A Proposed Model for Transformational Education

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The proposed Transformational Education (TE) model clarifies a dynamic process where teachers and other school staff embrace their contribution to educational leadership. Reworking Transformational Leadership (TL) constructs for a stronger fit within the classroom, this concept paper reviews the literature to construct a model illustrating the relationship among teacher behaviors, school climate, student wellness, and performance outcomes. The proposed conceptual framework describes teacher TL behaviors that directly and indirectly influence student performance outcomes. Student wellness outcomes mediate this relationship, and a positive school climate creates a context where teacher leadership benefits are maximized. Most work on effective school leadership posits administrators as leaders, with teacher factors only as mediators of student outcomes. The TE model described here is distinctive in its approach to apply TL to teachers, describing the means by which teachers benefit students in a supportive classroom and school context.

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Leadership within organizations has received a great deal of scholarly attention for the last century. While all this work proceeds from the basic premise that leadership involves influence, understandings of the nature of this influence have varied greatly (Vroom & Jago, 2007). Initially, heroic conceptions of leadership focused on traits yielded to behavior-based formulations, and these have been expanded into education through instructional leadership (Coladarci, 1992) and transformational school leadership (Leithwood, 1992), among others.

Transformational school leadership emerges from transformational leadership (TL), arguably the most widely researched leadership theory among organizational researchers in the last three decades (Anderson, 2017; Bass, 1985; Berkovich, 2016). Core characteristics include increasing others' commitment to a compelling vision, motivating followers to accomplish shared values and goals, providing empathy and individual support, and developing others' intellectual capacities for higher performance (Bass, 1985, 1990; Bass & Avolio, 1994; Leithwood & Jantzi, 2006). Transformational leaders are often described as charismatic and trusting (Bass, 1990). Notably, authority does not stem from formal positions but instead from the ability to foster a collective environment of inspiration and mastery, and a collective capacity to achieve goals (Leithwood & Jantzi, 2006).

Many researchers have highlighted the use of TL by school principals (e.g., Allen et al., 2015; Leithwood & Jantzi, 1999, 2006). Principal TL behaviors have been correlated with student academic improvement, both directly and through numerous mediators (Basham, 2012; Day et al., 2016; York et al., 2015). Other studies have found benefits for teachers' job satisfaction (Podsakoff et al.,1996), organizational commitment (Yammarino et al., 1998), and individual and collective self-efficacy (Ninković & Knežević Florić, 2018).

This model of leadership, like others, suffers shortcomings. One is a lack of attention to the situation and complexity of leadership (Van Knippenberg & Sitkin, 2013; Vroom & Jago, 2007). More recent theories posit that leadership is distributed, embedded in the network of roles and interactions creating an organization (Ogawa & Bossert, 1995; Spillane, 2005). For schools, these oversights have led to research focused only on principals as leaders, with teachers as followers. Only few studies have examined the leadership behaviors of teachers; those that have done so have revealed the positive impact of teacher leadership on student and school outcomes, including school climate (Battistich et al., 1997; Bolkan & Goodboy, 2010; Bolkan et al., 2011).

These studies, taken together, suggest teacher leadership is part of a network of factors related to student outcomes. However, no attempt has been made to map this network and describe the interactions involved in a teacher's influence on student outcomes. In this article, we attempt to articulate such a map through a model for Transformational Education.

Development of the Transformational Education Model

To develop the Transformational Education (TE) model, we began from the premise that leadership is distributed and that teachers play a key leadership role both for the school and in their classrooms. In modeling teachers' influence on students, we start with the TL framework, formally applied to education by Leithwood (1992), whose six constructs mirrored the four developed by Bass (1985): (a) idealized influence—providing a compelling vision, setting high standards for emulation, serving as a role model for followers, demonstrating high moral standards, and putting followers' needs first; (b) inspirational motivation—engaging followers in shared goals, providing meaning and challenge to followers' work, and inspiring enthusiasm and optimism; (c) intellectual stimulation—stimulating innovation and creativity, and developing followers' intellectual

capacities for higher performance; and (d) individualized consideration—providing empathy and support to followers, addressing followers' needs and interests, and coaching and mentoring to help followers develop new skills.

Using TL as a starting point for the construction of a model, we then turned to examination of the power of its influence on various organizational outcomes. A robust body of literature attests to the influence of TL behaviors on followers in organizations. In schools, these include teachers and students (Sergiovanni, 1999). Research has found even direct effects on student engagement and achievement from principal TL behaviors (Leithwood & Jantzi 1997, 1999, 2005; Leithwood & Sun, 2012). Much of the influence of TL on students, however, is exerted via direct effects on teacher- and school-level outcomes (Boberg & Bougeois, 2016; Ngang, 2011). These and other studies have found specific links between TL and student performance are mediated by as many as 41 such factors (Hallinger & Heck, 1996; Leithwood & Jantzi, 2006).

Among the proximal and distal teacher outcomes associated with principal TL behaviors are motivation (Leithwood & Jantzi, 2006), job satisfaction (Aydin et al., 2013; Cansoy, 2019), individual and collective efficacy (Ibrahim et al., 2014; Ling, Pihie, Asimirin, & Fooi, 2015; Ross & Gray, 2006), and several facets of commitment, including organizational commitment and commitment to students (Dumay & Galand, 2012; Jackson et al., 2013; Sun, 2015).

Again, these outcomes have been associated with *school leadership*—leadership as a set of behaviors exhibited by principals, without respect to the distributed nature of leadership and the understanding that teachers are themselves leaders, working directly with students and contributing to student outcomes. Indeed, leadership involves a process of influence, and educators exert that influence most directly through teaching.

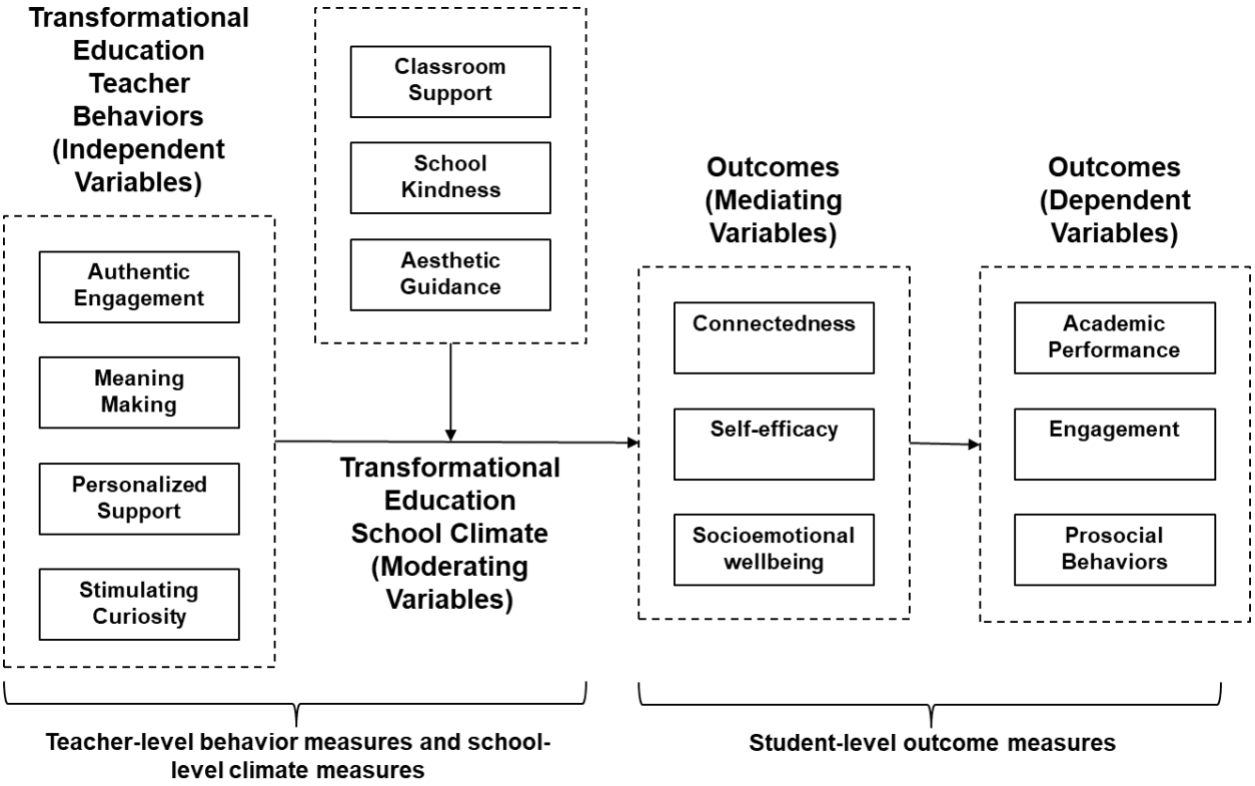
Existing research on teacher leadership acknowledges teachers' influence, though scholarly focus has been on teachers as organizational actors, not as educators. An early writer in the field, Wasley (1991) conceived of teacher leadership as "the ability to encourage colleagues to change" (p. 32). Other researchers, including Gehrke (1991) and Muijs and Harris (2003), acknowledge a role for teacher leaders in the improvement of their own instruction, but they emphasize influencing colleagues through in-school decision-making, in-service trainings, performance evaluations, and supportive relationships—not teaching.

The little work on teachers' classroom leadership indicates that behaviors roughly aligned with TL predict a number of student- and school-level outcomes. Pounder (2010, 2014) conducted studies on teacher TL behaviors in universities, finding extra student effort and a positive classroom experience for students with transformational teachers. Battistich et al. (1997) measured elementary school teacher behaviors, including (a) warmth and supportiveness, (b) emphasis on prosocial values, (c) encouragement of cooperation, (d) elicitation of student thinking and idea expression, and (e) and promotion of student influence in the classroom. These behaviors were associated with students supporting and working collaboratively with one another, and with active student engagement in classroom activities and decision-making.

While more research is needed, we argue that these results, taken with robust support for the effectiveness of transformational school leadership, enable the creation of a model to provide a network of school- and student-level outcomes associated with *teacher leadership*.

Figure 1

The Transformational Education (TE) Model



The TE model involves four components: (a) teacher behaviors, (b) school climate, (c) student wellness, and (d) student performance. Teacher behaviors are aligned with the tenets of TL and predict student performance outcomes, consisting of engagement, prosocial behaviors, and academic performance. Student wellness—connectedness, self-efficacy, and socioemotional wellbeing—mediates this relationship; its factors are directly influenced by teacher leadership and contribute to student performance (Shamir et al., 1993). School climate contributes to student wellness, providing an additive effect (Gray et al., 2017), and its components of aesthetic guidance, school kindness, and classroom support allow for a more explanatory model. A description of each component of the model and subcomponents, as well as the rationale for model inclusion, is provided below.

Model Description and Supporting Literature

Teacher Behaviors

Teacher leadership behaviors predict school and student outcomes, including connectedness, collective sense of community, and wellbeing (Battistich et al., 1997) as well as student learning (Seashore Louis et al., 2010). Teacher behaviors are a critical component of TE because students' positive outcomes constitute the ultimate goal of education. These behaviors are composed of (a) *authentic engagement*, (b) *meaning making*, (c) *personalized support*, and (d) *stimulating curiosity*. They align broadly with dimensions of TL and with teacher behaviors (e.g., supporting

different learning styles and having a growth mindset) found in project-based learning literature (Boss & Larner, 2018), as well as with teacher leadership practices found by Battistich et al. (1997) to shape school climate and student behaviors (see Table 1). In this way, TE formalizes these teacher behaviors through the creation of a holistic model connecting these behaviors with student outcomes.

Table 1

Teacher Behaviors

Transformational Education	Teacher Leadership Practices (Battistich et al., 1997)	Transformational Leadership
Authentic engagement	Low use of extrinsic control	Idealized influence
Meaning making	Emphasis on prosocial values; encouragement of cooperation	Inspirational motivation
Stimulating curiosity	Elicitation of student thinking and idea expression	Intellectual stimulation
Personalized support	Warmth and supportiveness; promotion of student influence in the classroom	Individual consideration

Authentic Engagement. Authentic engagement, aligned with TL's idealized influence, involves influencing students through what Battistich et al. (1997) described as low use of extrinsic control. Teachers using authentic engagement eschew external motivators and means of control, instead engaging meaningfully with learning. They believe genuinely in education and their teaching, and they ask students, both directly and through modeling, to feel and act the same way.

Authentic engagement provides a powerful model for students (Cetin, 2018). Evidence suggests that teachers' reactions to student responses and lesson elements may matter more than the content of those responses: Conveying genuine surprise, interest, and engagement creates a more interactive environment and supports learning (Smith & Higgins, 2006). A comprehensive study by Sebastian et al. (2016) found that authentically engaged instruction increased student engagement and achievement. We propose that this behavior also directly influences students' connectedness to teacher and school, and other facets of their wellness, mediating relationships between authentic engagement and student performance as distal outcomes.

Meaning making. Meaning making is distilled from inspirational motivation, focusing on the teacher behaviors that create that motivation. Meaning making occurs when teachers unite students to achieve important, shared goals; they help students to see the importance of their choices and the meaning and values they convey. Meaning making aligns with Battistich et al.'s (1997) emphasis on prosocial values and encouragement of cooperation, as both involve teachers guiding students to explore and articulate values through action, including through collaborative and helping behaviors.

Researchers have identified meaning making as a critical aspect of leadership. Varney (2009) proposed that a key goal of leadership is to continuously create meaning in life, a behavior important for change even at the organizational level. It creates purpose by aligning individuals' goals, resulting in intrinsic motivation and commitment. While studies on teachers are few, principal meaning making is associated with increased teacher commitment (Ibrahim et al., 2014). In Battistich et al.'s (1997) own research, teacher meaning making improved students' sense of

community. Students perceived they all enacted care and support for one another and were important to decision-making in the classroom.

Stimulating Curiosity. Stimulating curiosity shifts TL's intellectual stimulation to focus on what Battistich et al. (1997) described as eliciting student thinking and idea expression. Teachers who stimulate curiosity encourage students to think about *how* and *why*, building curiosity to clarify and solve problems. Stimulating curiosity has been highlighted in education research (e.g., Crough, 2019; Lee et al., 2017; Lindholm, 2018). For instance, Lindholm (2018) proposed that curiosity is a driving force of innovation and learning, emphasizing exploration rather than the accumulation of facts.

In the classroom, stimulating curiosity generates concrete student outcomes. Such stimulation as a school leadership behavior results in increased teacher commitment (Ibrahim et al., 2014). Examining teacher leadership, Bolkan and Goodboy (2010) and Bolkan et al. (2011) found intellectual stimulation resulted in student empowerment and deep and strategic approaches to learning, leading to increased affective and cognitive growth.

Personalized Support. Individualized consideration in TL becomes personalized support in TE, aligned with what Battistich et al. (1997) described as warmth, supportiveness, and the promotion of student influence in the classroom. Teachers enacting this behavior are supportive to each student's needs and tailor instruction to their interests, fostering student growth and decision-making.

In Sebastian et al.'s (2016) study of teacher leadership, personalized support was an outcome of authentically engaged classroom instruction; student engagement and achievement also resulted, though the authors did not assess links among these outcomes. A more recent study by Benner et al. (2017), however, did assess these links, and they found that personalized teacher support promoted engagement. Other research has linked this support with reduced internalizing and school problems, as well as increased personal adjustment (Tennant et al., 2015). We postulate that a similar, model-aligned examination would find an association, consistent with many studies of school leadership and teacher outcomes.

Student Performance

In the TE model, transformational teacher behaviors improve student performance outcomes: academic performance, student engagement, and prosocial behaviors. Research has conceptualized student performance mostly in academic terms, measured through course grades, test results, and standardized test scores (e.g., Allen et al., 2015; Hallinger & Heck, 1996; Sun & Leithwood, 2012). Writing about upside-down educational organizations, Ross et al. (2005) argued for a more expansive view of performance: education should build transformation and growth in students, with approaches that focus on building character and community-mindedness, expressed through empathy, kindness, cooperation, and understanding (Schonert-Reichl et al., 2012).

The inclusion of these additional, non-academic outcomes in the TE model is in part an expression of values and an argument about what education *should* do. But it also emerges from the belief that such skills—to engage, and to empathize and be kind—are critical for students to live healthy and productive lives.

Academic Performance and Engagement. Engagement, in practical terms, refers to the degree to which a student is engaged in the work of meaningful learning, enacting behaviors (e.g., homework completion, observed attention, self-monitoring comprehension) demonstrating compliance with instructions and an intent to learn (DuPaul et al., 1991). This engagement is a

positive outcome on its own and is predictive of increased student performance (Boberg & Bourgeois, 2016; Sabin, 2015). Additional research has linked student engagement with transformational school leadership (Leithwood & Jantzi, 1997, 1999). In TE, academic performance refers to demonstrated skill proficiency in written work, overall work quality, and durability of learning (i.e., retaining knowledge and skills learned).

A host of studies find links between school leadership and increased student academic achievement (Boberg & Bourgeois, 2016; Sebastian et al., 2016; Sun & Leithwood, 2012). Direct associations are rarely found, however, and the findings of Sebastian et al. (2016) typify this literature, indicating that teacher characteristics and learning climate, among others, mediate the effects of school leadership on student achievement. This study is significant, however, in conceptualizing classroom leadership similarly to Battistich et al. (1997) and to TL—effective instruction is characterized by a teacher's authentic engagement and support for students.

Prosocial Behaviors. As described, student performance goes beyond the academic, and students' ability to empathize and enact kindness are important outcomes from a holistic education. They also reflect the increasing recognition that social and emotional learning matters; however, they are often absent from conceptual models of teaching and learning (Binfet et al., 2016). We conceptualize prosocial behaviors as consisting of empathy and kindness, borrowing Spreng et al.'s (2009) definition of empathy as involving understanding and adaptive responses to others' feelings and effective emotional communication. Kindness refers to "doing good for others" (Layous et al., 2012, para. 2) and includes behaviors such as showing respect to teachers, sharing with someone in need, keeping a promise, and consoling someone anxious or upset (Battistich et al., 1997; Lamborn et al., 1994; Layous et al., 2012).

A significant body of literature supports the notion that teachers can help students develop empathy and kindness (e.g., Eisenberg et al., 2006). Using behaviors aligned with those in the TE model, Battistich et al. (1997) found empathetic and kind responses (e.g., concern for others, altruism, acceptance of outgroups, intrinsic motivation to act positively) as a result of the strong community emerging from teacher behaviors.

Student Wellness

Though transformational leadership behaviors can impact student performance directly, these influences are also mediated by other student-level outcomes (Leithwood & Jantzi, 2005; Leithwood & Sun, 2012). Additionally, students play a role in their own personal academic performance, developing characteristics that enable success. Student wellness, in particular, influences both overall health and academic achievement (Thompson & Porto, 2014).

In the TE model, we include student connectedness, self-efficacy, and socioemotional wellbeing as wellness outcomes proximal to teacher leadership and mediating effects on the distal performance outcomes described above.

Connectedness. Connectedness is the extent to which students feel part of the community within their school and among their family and friends (Battistich et al., 1997; Freeman, 2016; Shamir et al., 1993). It is composed of students' internal experiences, perceptions, and feelings about school—encompassing a sense of belonging, relationships with staff and other students, and the feeling that learning is a priority (Osher et al., 2009). School leadership literature finds links between TL behaviors and similar follower outcomes, and these findings support Shamir et al.'s (1993) general identification of organizational conditions.

Connectedness to school, in the form of a sense of community, was found by Battistich et al. (1997) to mediate relationships between teacher leadership behaviors and a host of other student outcomes, including prosocial behaviors, intrinsic motivation to learn, and reading achievement. Other empirical research has linked forms of connectedness and engagement, classroom participation (including homework completion), and student achievement (Osher et al., 2009; Sidelinger & Booth-Butterfield, 2010). Foundational research on connectedness by King et al. (2002) found links between adult mentoring (including personalized academic and socioemotional support) and significantly increased connectedness to school, peers, and family, as well as decreased levels of depression. During the transition between primary and secondary school, connectedness to school is predctive of socioemotional wellbeing (Lester & Cross, 2015). In the TE model, we formalize these interactions, placing connectedness as a mediator between transformational teacher behaviors and student performance outcomes.

Self-efficacy. Self-efficacy for students refers to the degree to which they sense the power to make choices that impact themselves and their larger contexts (Binfet et al., 2016; Ross et al., 2005; Schwarzer & Jerusalem, 1995). Many studies on student self-efficacy have found that it influences cognitive engagement and academic performance (Cassidy, 2015; Pintrich & De Groot, 1990). Indeed, per Cassidy (2015), self-efficacy may be more predictive of achievement than even a student's previous achievement. A recent meta-analysis of 57 studies by Honicke and Broadbent (2016) also revealed a significant correlation with academic performance.

Many studies have found transformational school leadership predictive of self-efficacy in teachers as followers (Ibrahim et al., 2014; Ling et al., 2015; Ross & Gray, 2006). There is also indication that student self-efficacy can be influenced by teacher behaviors, particularly those in the TE model (Battistich et al., 1997). In math, for instance, emotionally supportive teacher behaviors predict increases in subject-specific self-efficacy (Blazar & Kraft, 2017). Given the network of interactions involving self-efficacy, we posit that transformational teacher behaviors will directly influence self-efficacy, which will itself influence student performance.

Socioemotional Wellbeing. Socioemotional wellbeing is a broad dimension in the TE model, representing a student's belief in self, belief in others, emotional competence, and engaged living (Furlong et al., 2013). These constructs predict a sense of connection and safety for students (Wang et al., 2010). A meta-analysis of 213 school-based studies by Durlak et al. (2011) found that interventions aiming to build socioemotional skills and create wellbeing were associated with improved attitudes and behavior, as well as academic achievement. Additional research by Hawkins et al. (2008) found significantly improved mental health for students, even long after socioemotional learning interventions ended. Finally, elements of socioemotional wellbeing were found by Furlong et al. (2013) to predict self-efficacy, persistence, peer support, empathy, and other outcomes.

The interventions described above make clear that socioemotional wellbeing can be learned. They do not conceptualize socioemotional learning interventions or the behaviors that make them up in overtly transformational terms, but Durlak et al. (2013) suggest that the benefits they found result in part from teacher support for student achievement, caring teacher-student relationships that build connectedness, cooperative learning, and positive classroom environments. TE formalizes these links as part of a comprehensive model.

School Climate

The interactions described above—among teacher behaviors, student wellness, and student performance—take place within a school context, which itself has characteristics bound up with the behaviors of individuals. The climate of a school is made up of "factors that contribute to the tone in schools, and the attitudes of staff and students toward their schools" (Osher et al., 2009, p. 1). In Transformational Education, school climate factors moderate the relationships among teacher behaviors, student wellness, and student performance.

Researchers studying school climate have found that it interacts with many of these constructs—it has been linked to both academic learning (Cohen et al. 2009) and the social and emotional wellbeing of students (O'Brennan & Bradshaw, 2013), as well as school connectedness (Osher et al., 2009; Thapa et al., 2013). School climate also predicts students' engagement, as well as their kindness and empathy, self-efficacy, and academic success (Bernard & Slade, 2009; Binfet et al., 2016; Cohen, 2006; Sherman et al., 1998).

School climate has also been an outcome. Research indicates that school climate is influenced by principal TL behaviors (Allen et al., 2015; McCarley et al., 2016). Improved school climate has also been the result of School-wide Positive Behavioral Supports implementation focused on teaching of social skills and responsiveness to middle school students' socioemotional needs (Caldarella et al., 2011).

In most of these studies, climate has been a mediator of outcomes such as decreased referrals (Caldarella et al., 2011) and student achievement (Osher et al., 2009). In the TE model, we postulate that school climate factors act as moderators; this has been found in some research (e.g., Birkett et al., 2009; Loukas & Robinson, 2004; Wang & Dishion, 2012). Again, we apply these to relationships involving teacher leadership.

In TE, the first two variables contributing to school climate measure socioemotional or relationally perceived elements of the climate: classroom support and school kindness. A third variable, aesthetic guidance, measures how physical school and classroom spaces shape the teaching and learning process, as well as the student's sense of safety, the institutional environment, and capacity to improve. Together, these mirror the five emergent themes in Thapa et al.'s (2013) review on school climate: (a) safety, (b) relationships, (c) teaching and learning, (d) institutional environment, and (e) school improvement.

Classroom Support. Classroom support refers to the empathetic and caring behaviors exhibited by the school—for students by teachers, staff, and other students. Durlak et al.'s (2011) meta-analysis revealed that classroom support in caring school communities predicts improved student academic performance and socioemotional health.

Other research concurs, finding supportive classroom behaviors part of a larger network of factors that contribute to student success, including self-efficacy (Battistich et al., 1997; Ross et al., 2005). In Battistich et al.'s (1997) own research, the specific teacher behavior of meaning making improved students' sense of community, including their perception that students cared for and support one another and that they were important to decision-making in the classroom. A more recent study by Lester and Cross (2015) found that the peer support dimension of classroom support was linked to student wellness—both connectedness to school and socioemotional wellbeing.

There is significant interest in strategizing to create conditions for social and emotional learning (Schonert-Reichl & Weissberg, 2014; Wang et al., 1997), and our TE model formalizes this construct and posits a moderating role for it and the other school climate factors.

School Kindness. School kindness has been defined as "voluntary, intentional behaviors that benefit another and are not motivated by external factors such as rewards or punishments" (Eisenberg, 1986, p. 63). School kindness is linked to socioemotional wellbeing, broadly, and more specifically to classroom support (another climate factor in the TE model), life satisfaction, and academic self-efficacy (Binfet et al., 2016). Kindness also helps students enact prosocial behaviors, leading to healthy interpersonal relationships (Binfet et al., 2016). Datu and Park (2019) found associations between school kindness and students' cognitive, behavioral, and emotional engagement.

The Binfet et al. (2016) study examined associations, rather than predictions, and further research is needed to determine whether kindness is a predictor, outcome, or both in its interactions with other positive results for students. Additional study is needed to confirm the results of Binfet and Passmore's (2017) qualitative study in which teachers perceived their kind behaviors encouraged kindness on the part of students. Given the results of research on classroom support and other caring behaviors, we posit a moderating role for school kindness in the Transformational Education model.

Aesthetic Guidance. Aesthetics refer to "felt meaning generated from sensory perceptions, [involving] subjective, tacit knowledge rooted in feeling and emotion" (Hansen et al., 2007, p. 544). Since climate is the collective perception of the school community, the physical presentation of that space also merits consideration as an influence on students.

According to Chang (2017), a student's aesthetic experience of the classroom and other educational spaces occurs both consciously and unconsciously and can improve a student's capacity to think critically and creatively to solve problems (Chang, 2017; Lin, 2009; Richards, 2007). Favorable aesthetic experiences predict student learning and achievement (Lin et al., 2009; Suleman & Hussain, 2014), and specific physical elements, such as lighting and seating arrangements, can impact learning behavior and achievement (Brooks, 2012; Samani, 2012).

The TE model uses four dimensions of Fenner's (2003) theory of aesthetic experience: (a) object directness, where the object (e.g., classroom or school space) directs the individual's attention in ways that help the individual sense that things will resolve positively; (b) felt freedom, in which the object or space enables the individual to sense the ability to freely make choices; (c) detached affect, whereby the object or space enables the individual to gain emotional distance from things that frighten or oppress him or her; and (d) active discovery, where the object or space challenges the individual to creatively discover new connections and solve problems. Measurement aligned with this theory allows for a more directed exploration of students' aesthetic experiences as they contribute to positive wellness and performance outcomes.

In all, the TE model creates a coherent picture of transformational teacher leadership and the paths through which it results in measurable benefits for students. The model leverages a robust body of studies on leadership theory, compares and synthesizes these theories, and directs future research to fill a gap on studies that features teachers as leaders.

Measurement and Validation Methods

To begin validation of the proposed TE model, a two-phase study including a minimum of 200 middle and high school students from schools of various sizes around the United States is recommended. This research should sample from schools with a wide variety of characteristics (e.g., open-model, traditional, public, private, charter), from teachers of middle and high school classes with at least 20 students. Initial baseline data collection and analysis should comprise the

first phase, undertaken at or near the start of an academic term (e.g., at or near the start of the fall semester). Analysis should establish (a) construct validity (exploratory and confirmatory factor analyses), and internal consistency reliability (Cronbach's alpha) for the dimensions in the chosen instruments; (b) bivariate correlations between the model's individual variable pairs; and (c) full-model results using regression analysis and ANOVA modeling.

The second phase, with validated instrumentation, should be conducted near the end of the term or school year and using the same procedures as in the first phase. Analysis should consist of the same validity and reliability testing, bivariate correlations, and full-model testing, with additional examination of the extent to which teachers' leadership behaviors account for the student performance outcomes at the end of the term or year as compared to the beginning. The extent to which the moderating and mediating variables impacted these relationships should also be assessed.

Implications for Practice

A validated TE model can have significant implications for teacher practice and evaluation, as well as for the student outcomes described above. In formalizing a vision for effective teaching, the model clarifies the leadership role that teachers play in their classrooms and for their students. This clarification can result in a streamlining of teacher evaluation that encourages teacher growth. Currently used evaluation tools may not nurture continued development (Lillejord & Børte, 2020; Warren & Ward, 2019), and a refined approach to evaluation may result in clearer guidance for teachers.

For students, teaching practice that embodies the TE teacher behaviors can promote improved wellness and performance, as well as contribute to a school climate that intensifies these impacts. Foundational research by Battistich et al. (1997) found teacher behaviors like those in TE associated with a host of benefits for students—empathy and kindness, connectedness, motivation, self-efficacy, and achievement, among others. More recent studies suggest that specific behaviors, such as authenticity and personalized support, increase student engagement, improve student behavior, and improve academic performance (Benner et al., 2017; Sebastian et al., 2016).

Conclusion

Student performance can be impacted by a variety of factors, and examining student outcomes from a single angle is insufficient. This paper proposes a new, multidimensional model—called Transformational Education—based on transformational leadership and research linking these behaviors with student- and school-level outcomes. The model illustrates the holistic, reciprocal relationship between teacher behaviors and student outcomes, as moderated by school climate variables and mediated by student wellness. This model can be incorporated into the school as a whole to assess teacher behaviors but also in the classroom to assess student performance and wellness and perceptions of school climate.

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