both transformational and transactional leadership behaviours are identified. However, these results suggest that these
teachers did not distinguish between the transformational leadership behaviours – charisma, intellectual stimulation and inspirational motivation. Similar results have been reported by other researchers (Bycio et al., 1995; Carless, 1998).

Several of the contingent reward items (transactional leadership) loaded on the factor individual concern suggesting that these teachers did not distinguish between individual concern (transformational leadership) and contingent reward (transactional leadership). It is possible that this finding represents the augmentation effect of transformational and transactional leadership described by Bass and Avolio (1997). However, other research (Eden, 1998) suggests that although in theory these two leadership styles have distinct contradictory features, in reality transformational and transactional leadership practices are interwoven. Moreover, transformational leadership is effective when it manages to incorporate transactional practices in a way that is sensitive to teachers and is accepted by them.

Principal axis factoring of the outcome items on the MLQ 5X (short) generated one factor with an eigenvalue of 4.99 that accounted for 55.5 percent of the variance. The items, factor loadings and reliability coefficient are shown in Table II. The outcome factor – teacher outcomes contains items, which reflect teacher satisfaction, willingness of teachers to put in extra effort and teacher perception of principal effectiveness. This result is different to that of Bass and Avolio (1997) who reported three outcome factors – extra effort, satisfaction and effectiveness.

Principal axis factoring of the school-learning culture items produced five interpretable factors with eigenvalues of 9.77, 4.32, 2.11, 1.85 and 1.45, which account for 23.3 percent, 10.3 percent, 5 percent, 4.4 percent and 3.5 percent of the variance, respectively. The items, factor loadings and reliability coefficients are shown in Table III. It is important to remember that these factors reflect teacher perceptions of school-learning culture. These results are consistent with the theoretical framework, and five dimensions of school-learning culture are identified:

<table>
<thead>
<tr>
<th>Item</th>
<th>Loading</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increases my willingness to try harder</td>
<td>0.85</td>
<td></td>
</tr>
<tr>
<td>Works with me in a satisfactory way</td>
<td>0.83</td>
<td></td>
</tr>
<tr>
<td>Is effective in meeting my job-related needs</td>
<td>0.82</td>
<td></td>
</tr>
<tr>
<td>Uses methods of leadership which are satisfying</td>
<td>0.81</td>
<td></td>
</tr>
<tr>
<td>Heightens my desire to succeed</td>
<td>0.80</td>
<td></td>
</tr>
<tr>
<td>Leads a group that is effective</td>
<td>0.75</td>
<td></td>
</tr>
<tr>
<td>Is effective in representing me to a higher authority</td>
<td>0.70</td>
<td></td>
</tr>
<tr>
<td>Is effective in meeting organisational requirements</td>
<td>0.68</td>
<td></td>
</tr>
<tr>
<td>Gets me to do more than I expected</td>
<td>0.30</td>
<td></td>
</tr>
</tbody>
</table>

Table II.
Factor groupings of teacher outcome items with factor loadings and reliability coefficient
### Table III.

Factor groupings of school learning culture items, factor loadings and reliability coefficients

<table>
<thead>
<tr>
<th>Factor/item</th>
<th>Loading</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor one: intrinsic motivating for learning</strong></td>
<td>0.89</td>
<td></td>
</tr>
<tr>
<td>This school supports instructional innovations</td>
<td>0.75</td>
<td></td>
</tr>
<tr>
<td>In this school the students are frequently told that learning is fun</td>
<td>0.70</td>
<td></td>
</tr>
<tr>
<td>In this school, a real effort is made to show students how the work they do in school is related to their lives outside school</td>
<td>0.67</td>
<td></td>
</tr>
<tr>
<td>In my classroom, I make special effort to give my students work that has meaning in their everyday lives</td>
<td>0.65</td>
<td></td>
</tr>
<tr>
<td>In my classroom, I frequently tell my students that I want them to enjoy learning</td>
<td>0.64</td>
<td></td>
</tr>
<tr>
<td>This school makes teachers want to work hard</td>
<td>0.58</td>
<td></td>
</tr>
<tr>
<td>In this school, the administration is always looking to improve teaching</td>
<td>0.56</td>
<td></td>
</tr>
<tr>
<td>In this school, the emphasis is on really understanding the work, not just memorising it</td>
<td>0.53</td>
<td></td>
</tr>
<tr>
<td><strong>Factor two: favouritism</strong></td>
<td>0.79</td>
<td></td>
</tr>
<tr>
<td>In this school, the administration shows favouritism to some teachers</td>
<td>-0.80</td>
<td></td>
</tr>
<tr>
<td>Power and influence count a lot around this school</td>
<td>-0.75</td>
<td></td>
</tr>
<tr>
<td>In this school, the administration actively encourages competition among teachers</td>
<td>-0.60</td>
<td></td>
</tr>
<tr>
<td>In this school, some teachers have greater access to resources than others</td>
<td>-0.58</td>
<td></td>
</tr>
<tr>
<td>In this school, some teachers have more influence than other teachers</td>
<td>-0.52</td>
<td></td>
</tr>
<tr>
<td><strong>Factor three: personal expectations of teaching ability</strong></td>
<td>0.60</td>
<td></td>
</tr>
<tr>
<td>Some students are not going to make a lot of progress this year no matter what I do</td>
<td>0.86</td>
<td></td>
</tr>
<tr>
<td>There is little I can do to ensure that all my students make significant academic progress this year</td>
<td>0.55</td>
<td></td>
</tr>
<tr>
<td><strong>Factor four: extrinsic motivation for learning</strong></td>
<td>0.82</td>
<td></td>
</tr>
<tr>
<td>In my classroom, I point out those students who do well academically as a model for other students</td>
<td>0.81</td>
<td></td>
</tr>
<tr>
<td>Students who get good marks are pointed out as examples to other students</td>
<td>0.69</td>
<td></td>
</tr>
<tr>
<td>In my classroom I encourage students to compete with each other academically</td>
<td>0.63</td>
<td></td>
</tr>
<tr>
<td>In my classroom, I help students understand how their performance compares to others</td>
<td>0.59</td>
<td></td>
</tr>
<tr>
<td>It is easy to tell which students get the highest marks and which students get the lowest marks</td>
<td>0.54</td>
<td></td>
</tr>
<tr>
<td>Students hear a lot about the importance of achieving high marks in tests</td>
<td>0.51</td>
<td></td>
</tr>
<tr>
<td><strong>Factor five: excellence in teaching</strong></td>
<td>0.77</td>
<td></td>
</tr>
<tr>
<td>In my classroom, I make special efforts to give my students work that is creative and imaginative</td>
<td>0.81</td>
<td></td>
</tr>
<tr>
<td>In my classroom, I stress to students that I want them to understand the work, not just memorise</td>
<td>0.75</td>
<td></td>
</tr>
<tr>
<td>In this school, the importance of trying hard is stressed to students</td>
<td>0.59</td>
<td></td>
</tr>
</tbody>
</table>
The factor intrinsic motivation for learning contains items that convey the idea that the school stressed to students the relevance and fun of learning. Several items suggest that these teachers viewed intrinsic motivation for learning in students with hard work, innovation and improvement in teaching. Also, some items that load on this factor suggest that teachers do not distinguish school and classroom levels. For example, item 31, “This school supports instructional innovations” reflects school emphasis of this factor. While item 19, “In my classroom, I frequently tell my students that I want them to enjoy learning” suggests a classroom emphasis. This finding may reflect the fact that these data were collected in secondary schools where students are likely to experience several different teachers and learning contexts during a school day. These teachers may not perceive a difference, because in the secondary school context a student’s purposes and goals in learning may be determined by their learning experiences in multiple classrooms rather than in a single classroom and this may be interpreted by teachers as being at the school level. This is consistent with the findings from other research (Maehr, 1991; Maehr and Fyans, 1989) which indicate that as students progress through school it is increasingly the culture of the school which is associated with motivation for learning.

The second factor, favouritism, refers to the perception that the school encourages competition among teachers and allows some to have more influence than others. These teachers perceived that they were not treated the same. For example, some may have been given preferential treatment when classes were timetabled.

The third factor, personal expectations of teaching ability, refers to each teacher’s beliefs about her/his own ability to teach any student and contribute to his/her learning. The items which make up this factor indicate that teachers have low personal expectations of their ability to teach any student. The fourth factor, extrinsic motivation for learning, contains items which refer to the emphasis the school places on the importance of achieving good marks and performing better than other students. The final factor, excellence in teaching, contains items which refer to the teacher’s commitment to provide students with work that is imaginative and creative and will assist students to understand that learning involves understanding and hard work.

Inter-correlations
The inter-correlations in Table IV suggest the possibility of some multicollinearity among the independent variables. However, this was
controlled for in the multiple regression analysis. There is a very strong correlation between individual concern and teacher outcomes ($r = 0.81$). Such a high correlation requires us to consider whether the two factors represent the same phenomenon. It is understandable that there should be a high correlation between individual concern and teacher outcomes because individual concern is about leadership behaviour and teacher outcomes describe the relationship of teacher behaviour to leadership behaviour. However, these variables are conceptually distinct with individual concern representing principal leadership behaviours and teacher outcomes representing the responses of teachers or the consequences of these leadership behaviours.

**Multiple regression analyses**

Multiple regression analysis was used to examine how well the leadership factors predict teacher outcomes and the aspects of school-learning culture identified by the factor analysis. Weighted factor scores of teacher outcomes and the aspects of school-learning culture generated by the factor analysis were treated as dependent variables and the factor scores of the four dimensions of leadership were treated as independent variables. Having examined the main effects of the independent variables, their possible interactions were investigated by introducing cross-products into the regression model.

**Association between leadership behaviours and teacher outcomes**

Multiple regression analysis indicated that the leadership behaviours, individual concern, passive management by exception and vision/inspiration together predicted 78 percent of the variance in teacher outcomes (see Table V).
Individual concern, was the best predictor of teacher outcomes, accounting for 65 percent of the variance. Clearly, this result supports the idea that when the principal is perceived by teachers to treat each one uniquely, showing understanding and sharing individual concerns, they are more likely to be satisfied, put in extra effort and view the principal as an effective leader.

Bolman and Deal (1997) identified four lenses that people rely on to frame, assess and respond to situations:

1. a structural frame;
2. political frame;
3. symbolic; and
4. human resource frame.

They suggested that in education some lenses are more prominent than others, with principals and teachers having a tendency to read and respond to day-to-day challenges from a human resource frame. This frame emphasises people’s needs, skills and the importance of a caring, trusting environment. If in fact principals and teachers do view what happens in schools through a human resource frame, as suggested by Bolman and Deal (1997), then it may explain the close association between the leadership behaviour individual concern and teacher outcomes of effectiveness, satisfaction and extra effort.

The second predictor, passive management by exception explains 11 percent of the variance. This result indicates that the failure of a principal to intervene until things go wrong has a negative association with the satisfaction and extra effort of teachers, and teachers are likely to form a perception of ineffective leadership. The third predictor, vision/inspiration, accounts for a low, but significant 2 percent of the variance and has a negative relationship with teacher outcomes. A possible explanation for this result, is that a principal who is visionary/inspirational may be perceived by teachers to be interfering with the work teachers do in the classroom by placing greater work demands on teachers outside the classroom. This is consistent with previous research on teacher satisfaction that suggests teacher dissatisfaction is associated with anything that interferes with the student-teacher relationship in the classroom (Johnston and Wartel, 1998).

**Association between leadership behaviours and intrinsic motivation for learning**

Table VI shows that vision/inspiration and passive management by exception together predicted 29 percent of the variance of student intrinsic motivation for learning. Vision inspiration is the best predictor, accounting for 21 percent of the variance. Although a direct causal relationship may not be drawn, this result suggests that the more visionary or inspirational the leadership behaviour of a principal, the less teachers perceived that students would be motivated to learn and the less teachers would try to ensure that
### Table VI. Multiple regression of leadership behaviour factors and school learning culture factors

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Step</th>
<th>Independent variable</th>
<th>$R^2$</th>
<th>$R^2$ change</th>
<th>$F$</th>
<th>Beta in</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrinsic motivation for learning</td>
<td>1</td>
<td>Vision/inspiration</td>
<td>0.21</td>
<td></td>
<td>31.67***</td>
<td>-0.45</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>MBE (passive)</td>
<td>0.29</td>
<td>0.08</td>
<td>24.48***</td>
<td>-0.29</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Vision/inspiration X, MBE (active)</td>
<td>0.32</td>
<td></td>
<td>18.50***</td>
<td>-0.17</td>
</tr>
<tr>
<td>Excellence in teaching</td>
<td>1</td>
<td>Vision/inspiration</td>
<td>0.12</td>
<td></td>
<td>16.51***</td>
<td>-0.35</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>MBE (passive)</td>
<td>0.16</td>
<td>0.04</td>
<td>11.26***</td>
<td>-0.20</td>
</tr>
<tr>
<td>Favouritism</td>
<td>1</td>
<td>Individual concern</td>
<td>0.15</td>
<td></td>
<td>21.72***</td>
<td>0.39</td>
</tr>
<tr>
<td>Personal expectations of teaching ability</td>
<td>1</td>
<td>MBE (passive)</td>
<td>0.07</td>
<td></td>
<td>8.59**</td>
<td>0.26</td>
</tr>
<tr>
<td>Extrinsic motivation for learning</td>
<td>1</td>
<td>MBE (passive)</td>
<td>0.15</td>
<td></td>
<td>4.69*</td>
<td>-0.19</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>MBE (passive X, vision/inspiration)</td>
<td>0.08</td>
<td></td>
<td>5.42**</td>
<td>0.23</td>
</tr>
</tbody>
</table>

**Notes:** * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$
their teaching strategies encourage students to understand, work hard and enjoy learning. This could be explained in the other direction, but it is unlikely, as one would expect at least some consistency of leadership behaviour independent of context. It is acknowledged that this finding should be viewed cautiously, as there are other factors which have not been considered, such as nature of vision, how it was developed and what vision building strategies were used to develop consensus and commitment to the vision. However, this is an interesting and potentially important result. A possible explanation is that a visionary/inspirational leader may distract teachers from teaching and learning goals in their classrooms. For example, a teacher may be asked to take on a role as part of the school’s emphasis on pastoral care. Although he/she may be allocated time to do this, it is often not enough and because of these responsibilities the teacher may be unable to concentrate on the goals of teaching and learning in the classroom. A visionary/inspirational principal may expect teachers to be involved with many other school-level activities, which they may view as important for achieving and gaining teacher support for the vision of the school. Ironically, the ultimate cost may be the teaching and learning goals in the classroom.

These findings are consistent with Robertson (1993) who, without focusing on leadership behaviours, reviewed the devolution and restructuring in Western Australian schools during the late 1980s. She found that many teachers were increasingly drawn away from the classroom towards the corporate school level by numerous committees being formed to handle devolved management responsibilities. This raised many tensions for teachers; for example, if they participated in the corporate life of the school, it undermined their commitment to the classroom; if they remained committed to the classroom they tended to miss “the promotional raft as it swept by” (1993, p. 132). Robertson (1993) reported that a significant number of teachers talked about the pedagogical relationship as central to what it meant to be a teacher, a relationship they could see slipping by. There was decreasing time for personal reflection, for getting to know students and their needs, and for developing a sense of pedagogic purpose.

The second predictor, passive management by exception accounts for 8 percent of the variance and the result suggest that there is a negative relationship between this type of leadership and teacher perceptions of student intrinsic motivation for learning.

Association between leadership behaviours and favouritism
Table VI indicates that individual concern accounts for 15 percent of the variance in favouritism. This result could be expected given that a principal who uses individual concern endeavours to understand and share the concerns of teachers. He/she is likely to use leadership behaviours that are focused on the needs of the individual teacher. Some teachers may perceive that a principal does not treat all staff equally and that some teachers are
Transformational leadership in schools

Association between leadership behaviours and personal expectations of teaching ability
The results from multiple regression analysis of leadership behaviours with personal expectations of teaching ability (see Table VI) show that passive management by exception predicts 7 percent of the variance in personal expectations of teaching ability. Passive management by exception implies low expectations of the principal for teachers. Hence, it is consistent that teachers might then have lower personal expectations of teaching ability.

Association between leadership behaviours and extrinsic motivation for learning
Table VI shows that extrinsic motivation for learning is predicted by passive management by exception accounting for 4 percent of the variance. This result suggests that passive management by exception has a negative association with the extrinsic motivation of students for learning. It is important to remember that these data were provided by teachers and it is possible that passive management by exception discourages teachers from using teaching strategies that encourage students to be competitive and performance-focused.

Association between leadership behaviours and excellence in teaching
The results of multiple regression analysis indicates that vision/inspiration and passive management by exception together predict 16 percent of the variance in excellence in teaching (see Table VI). This suggests that the more visionary/inspirational a principal is, the less teachers will use teaching strategies which encourage an ethos of hard work and enjoyment of learning among students, and vice versa. Other research (Elmore et al., 1996) suggests that teachers find it “extraordinarily difficult” to attain the deep systematic knowledge of practice needed to make vision a reality. Furthermore, teachers may not automatically see the connection between vision and its implications for teaching. This may explain why the leadership behaviour vision/inspiration has a negative association with excellence in teaching.

Passive management by exception accounts for a small, but significant, 4 percent of the variance in excellence in teaching. This result suggests that, there is a negative relationship between passive management by exception and excellence in teaching. It is possible that passive management by exception behaviour of a principal discourages these
teachers from being motivated to work hard and implement teaching strategies, which are risky and more exciting.

*Interaction effect of vision/inspiration and active management by exception with intrinsic motivation for learning*

Two statistically significant two-way interaction effects were found. To assist comprehension, regression lines of subjects who scored greater than one standard deviation above the mean on one of the interaction variables, and of subjects less than one standard deviation below the mean were graphed together.

Figure 1 illustrates the interaction of vision/inspiration with active management by exception for the dependent variable, intrinsic motivation for learning. This suggests that high visionary/inspirational leadership behaviour is associated with relatively low intrinsic motivation for learning in students whatever the level of active management by exception. On the other hand, low visionary/inspirational leadership behaviour and a low level of active management by exception leadership behaviour is associated with low intrinsic motivation for learning. However, the more a principal displays active management by exception leadership behaviour, the greater the intrinsic motivation for learning in students. A principal who is perceived to practise active management by exception leadership behaviour may actively concentrate on dealing with mistakes and complaints before they happen. Since complaints are most likely to come from parents and may concern teaching practice, a principal may encourage teachers to focus on teaching and learning goals in the classroom in order to avoid these types of complaints. Another possible explanation is that these teachers perceive active management by
exception leadership behaviour of a principal to concern the principal in the day-to-day school activities of teaching and learning, the activities that concern most teachers. This may involve a principal in activities to ensure that curriculum changes are implemented, assessment schedules are kept, and reporting deadlines are met. It is possible the active management by exception leadership behaviour of a principal is perceived by teachers to be at the operational level, the level at which most teachers’ work. On the other hand, vision/inspiration may be perceived to be at a strategic level which is perceived by these teachers to be irrelevant to the day-to-day activities of teaching and learning which concern most teachers.

*Interaction effect of passive management by exception and vision/inspiration and extrinsic motivation for learning*

Figure 2 illustrates the interaction of passive management by exception with vision/inspiration with the dependent variable, extrinsic motivation for learning.

This suggests that high passive management by exception is associated with low levels of extrinsic motivation for learning, whatever the level of visionary/inspirational leadership behaviour. On the other hand, a low level of passive management by exception and low level of vision/inspiration is associated with higher levels of extrinsic motivation for learning in students. However, as visionary/inspirational leadership behaviour increases, the greater is the negative association with extrinsic motivation for learning in students. A possible explanation for this result is that visionary leadership behaviour is perceived by these teachers to be unrelated to what teachers do every day in the classroom. They may view this type of leadership behaviour as imposing further demands that interfere with student learning.

![Figure 2. Interaction effect of passive management by exception and vision/inspiration with extrinsic motivation for learning](image-url)
Conclusion
This study investigated the relationships of transformational, transactional and non-leadership behaviours with teacher outcomes and aspects of school-learning culture. While some limitations with this study exist, such as reliance on teacher perceptions, it has questioned a number of commonly-held views about the relationship of transformational and transactional leadership behaviours in schools with aspects of school learning culture which are worth noting.

First, this study suggests that the leadership model developed by Bass and Avolio (1997) is valid in the Australian school context, in that both transformational and transactional leadership behaviours were identified. However, Bass and Avolio (1997) argued that there are conceptual differences between transformational leadership behaviours. This study suggests that in practice the teachers in the study did not distinguish between the transformational leadership behaviours of charisma, intellectual stimulation and inspirational motivation. Furthermore, the teachers in this study did not distinguish between the transformational leadership behaviour, individual concern and the transactional leadership behaviour, contingent reward. This may represent the augmentation effect of transformational and transactional leadership suggested by Bass and Avolio (1997). However, it is possible that, in reality, transformational and transactional leadership practices are interwoven and that transformational leadership is effective when it manages to incorporate transactional practices in a way that is sensitive to teachers and is accepted by them (Eden, 1998).

Second, the school-learning culture model developed by Maehr et al. (1996) was found to be valid, with five aspects of school learning culture identified in the Australian context:

1. intrinsic motivation for learning;
2. extrinsic motivation for learning;
3. favouritism;
4. personal expectations for learning; and
5. excellence in teaching.

However, it should be noted that the teachers in this study did not perceive a difference between the learning culture at the corporate school level and the classroom level. This is hardly surprising, given that these data were collected in secondary schools where multiple classrooms and teachers may influence the goals students adopt for learning. It is suggested that the teachers in the study interpreted this at the school level. This is also consistent with other researchers (Maehr, 1991; Maehr and Fyans, 1989) who have reported that the corporate culture of the school is increasingly associated with student motivation at successive grade levels.

Third, the positive teacher outcomes of extra effort, satisfaction and effectiveness were closely related to the transformational behaviour of
individual concern. It is suggested that this finding reflects Bolman and Deal’s (1997) suggestion that principals and teachers view what happens in school through a human resource frame which values people’s needs, skills and the importance of a caring trusting environment.

Fourth, relationships were found to exist between the transformational, transactional leadership behaviour of the school principal with aspects of school-learning culture. As has been found in previous research (Leithwood et al., 1996), the transactional leadership behaviour passive management by exception was perceived by teachers to be an unhelpful form of leadership in relation to teacher outcomes and teacher perceptions of student learning culture.

The most important finding of the study is that the transformational leadership behaviour of vision/inspiration had a negative association with teacher perceptions of intrinsic motivation for learning in students. This is contrary to what might be expected, given that it would be reasonable to suggest that providing purpose and direction through leadership would assist teachers to focus on teaching and learning goals. However, it suggested that in fact a visionary/inspirational principal may distract teachers from concentrating on teaching and learning and this may be perceived by teachers to be negatively related to student-learning outcomes. Teachers are likely to be expected by a visionary/inspirational principal to be involved in corporate school initiatives, which are aimed at ensuring the vision becomes reality. Teachers’ time may be taken up with these initiatives, possibly aimed at improving student outcomes, but ironically they may have the opposite effect.

It is acknowledged that this finding needs to be viewed with some caution, since there are other factors beyond the scope of the study, which have not been considered. So perhaps the most important implication of this finding is that it highlights the need for further research that will clarify vision and how it affects schools, how schools develop vision and the vision-building strategies used to attain consensus and commitment to vision in school communities.

Fifth, the leadership behaviours of vision/inspiration and passive management by exception (which in theory are quite opposite leadership behaviours) have a negative association with excellence in teaching. It is suggested that teachers may not see the connection between vision/inspiration and its implications for teaching, while passive management by exception leadership behaviour discourages these teachers from being motivated to work hard and implement teaching strategies which are possibly more likely to encourage student learning.

Finally, significant interactions were found between vision/inspiration and active management by exception with intrinsic motivation for learning and between passive management by exception and vision/inspiration with extrinsic motivation for learning. This suggests that the relationship between
transformational and transactional leadership behaviour and school-learning culture is more complex than might be first thought.

So, is transformational leadership a panacea, placebo or problem in schools? Clearly, this study suggests that it may be presumptuous to advocate transformational leadership, *per se*, as being the best way to achieve school restructuring in the twenty-first century. It is obvious from this study that further research is needed to clarify not only perceptual differences that exist with transformational leadership but, more importantly, the relationships that transformational and transactional leadership behaviours have with aspects of school-learning culture in the context of Australian schools.

**References**


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