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Correlates of Attitudes Toward Academic and Physical Inclusive Practices for Students with Disabilities and Selected Leadership Behaviors Among Middle School Principals in North Carolina

Dr. Mary A. Houser
Dr. Virginia Dickens
Dr. Terence Hicks

Abstract

The purpose of the study was to examine the relationship between attitudes toward academic and inclusive practices for students with disabilities and selected leadership behaviors (transformational and transactional) among principals in North Carolina. Participants for this study were randomly selected middle school principals from public schools in North Carolina. This study used a one-group, correlational design, using two instruments. The results of this study found a significant relationship between academic and physical inclusive practices and transformational leadership behaviors, $r (75) = .320, p < .01$). However, no significant relationship was found between academic and physical inclusive practices and transactional leadership behaviors, $r (72) = -.068, p < .05$. The findings for this study suggest that the more North Carolina middle school principals demonstrated transformational leadership behaviors, the more positive their attitudes were toward academic and physical inclusive practices for students with disabilities.

Introduction

Inclusive education of students with disabilities is the integration of students with special needs with their typically developing peers. This integration of students with disabilities occurs in a regular education setting in the student’s neighborhood school to the maximum extent appropriate with the use of supplemental aids and services, as needed (Hallahan & Kaufmann, 2003). The definition of inclusion can vary from state to state or even school to school. Although current legislation, The Individuals with Disabilities Education Act (IDEA), does not use the term inclusion, the law does require that school districts place students with disabilities identified for services under IDEA in the least restrictive environment (LRE) (Wrightslaw, 2006). LRE refers to an educational setting in which students with special needs receive a free appropriate public education (FAPE) which meets their needs while being educated alongside their typically developing peers in the regular education setting to the maximum extent appropriate (Least Restrictive Environment Coalition, 2006).

Determination of a student with a disability’s LRE must be conducted on a case by case basis. When implementing LRE provisions, the regular classroom in the student’s neighborhood school must be considered the first placement prior to considering a more restrictive placement. If the regular classroom with appropriate support services is not an
option for a student with special needs, a continuum of services is then examined for an appropriate placement that will meet the requirements for his or her LRE.

Research suggests that students with disabilities are currently more often taught in general education classrooms with the help of additional supports and services (inclusion) (Praisner, 2003). As a result of an increase of students with disabilities being educated in their least restrictive environment (LRE), school leadership roles have taken an alternative direction. Principals are now required to have an understanding of each of the disabilities, characteristics unique to the disabilities, and how to lead this 2 population of students effectively, not as disability groups, but rather as part of the mainstream (Praisner, 2003). Principals are essential in making inclusion work in their buildings (Parker & Day, 1997; Quigney, 1996; Smith & Colon, 1998). Inclusive models are growing in popularity, and this movement shows no sign of regression (Daane, Beirne-Smith, & Latham, 2000). Learning more about principals’ leadership behaviors and how they impact their attitude toward inclusion becomes highly relevant as diversity in education gains momentum (Daane et al., 2000, Ingram, 1997).

The term “leadership” has been defined by many persons (Howard, 2004). Leadership has been defined as “the ability to step outside of the culture…to start evolutionary change processes that are more adaptive (Shein, 1992, p.2). Owen (1996) stated that leadership “is a process of involving dynamic interaction with subordinates…satisfying the needs of a group…and accepting responsibility. The origins of effective leadership stem from the business world, where a long-standing and well-developed belief exists in the leaders’ ability to transform elements such as character, performance, and profitability of their companies (Barker, 2001). Leadership is often measured in terms of consequences of the leaders’ actions for followers and stakeholders. According to Yukl (2002), the most commonly used measure of leader effectiveness is the extent to which his or her organizational unit performs its task successfully and attains its goals.

Effective leadership behaviors have been associated with communicating a vision (Dyal, Flynt, & Bennett-Walker, 1996). Moreover, an effective leader and manager in the educational arena are described as visionary and whose subordinates follow his lead. The ability of the school leader to provide meaning and direction to his subordinates has also proved integral to his overall effectiveness (Bennis, 1997). According to Hargreaves (2004) and Ingram (1997), effective school reform, which is similar to what is required to lead an inclusive school, requires visionary leadership.

**Purpose of the Study**

The purpose of this study was to examine the relationship between attitudes toward academic and physical inclusive practices for students with disabilities and selective leadership behaviors among middle school principals in North Carolina. Academic inclusive practices are practices involving students with disabilities participating in an academic curriculum in regular classes. Physical inclusive practices, on the hand, refer to the placement of students with physical disabilities in regular education classes (Wilczenski, 1993). For the purposes of this study, selective leadership behaviors are
defined as transformational and transactional. Transformational leadership behaviors include leaders talking about their beliefs and visions and how they can be attained. Conversely, transactional leadership behaviors focus on leaders motivating followers by appealing to their own self-interests and the accomplishment of tasks and good worker relationships in exchange for desirable rewards (weLead, Inc., 2003, para. 1).

**Methodology**

This study employed a one-group, correlational design, using two instruments: Attitudes Toward Inclusive Education Scale (ATIES) (Wilczenski, 1993) and The Multifactor Leadership Questionnaire (MLQ – 5x short) Leader Form (Bass & Avolio, 2004). The ATIES measures attitudes toward inclusion of students with disabilities in the regular education setting. It is comprised of four measurable constructs – physical, academic, behavioral and social (Wilczenski, 1993). Reliability coefficients for the four dimensions were found to range between .82 for an individual factor to .92 for a total score as assessed by Cronbach’s alpha (O’Rorke & Trigiani, 2003). The author, however, reduced her tool to only those items that contained a factor loading of .55 or higher. Internal consistency was determined by factors possessing the following reliability coefficients: Dimension I (Physical): .83; Dimension II (Academic): .84; Dimension III (Behavioral): .87; Dimension IV (Social): .82; and Total: .92

Although Wilczenski’s instrument examines four dimensions of inclusion accommodations: physical, academic, behavioral, and social, this study examined only two of them (academic and physical). Four items were included to measure each of the two dimensions (academic and physical) for a total of 8 items. The academic dimension is comprised of Items 1, 5, 11, and 13. The physical dimension is comprised of Items 3, 7, 10, and 14. For example, participants were asked to respond to the statement, “Students whose academic achievement is 1 year below the other students in the grade should be in regular classes” (Wilczenski, 1993). Participants responded to the statement using one of six forced-choice responses. This Likert-type response format provides favorability ranges from strongly disagree to strongly agree. The rating scale is: 1 means strongly disagree; 2 means disagree; 3 means disagree somewhat; 4 means agree somewhat; 5 means agree; and 6 means strongly agree. Therefore, if a participant rated the statement, “Students whose academic achievement is 1 year or below the other students in the grade should be in regular classes” with a 6, it meant that he or she strongly agreed with this academic inclusive practice. Conversely, if he or she rated this item with a 1, it meant that he or she strongly disagreed with this academic inclusive practice.

The MLQ has been used to determine leadership type on scales of different characteristics and is based on a Full-Range Leadership Model. The leader form asks participants to rate themselves evaluating how frequently they participated in specific leadership behaviors. For example, a principal may be asked to respond to and rate his behavior with respect to the following statement, “I spend time teaching and coaching” (MLQ-Leader Form). Using a five-point Likert scale, participants rated the frequency of his action related to the stem. The rating scale is: 0 means not at all; 1 means once in
awhile; 2 means sometimes; 3 means fairly often; and 4 means frequently, if not always. In other words, if a principal rated the item “I spend time teaching and coaching” with a number 3, it meant that he or she displayed this particular transformational leadership behavior frequently, if not always. On the other hand, if a principal responded to the statement with a 0, 1, or 2, it meant that the transformational leadership behavior in question was not demonstrated very often.

The researchers only examined questions that assessed transformational and transactional leadership behaviors. The transformational scale on the MLQ included items: 2, 6, 8, 9, 10, 13, 14, 15, 18, 19, 21, 23, 25, 26, 29, 30, 31, 32, 34, and 36. The transactional scale included items: 1, 3, 4, 11, 12, 16, 17, 20, 22, 24, 27, and 35.

### Results

Attitudes toward inclusive practices scores were derived from designated items on the ATIES. Transformational leadership behaviors were derived from designated items on the MLQ. The Pearson Product Moment Correlation was used to determine if there was a relationship between attitudes toward academic and physical inclusive practices and transformational leadership behaviors among middle school principals in North Carolina. In the case of these selected inclusive practices and transformational leadership behaviors, $r (75) = .320, p < .01$. Therefore, a significant relationship was found between attitudes toward academic and physical inclusive practices and transformational leadership behaviors among middle school principals in North Carolina (see Table 1).

#### Table 1

**The Pearson Product Moment Correlation Coefficient Model for Inclusive Practices (academic and physical) and Transformational Leadership Behaviors**

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Transformational</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational</td>
<td>.320**</td>
</tr>
<tr>
<td></td>
<td>.005</td>
</tr>
<tr>
<td></td>
<td>75</td>
</tr>
</tbody>
</table>

Note. ** Significant at the 0.01 level (2-tailed)

Correlation coefficients were computed among all transformational leadership behavior items on the MLQ and the academic and physical items on the ATIES. Although this study’s purpose was not to analyze on a per item basis, statistically significant inter-item correlations were noted as seen in Tables 2 and 3. The results suggest that the more that principals displayed transformational leadership behaviors, the more positive their attitudes were toward these selected inclusive practices.
Pearson $r$ correlations were computed between all transformational leadership items (20) from the MLQ and all academic (4) and physical (4) items from the ATIES. Five transformational leadership behavior items from the MLQ and three items from the physical dimension of the ATIES resulted in five statistically significant inter-item correlations, as seen in Table 2. The transformational leadership behavior indicating that participants treat others as individuals was found to be significantly correlated to the attitude that students who cannot move without help should participate in inclusion, ($r$ (97), $=.291$, $p < .01$). The most statistically significant correlation between a transformational behavior item and the physical dimension of the ATIES ($r$ (96) = .324, $p < .01$) was found between the items. One significant correlation suggesting an inverse relationship was revealed between re-examining critical assumptions to question whether they are appropriate and students who use sign language or communication boards participating in regular classes ($r$ (96) = -.258, $p < .05$). The transformational leadership behavior of going beyond self-interest for the good of the group was also significantly correlated to students who are unable to hear conversational speech in regular education ($r$ (98) = .285, $p < .01$). Similarly, a statistically significant correlation was found between the transformational behavior of individuals displaying a sense of power and students who use language and communication boards being in regular classes ($r$ (98) = .22, $p < .05$) (see Table 2).

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**Table 2**

**Correlational Matrix for Attitudes Toward Inclusive Education: Physical Dimension: (ATIES – Items 3, 11& 14) and Transformational Leadership Behaviors**

<table>
<thead>
<tr>
<th>Item 3</th>
<th>Item 11</th>
<th>Item 14</th>
</tr>
</thead>
<tbody>
<tr>
<td>19. I treat others as individuals rather than just as members of the group.</td>
<td>.291**</td>
<td></td>
</tr>
<tr>
<td>31. I help others to develop their strengths.</td>
<td></td>
<td>.324**</td>
</tr>
<tr>
<td>2. I re-examine critical assumptions to question whether they are appropriate.</td>
<td>-.258*</td>
<td>.285*</td>
</tr>
<tr>
<td>18. I go beyond self-interest for the good of the group.</td>
<td></td>
<td>.285**</td>
</tr>
</tbody>
</table>

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25. I display a sense of power and confidence. \( .255^* \)

Note. **Significant at the 0.01 level (2-tailed); Significant at the 0.05 level (2-tailed)

Four transformational behavior items from the MLQ and two items from the academic dimension of the ATIES resulted in four statistically significant inter-item correlations, as seen in Table 3. Statistically significant correlations centered around the attitude that students who are either 1 or 2 years behind in the grade should be in regular education classes. The transformational leadership behavior indicating that the participant talks about his or her most important values and beliefs was significantly correlated to the attitude that students whose academic achievement is 2 or more years below other students in the grade should be in regular classes (\( r (98) = .273, p < .05 \)). The transformational leadership behavior of specifying the importance of having a strong sense of purpose was significantly correlated to the attitude that students whose academic achievement is 1 year below the other students in the grade should be in regular classes (\( r (97) = .281, p < .01 \)). Furthermore, the same attitude toward inclusive practices was significantly correlated to the transformational leadership behavior of going beyond self-interest for the good of the group, (\( r (96) = .368, p < .01 \)). The same attitude toward students whose academic achievement is 1 year below the other students in the grade was also determined to be statistically significant to the transformational leadership behavior suggesting that the participant considers an individual as having different needs, abilities, and aspirations from others (\( r (97) = .435, p < .01 \)).

Table 3

**Correlational Matrix for Attitudes Toward Inclusive Education: Academic Dimension: ATIES – Items 1 & 5 and Transformational Leadership Behaviors**

<table>
<thead>
<tr>
<th>Item</th>
<th>Item 1</th>
<th>Item 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.</td>
<td>I talk about my most important values and beliefs.</td>
<td>.273*</td>
</tr>
<tr>
<td>14.</td>
<td>I specify the importance of having a strong sense of purpose.</td>
<td>.281**</td>
</tr>
<tr>
<td>18.</td>
<td>I go beyond self-interest for the good of the group.</td>
<td>.368**</td>
</tr>
<tr>
<td>29.</td>
<td>I consider an individual as having different needs, abilities, and aspirations from others.</td>
<td>.435**</td>
</tr>
</tbody>
</table>
The Pearson Product Moment Correlation Coefficient was used to determine if there was a relationship between transactional leadership behaviors and attitudes toward selected inclusive practices (academic and physical) as seen in Table 4. In the case of transactional leadership behaviors and attitudes toward selected inclusive practices, $r(72) = -0.068, p < .05$. Therefore, it was found that no significant relationship existed between North Carolina middle school principals’ transactional leadership behaviors and attitudes toward academic and physical inclusive practices for this study.

<table>
<thead>
<tr>
<th>Table 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Pearson Product Moment Correlation Coefficient Model for Inclusive Practices (academic and physical) and Transactional Leadership Behaviors</td>
</tr>
<tr>
<td>Inclusion</td>
</tr>
<tr>
<td>Transactional</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Correlation coefficients were computed among all transactional leadership behavior items on the MLQ and all items on the ATIES. A $p$ value of less than .05 was required for significance. Pearson $r$ correlations were computed between transactional leadership behavior items (12) on the MLQ and the academic (4) and physical items (4) on the ATIES instrument. For organizational purposes, data were organized by dimensions of the ATIES. Some of the relationships were negatively correlated, therefore indicating inverse relationships. Three transactional leadership behavior items from the MLQ and three items from the physical dimension of the ATIES resulted in three statistically significant inter-item correlations, as seen in Table 5.

<table>
<thead>
<tr>
<th>Table 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correlational Matrix for Attitudes Toward Inclusive Education: Physical Dimension: ATIES – Items 3, 7, &amp; 11 and Transactional Leadership Behaviors</td>
</tr>
<tr>
<td>Item 3</td>
</tr>
<tr>
<td>11. I discuss in specific</td>
</tr>
</tbody>
</table>
The transactional leadership behavior indicating that the participant discusses in specific terms who is responsible for achieving performance targets was significantly correlated with the attitude toward inclusive practices suggesting that students who cannot move without help from others should be in regular classes ($r_{(98)} = .306, p < .01$). Similarly, the transactional leadership behavior indicating that the participant demonstrates problems must be chronic before taking action was significantly correlated to the attitude that students who cannot read standard print and need to use Braille should be in regular classes ($r_{(97)} = .387, p < .01$). The same transformational leadership behavior item was inversely correlated to the attitude toward inclusive practices. One transactional leadership behavior item from the MLQ and one item from the academic dimension of the ATIES resulted in one statistically significant correlation as seen in Table 6. The transactional leadership behavior item indicating that participants discuss in specific terms who is responsible for achieving performance targets was statistically correlated to the attitude that students whose academic achievement is 2 or more years below other students in the grade should be in regular classes ($r_{(99)} = .253, p < .05$).

**Table 6**

**Correlational Matrix for Attitudes Toward Inclusive Education: Academic Dimension: ATIES – Item 1 and Transformational Leadership Behaviors**

<table>
<thead>
<tr>
<th>Item 1</th>
</tr>
</thead>
</table>
| 11. I discuss in specific terms who is responsible for achieving performance targets. | .253*  

Note. *Significant at the 0.05 level (2-tailed)

**Discussion**

In recent years, as a result of the Least Restrictive Environment mandate, American public schools have seen an increase in students with disabilities being educated in the regular classroom known as inclusion. Investigation of this topic was relevant because the degree to which schools implement inclusive practices rests largely with the principal and his or her attitude (Hall & Ford, 1987; Wilczenski, 1993); therefore, examining the principals’ attitudes toward inclusion is even more critical. It is important to determine how selected leadership behaviors are related to principals’ attitudes toward inclusive practices as school systems seek to assist educational professionals in deciding what type of leader is best suited for leading schools implementing inclusive models. Such research also aids in designing professional development opportunities for principals in creating an inclusive culture for their schools, contributes to the existing body of literature on leadership behaviors and attitudes toward inclusive education.

This study investigated the potential relationship between attitudes toward inclusive practices (academic and physical) and selected leadership behaviors (transformational and transactional). Data revealed a significant relationship between transformational leadership behaviors and academic and physical inclusive practices among middle school principals in North Carolina who participated in this study. No relationship was determined between transactional leadership behavior and attitudes toward these inclusive practices. Although the relationship between attitudes toward academic and physical inclusive practices and transformational leadership behaviors did prove significant, its magnitude was considered low ($r(75)=.320$, $p<.01$). This weak correlation may be the result of participants’ experiences with various inclusion models. Furthermore, although the term inclusive practices was defined at the top of ATIES instrument, participants may have developed attitudes toward inclusion from varying experiences. For example, one administrator may have experience with collaborative team teaching where general and special education teachers work as partners with shared responsibility to teach the entire class. Both are engaged with activities related to student lessons (New Visions for Public Schools, 2007). Another principal may have experience with another approach such as Wang’s Adaptive Learning Environment Model whose purpose is to teach all students basic skills while at the same time teaching coping strategies to assist them with the social and intellectual demands of school (ALEM, Wang & Birch, 1984; Wang & Zollers, 1990). These varying experiences with different inclusion models may have impacted the participants’ responses.

The level of involvement that principals have with inclusive practices at their schools may also have contributed to the low degree of correlation between attitudes toward academic and physical practices and transformational leadership behaviors of North Carolina Middle school teachers for this study. To illustrate, if principals have assigned special education duties to their assistant principals, their own experiences with inclusive practices may be significantly less, therefore resulting in a lower number on the Likert scale provided. Furthermore, a low degree of correlation may also be due to principals not having a clear understanding of the inclusive practices in their schools.

On the other hand, no significant relationship was found between attitudes toward inclusive practices (academic and physical) and transactional leadership behaviors among
North Carolina middle school principals. This may be due to the fact that transactional leaders demonstrate a managerial style of leadership focusing on the maintaining the status quo (Bensimon, 1989; Johanson, 2006). Such leadership behaviors are considered central to maintaining an organization as opposed to developing a vision that is apparent in leading inclusive schools. Lack of a significant relationship may also be due to instrument selection. The ATIES may have caused participants to respond in an “all of nothing” manner to several of its statements. For example, when a participant responded to a statement such as Item 1 Students whose academic achievement is 2 or more years below other students in the grade should be in regular classes, he is forced to group all of his or her experiences with all students performing two years behind together. This may prove problematic because some students who are functioning 2 years below grade level may able to function in the regular education classroom with adequate support while others may not be able. This could impact how the participants rated their attitudes toward particular students functioning at this level.

**Conclusion**

Administrative involvement is critical to the success of any programmatic change in a school setting. Research indicates that successful inclusion has been the result of cooperation and collaboration put forth by school principals (Evans, Bird, Ford, Green, & Bischoff, 1992). According to Burrello, Schrup, and Barnett (1992), “the belief and attitudes of the principal toward special education are the key factors influencing their behavior toward students with disabilities” (p.37). There are a scant number of studies that examine the relationship between attitudes toward inclusive practices and principals’ leadership behaviors. The findings of this study indicated a statistically significant relationship between attitudes toward selected inclusive practices (academic and physical) and transformational leadership behaviors and no relationship between attitudes toward selected inclusive practices (academic and physical) and transactional leadership behaviors.

**Recommendations for Further Studies**

Findings of this study lead to the following specific recommendations for future research in the areas of special education and inclusive education.

1. The development of a new inclusion instrument would be beneficial. A new instrument could allow study participants to respond to items in a broader manner and not group their experiences in an “all or nothing” format as well as provide participants with specific definitions for each dimension included in the instrument.

2. Further reliability and validity testing of the ATIES is recommended.

3. It would be beneficial to examine the social and behavioral dimensions of inclusion and their possible relationship to attitudes toward principals’ leadership
behaviors. Studying these dimensions could provide administrators with valuable information about how to improve leadership behaviors in such inclusive settings.

4. Participants in this study completed self-rated questionnaires. Responses given by the study participants using the rater form may have been skewed to present the principal in a more favorable manner than actually represent the leadership behavior that he displays. It would be beneficial for principals’ subordinates to complete the rater form of the MLQ. As opposed to the leader form, the rater form asks subordinates to rate their leaders with respect to transformational and transactional leadership. This might generate a more objective view of the leadership behaviors actually exhibited by principals.

5. Using a mixed methodology that employs both quantitative and qualitative methods is also recommended. Qualitative data derived from interviews or case studies from middle school principals and their experiences with inclusive education (academic and physical) could further support and clarify the quantitative findings of this study.

References


